

# Assessing the Impact of Bi-Multi-Modal Stimuli on Blended Speaking Instruction: An Empirical Study in Primary School

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**Abstract**—Blended learning in ESL contexts has attracted substantial scholarly attention recently. However, the impact of various online input modes on English grammar learning outcomes, particularly for speaking skills, has not been extensively studied. This study evaluates how bi- and multi-modal online inputs impact blended speech training in a primary school. Using a quasi-experimental, between-subjects design over 20 weeks, the study categorized participants into two groups: the bi-modal group (BG, N=32), which utilized online text-and-audio materials, and the multi-modal group (MG, N=32), which engaged with online videos. The assessment of learning achievement was conducted through two speaking tests, a pretest and a posttest. The results revealed enhancements in grammar and overall speaking skills for both groups, with significant performance differences. The study enriches academic literature by providing empirical insights into how different online input modes could optimize blended learning environments and support explicit speaking instruction to improve grammar in primary students' speaking skills.

**Index Terms**—bi-multimodal, blended learning, speaking instruction, online input modes, ESL learners

## I. INTRODUCTION

The purpose of teaching second language (L2) grammar has evolved over the last 20 years from aiming for standard language accuracy to guaranteeing communicative efficiency. Ellis [1] initially claimed that comprehensibility, which refers to the degree of understanding, should be considered a vital teaching objective in L2 grammar instruction. The emphasis on language communicative ease brought about by this change has revolutionized English-speaking classrooms. In most ESL environments, meaning- and form-focused teaching has gained importance (Saito & Saito, 2017; Shabani & Jabbari, 2023; Zhang & Yuan, 2020). More precisely, the focus of these English grammar lectures is on comprehensibility in academic and practical contexts since speakers should aim to efficiently convey information rather than replicate native-like accuracy.

Nonetheless, such focus during lessons does not yet achieve the desired success level in enhancing ESL students' spoken clarity. Su (2021) identifies two main causes for this issue. First, the limited classroom hours restrict ESL students' opportunities to practice spoken English. Second, current observations indicate that ESL students often experience anxiety when speaking English due to fears of miscommunication.

A potential solution to these challenging issues may be adopting a blended learning approach, which integrates traditional in-person instruction with independent online coursework (Graham & Halverson, 2022). Numerous research projects have demonstrated support for blended learning models in ESL settings, showing enhancements in various linguistic competencies, including general proficiency (Wang et al., 2021), literacy skills (Yang, 2012), and oral communication (Hsu, 2016). This can be attributed to multiple factors. Students have the opportunity to engage with language materials beyond scheduled class times, enhancing exposure (Moradimokhles & Hwang, 2022) improving the long-term retention of lessons learned asynchronously (Horn & Staker, 2017), and boosting participation in educational activities both within and beyond the classroom environment (Xu et al., 2017; Yajie & Jumaat, 2023). Beyond learning outcomes, blended learning has shown promise in boosting motivation among ESL students (AbuSeileek, 2012; Esnaashari et al., 2023) and alleviating anxiety related to speaking (Min et al., 2018). This is partly because blended

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learning not only introduces engaging learning activities (Huang, 2015) but also fosters supportive environments that cater to the needs of most students (Chang, 2023). Such assistance is available beyond traditional class times (Chen & Chang, 2011) and cultivates active and highly motivated learners.

#### A. *Research Problem*

Although blended learning is increasingly recognized in ESL learning, there remains a scarcity of empirical studies examining the impact of its modality (specifically, the ways teaching materials are presented online) on learning outcomes, particularly within ESL-speaking blended environments.

#### B. *Research Purpose*

The study investigates how alternative input modes—specifically, a bi- and multi-modal approach—affect learners' speaking performances in terms of better grammar across modalities.

## II. LITERATURE REVIEW

### A. *Blended Learning in English Learning Context*

Blended learning offers alternative teaching and learning modalities (Graham & Halverson, 2022; Usama, 2023). However, its application goes beyond simply transferring learning to online platforms, as its pedagogical appropriateness for ESL learners must be evaluated. Li (2022) emphasized that a fundamental goal of blended learning was to successfully integrate online and traditional classroom instruction. This integration is expected to improve both the learning process and student outcomes. From a theoretical perspective, educational challenges in applying blended learning (Anthony et al., 2022; Graham & Halverson, 2022) focus on the routine integration of technology into language education. Educators are advised to integrate technology fluidly into their teaching to avoid extra burdens such as student technical problems. Effective integration requires preliminary stages, such as ensuring access, fostering engagement, and facilitating expert support. The current study reviews extensive literature to frame the deployment of blended learning across three key elements: methods of delivery (Graham et al., 2013) instructional techniques (Klentien & Wannasawade, 2016), and the degree of integration (Anthony et al., 2022). Initially, identifying effective mechanisms for the distribution of instructional materials and resources, including computer tools, blogs, social media, and other digital platforms, is essential. Furthermore, instructional techniques should align with the learners' skill levels and interests to enhance their learning journey. Notably, Anthony et al. (2022) suggest that increasing the duration of online instruction might boost blended learning's impact in higher education, where students are typically accustomed to digital environments. Chang (2020) also highlights the importance of tailoring online content to the varied attention spans of students at different skill levels. In summary, educators and researchers dealing with ESL students must consider the learners' investment of time and effort in digital learning environments to maximize educational outcomes.

As blended learning principles solidify, numerous investigations have explored its educational impacts on ESL learners' abilities in receptive (Chen & Chang, 2011; Klentien & Wannasawade, 2016) and productive language skills (Chen, 2021) as well as their attitudes toward learning (Wang et al., 2021; Usama et al., 2024). These studies demonstrate this blended learning affects English language skills significantly. Specifically, this review focuses on research that compares various online input methods. Yang (2012) noted that ESL students exposed to online text-based resources in a blended learning setting showed superior reading skills compared to a control group after 12 weeks. Supporting this, Chen and Chang (2011) found that participants receiving audio and textual inputs excelled in listening tasks over those receiving only auditory inputs. Similarly, Hsu (2016) reported that ESL learners' speaking abilities significantly advanced after 16 weeks of blended learning incorporating text, audio, and video resources. Chen (2021) further affirmed through a year-long study that multimodal inputs, like PowerPoint slides and audio-visual files, on digital platforms significantly enhanced ESL learners' writing skills, leading to more extended and complex written outputs. Conversely, when Hsu and Liu (2019) developed 13-week mixed academic writing lessons employing only text-based online instruction, they observed no notable improvements due to low engagement, lack of focus, and individual variances among participants. These findings suggest that learner outcomes with different online input modalities are complex and underscore the need for further empirical exploration in diverse educational contexts. According to the research, blended learning significantly influences learners' achievement (Rafiola et al., 2020), and the diversity in blended learning configurations, such as different online input modes, may impact ESL students' educational outcomes.

### B. *Integration of Digital Tools in Blended ESL Settings*

The instructional effectiveness of blended learning has often been assessed through comparisons with traditional learning methods at various research locations. However, studies that explored the impact of different online modalities on ESL blended learning results are scarce (Zhang & Zou, 2021). The method of presenting these modalities differs among investigations, ranging from single to bi-modal and multi-modal formats for delivering teaching materials via digital platforms. The Cognitive Theory of Multimedia Learning (Mayer, 2020) states that people perceive visual and audio information separately. Utilizing both channels simultaneously can improve learning efficiency compared to using a single channel, as it maximizes the brain's capacity to process information. This idea aligns with the Dual

Coding Theory by Paivio (2006) which asserts that cognition comprises two distinct yet interconnected systems: verbal and visual. The thesis claims simultaneous activation of both systems enhances memory. Mayer and Paivio's theories focus on general learning and memory, although audio-visual inputs can aid ESL students by imparting knowledge via sensory modalities. Drawing from these theoretical frameworks, many blended ESL instructional designs for speaking classes incorporate multiple modalities to deliver learning materials. For instance, Xu et al. (2017) combined online feedback given in both audio and text forms with in-person speaking lessons. After twelve weeks, the study reported that participants responded positively to this blended learning approach and exhibited greater confidence in their speaking abilities, as evidenced by questionnaire and interview results. Similarly, Yang et al. (2013) employed a multimodal approach using text, audio, and video formats in their blended learning design, significantly enhancing ESL learners' listening and speaking skills over a semester.

In practical applications of multimedia learning materials, the split-attention principle (Sweller, 2005) and the redundancy principle highlight potential pitfalls. Specifically, presenting multiple information within a single channel (e.g., combining images with text) can hinder learning rather than aid it. Human working memory constraints allow monitoring many unnecessary information sources to overwhelm cognitive burden and impede learning. Consequently, further empirical research is essential for comparing the influence of bi-modal (text + audio) and multi-modal (text + video) inputs in ESL blended learning environments to determine if using multiple channels enhances learning outcomes. It is important to note that while different online platforms may yield varying results, this study examines the impacts of various involvement of two modes on the designated online platform at the research site. The variations across different online platforms should be investigated in future studies.

### III. METHODOLOGY

#### A. Research Question

How significantly do ESL students' speaking performances in terms of grammar (articles, prepositions, plurals, comparative, and superlative) vary between two input modes in blended speaking instruction?

#### B. Research Design

The research framework for this study is illustrated in Figure 1. This investigation utilized a quasi-experimental approach, spanning 20 weeks, and involved two groups of primary school ESL students in India. The detailed methodology of this study is outlined below.

#### C. Participants and Sampling

The participants ( $N = 64$ ) were selected through convenience sampling from two existing English-speaking classes taught by the same teacher. The students, all in the fifth grade and between 9 and 11 years old, were provided with the study details. Upon agreeing to take part, they were randomly divided into a Bi-modal group (BG,  $N = 32$ ) and a Multi-modal group (MG,  $N = 32$ ). Participants were from India, and none had previously studied or lived in an English-speaking environment.

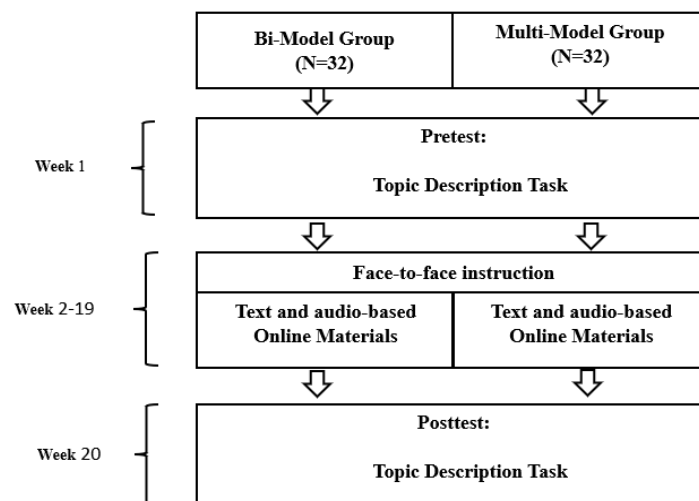


Figure 1. The Schematic Presentation of the Research Design (Pu & Chang, 2023)

#### D. Treatment

The BG and MG underwent a 20-week educational regimen with identical unit layouts and the same instructor (the first author). The sole distinction was the mode of input: the BG engaged with bimodal input (text and audio), while the

MG utilized multimodal input (text and video) throughout the period. For instance, during Weeks 2 and 3, both groups accessed identical text materials on the i-Learning platform, a college-developed site for facilitating online courses. These materials included exercises in using articles, prepositions, plurals, and comparative and superlative forms in various contexts like narrative construction. In addition to the written content, the BG was provided with two audio files that detailed the grammatical rules and provided examples for applying these rules effectively. Conversely, the MG received two video files containing the same instructional content as the BG's audio files but enhanced with captions that directly corresponded to the text, reinforcing the grammatical concepts visually.

Both groups experienced equivalent course content and a consistent weekly schedule (Appendix A) in the blended learning environment. Initially, they participated in a 30-minute in-person grammar instruction session each week, following a textbook provided by the school, as per the academic timetable. The course aimed to enhance students' grammar skills and promote their understanding of language structure. Specifically, each face-to-face session was divided into two segments: grammar comprehension and applied grammar exercises. The first segment included grammar topics, articles, prepositions, and comparative and superlative degrees, while the second segment involved various grammar exercises with multiple tasks.

Additionally, both groups engaged in 60-minute online self-study sessions each week. Students adhered to weekly learning guidelines and completed online tasks such as reviewing the weekly grammar materials, practicing grammar rules, and preparing grammar-related activities for the in-person sessions. Every two weeks, the focus shifted to different grammatical features for training. Subsequently, students worked on various daily grammar practice topics, including articles, prepositions, comparative and superlative, and sample exercises. All materials were made accessible on the school's digital learning platform. Before the commencement of the study, students received guidance on downloading educational resources, submitting assignments, and posting their work on the platform. It is important to note that participation in the online self-learning component was mandatory for all students at the research site, regardless of their involvement in the study.

#### *E. Instruments*

The current study exclusively utilizes a quantitative approach, employing a primary instrument for data collection and analysis i.e., speaking tests. These instruments provide a comprehensive quantitative assessment of the participant's performance.

#### *F. Speaking Tests*

Both groups undertook a grammar assessment (see Appendix B) before and after the instructional period. The assessment was based on a topic description task, widely regarded as a traditional method for evaluating students' L2 grammar accuracy (Isaacs & Thomson, 2013). The participants' responses to the test were audio-recorded for subsequent evaluation. The timed description tests involved participants explaining a subject related to daily life within two minutes. To ensure all participants were equally familiar with the task format, they were asked to randomly choose one of six possible topics and given two minutes to prepare. Following the preparation time, they were required to describe the chosen topic, with a speaking duration of 1 minute, 50 seconds, and 2 minutes.

The study endeavored to ensure the reliability and validity of the tests. The testing materials for the speaking tests were reviewed by two experienced English teachers and a professor of language teaching to confirm their test validity. Following Isaacs and Thomson's (2013) rating approach, the present study utilized a nine-point rating scale to assess participants' grammar accuracy in timed description tests, focusing on articles, prepositions, plurals, and comparative and superlative forms (see Table 1). For the grammar accuracy rubric, one point indicated that using grammatical elements was incorrect and disrupted understanding. In contrast, nine points signified that the grammatical usage was accurate and facilitated clear understanding.

#### *G. Data Analysis*

To address the study's objective, Repeated Measures Analysis of Variance (Repeated Measures ANOVA) was utilized to analyze data involving two groups (bi-model, multi-model) across two-time points (pretest and posttest). This statistical method is particularly suitable as it effectively handles multiple measurements from the same subjects, increasing statistical power by minimizing error variance due to individual differences and thereby enhancing the detection of intervention effects (Dang et al., 2022). Repeated Measures ANOVA also allows for assessing interaction effects between time points and groups, providing comprehensive insights into the intervention's impact on grammar accuracy (Stevens, 2002). Additionally, it accounts for the sphericity assumption, ensuring reliable F-ratios and enhancing result validity (Girden, 1992). This method directly compared grammar accuracy changes within and between groups, ensuring precise and reliable findings (Field, 2024). By employing Repeated Measures of ANOVA, the study robustly analysed the intervention's impact on grammar accuracy in speaking, ensuring statistically robust and valid results.

TABLE 1  
GRAMMAR ACCURACY SPEAKING RUBRIC FOR STUDY

Criterion	Excellent (9)	Good (7-8)	Satisfactory (5-6)	Needs Improvement (3-4)	Poor (1-2)
Articles	Perfect use of articles (a, an, the) with no errors	Mostly correct use of articles with few minor errors	Occasional errors in the use of articles	Frequent errors in the use of articles	Articles are consistently used incorrectly
Prepositions	Accurate use of prepositions in all contexts	Mostly accurate use of prepositions with minor errors	Some errors in preposition usage	Frequent misuse of prepositions	Prepositions are used incorrectly most of the time
Plurals	Correct plural forms used consistently	Mostly correct use of plural forms with minor errors	Occasional errors in plural forms	Frequent errors in forming plurals	Plurals are used incorrectly or not formed at all
Comparative Forms	Correct use of comparative forms throughout	Mostly correct use of comparatives with few errors	Some errors in the use of comparative forms	Frequent errors in the use of comparative forms	Comparatives are consistently used incorrectly
Superlative Forms	Accurate use of superlative forms throughout	Mostly accurate use of superlatives with minor errors	Some errors in the use of superlative forms	Frequent errors in the use of superlative forms	Superlatives are consistently used incorrectly

IV. RESULTS AND DISCUSSION

The results revealed significant speaking performance variances, underscoring the instructional modalities' substantial impact on grammatical proficiency. A repeated measures ANOVA was conducted on the mean scores of grammar which included categories such as prepositions, superlatives, articles, comparatives, and plurals (Figure 2). This analysis revealed a significant main effect of grammar  $F(4, 28) = 14.983, P < .001, \eta^2 = .682$ , demonstrating substantial differences in performance across these grammatical categories.

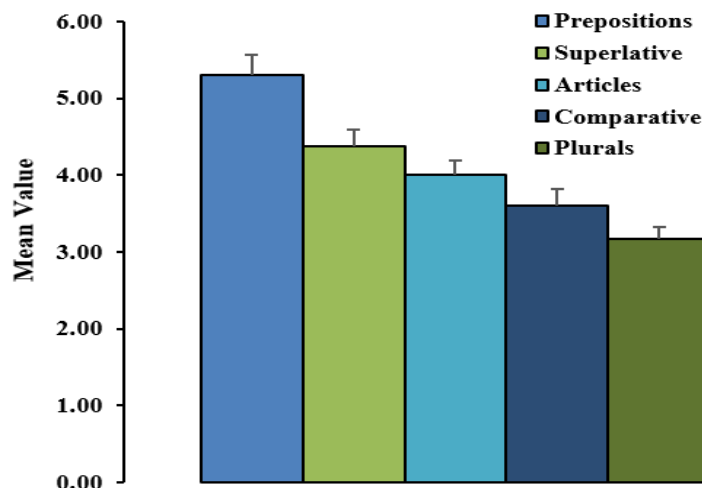


Figure 2. Main Effect on Grammatical Components

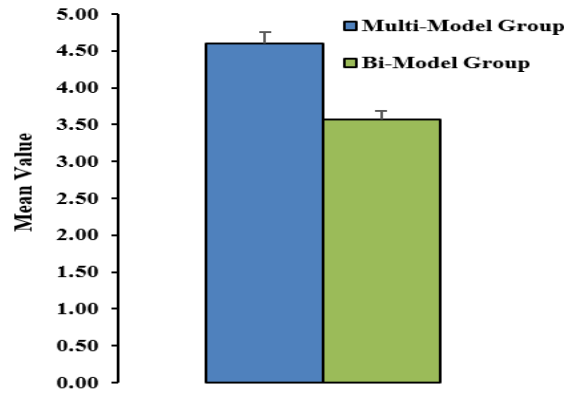


Figure 3. Main Effect on Groups

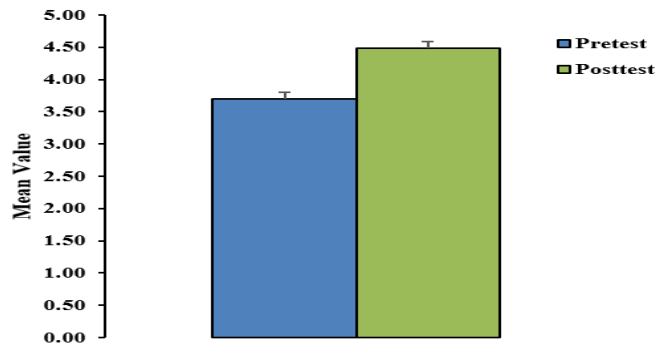


Figure 4. Main Effect on Tests

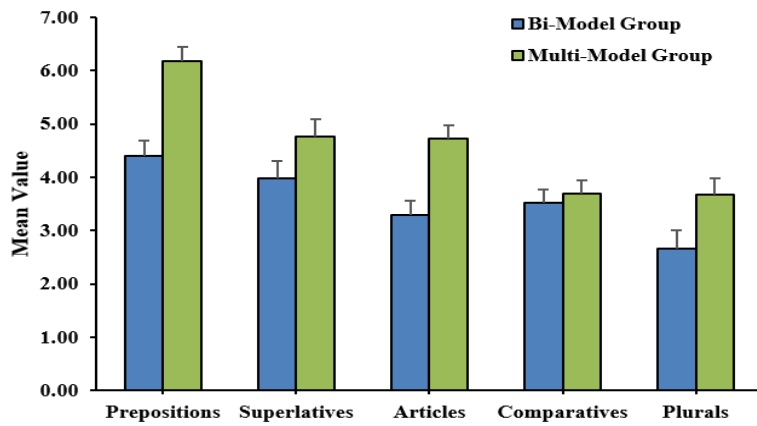


Figure 5. Interaction Between Components of Grammar and Groups

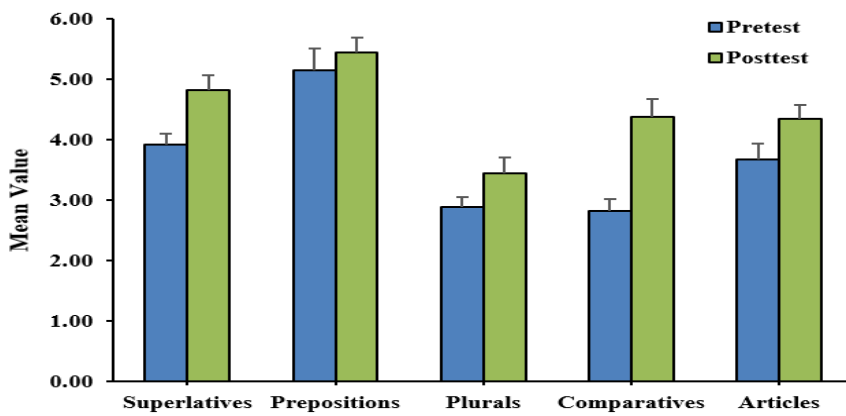


Figure 6. Interaction Between Components of Grammar and Tests

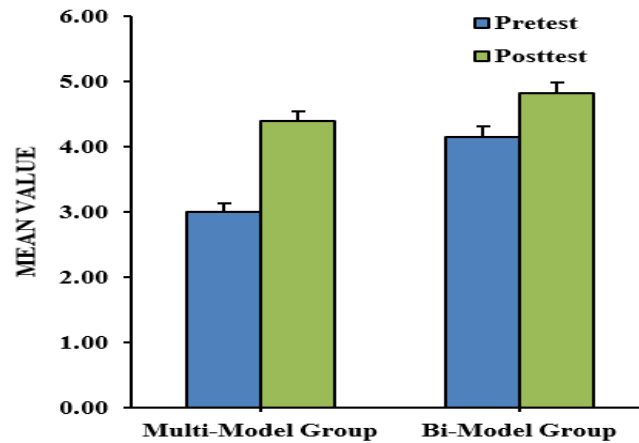


Figure 7. Interaction Between Components of Groups and Tests

Figure 3 illustrated the performance outcomes of two instructional groups, the multi-model and the bi-model groups, focusing on their grammar and speaking accuracy proficiency. The multi-model group demonstrated higher proficiency as indicated by their higher mean scores than the Bi-Model Group. The distinction was statistically significant, with results showing ( $F(1,31) = 29.249, P < .001, \eta^2 = .485$ ), suggesting that the multi-model approach was more effective in enhancing grammatical accuracy in speaking compared to the bi-model approach. The figure clearly showed this effectiveness and the variability within each group, indicated by the error bars, reflecting a range of individual performance outcomes.

Figure 4 compares mean values from a pretest and a posttest, demonstrating significant improvement in speaking performance. The pretest establishes a baseline level, while the posttest showed a notable increase in mean value, suggesting that intervention strategies implemented between the tests were effective. The positive change is corroborated by significant statistical results:  $F(1,31) = 63.139, P < .001, \eta^2 = .671$ , indicating a substantial impact on learners' performance.

Additionally, the interaction between grammar and group was significant,  $F(4,28) = 3.118, p = .031, \eta^2 = .308$ , suggesting that the impact of grammar on speaking performance varied across groups. Figure 5 compares mean values for two groups, the bi-model group and the multi-model group, across five grammatical categories: prepositions, superlatives, articles, comparatives, and plurals. The multi-model group demonstrated higher mean values in every category, indicating better performance than the bi-model group. This trend is consistent across the board, from prepositions to plurals, with the multi-model group maintaining a performance edge in all tested grammatical areas. Figure 5 clearly shows that the multi-model group outperformed the bi-model group in various aspects of grammatical proficiency.

Figure 6 compares mean values for two groups, the bi-model group and the multi-model group across five grammatical categories: prepositions, superlatives, articles, comparatives, and plurals. Each category showed noticeable improvement from the pretest to the posttest, with posttest mean values being higher, suggesting enhanced grammatical proficiency. Significant gains were observed in superlatives and prepositions, while plurals, comparatives, and articles also exhibited improvements, although they were less pronounced in comparatives. The consistent upward trend across all categories indicated that the instructional interventions provided between the tests were effective, improving grammatical usage overall. The multi-model group demonstrated higher mean values in every category, indicating better performance than the bi-model group. This trend was consistent across the board, from prepositions to plurals, with the multi-model group maintaining a performance edge in all tested grammatical areas. Furthermore, the interaction between grammar and test was significant,  $F(4, 28) = 4.547, P = .006, \eta^2 = .394$ , indicating that the influence of grammar on speaking performance varied with the type of test.

Moreover, the interaction between the group and the test highlighted significant variation, with ( $F(1,31) = 8.305, P = .007, \eta^2 = .211$ ), indicating that the performance in grammar between groups was affected. Figure 7 displayed mean values for pretest and posttest assessments for the multi-model and bi-model groups. In both cases, the posttest mean values were higher than the pretest, indicating improvements after the intervention. Specifically, the multi-model group showed a substantial increase, with the posttest mean significantly surpassing the pretest, highlighting a marked improvement. The bi-model group also exhibited a notable improvement, though the increase in mean value from pretest to posttest was slightly less pronounced compared to the multi-model group. Overall, the data illustrated positive outcomes for both instructional models, with the multi-model group demonstrating potentially more effective or impactful instructional strategies.

The three-way interaction among grammar, group, and test conditions showed that these variables collectively influenced speaking performance. Table 2 provided comparative data on the mean (M) and standard error (SE) values for five grammatical categories (article, preposition, plural, comparative, superlative) across two groups (multi-model group and bi-model group) during pretests and posttests. For the multi-model group, the pretest results showed means of

2.69 (SE=0.27) for articles, 4.25 (SE=0.46) for prepositions, 2.53 (SE=0.22) for Plurals, 2.28 (SE=0.22) for comparatives, and 3.25 (SE=0.49) for superlatives. The posttest scores notably increased to 3.91 (SE=0.40) for articles, 4.56 (SE=0.34) for prepositions, 2.81 (SE=0.41) for plurals, 4.75 (SE=0.41) for comparatives, and 4.72 (SE=0.32) for superlatives, indicating marked improvements across all categories. In contrast, the bi-model group started with higher pretest means 4.66 (SE=0.29) for articles, 6.06 (SE=0.36) for prepositions, 3.25 (SE=0.27) for plurals, 3.38 (SE=0.29) for comparatives, and 4.59 (SE=0.34) for superlatives. Their posttest improvements were more modest, resulting in means of 4.78 (SE=0.26) for articles, 6.31 (SE=0.30) for prepositions, 4.09 (SE=0.34) for plurals, 4.00 (SE=0.27) for comparatives, and 4.94 (SE=0.31) for superlatives. While both groups demonstrated improvement, the multi-model group showed more substantial gains comparatively, particularly in comparatives and superlatives, despite starting from lower pretest means.

TABLE 2  
INTERACTION BETWEEN THE COMPONENTS OF GRAMMAR, GROUPS, AND TESTS

		Article		Preposition		Plural		Comparative		Superlative	
		M	SE	M	SE	M	SE	M	SE	M	SE
<b>Multi-Model Group</b>	Pretest	2.69	0.27	4.25	0.46	2.53	0.22	2.28	0.22	3.25	0.49
	Posttest	3.91	0.40	4.56	0.34	2.81	0.41	4.75	0.41	4.72	0.32
<b>Bi-Model Group</b>	Pretest	4.66	0.29	6.06	0.36	3.25	0.27	3.38	0.29	4.59	0.34
	Posttest	4.78	0.26	6.31	0.30	4.09	0.34	4.00	0.27	4.94	0.31

The present study contributes quantitative data supporting the application of multimedia resources in blended speaking instruction. A speaking assessment was conducted to evaluate the speaking abilities of two distinct groups. The bi-model group (BG) and multi-model group (MG) demonstrated statistically significant enhancements in speaking assessments, namely the topic description tests.

Initially, the application of blended speaking instruction, whether through bimodal or multimodal online input, positively enhanced ESL learners' speaking abilities. The current study findings corroborate previous studies on ESL education (Xu et al., 2017; Yang et al., 2013) and reflect two information-processing strategies described in Mayer's (2020) theory of multimedia learning. Specifically, one approach involves a presentation mode incorporating visual, aural, and textual inputs, while the other strategy focuses on sensory modalities differentiating between auditory and visual channels. These findings support the effectiveness of bimodal (aural and text) and multimodal (aural, text, and video) content in online blended learning environments. Additionally, these results confirm other research indicating that comprehensive text inputs supplemented with audio (Webb & Chang, 2022) and video content with subtitles (Saito & Lyster, 2012) can enhance L2 vocabulary learning.

An educational takeaway from these findings, particularly from the description task assessments, is that explicit grammatical instruction focused on form, even when delivered online, can enhance learners' ability to produce precisely targeted grammatical components. Such findings support and broaden the application of Saito and Lyster's (2012) findings on the effectiveness of form-focused instruction among Japanese ESL learners, which initially took place in traditional classroom settings. The findings suggest that online instruction focused on form holds substantial value in teaching and learning.

The recent findings challenge the split-attention and redundancy principles proposed by Ayres and J. Sweller (2005) which argued that utilizing a single channel for information processing could reduce cognitive load and enhance learning. A key reason for this contradiction lies in the specific focus of this study on improving ESL learners' speaking abilities. This focus required learners to confront and master the grammatical aspects of spoken English through extensive practice to achieve both accuracy and fluency. On one side, integrating multiple sources of language input (verbal, nonverbal, auditory, visual, and video) proved effective in capturing learners' attention and enhancing their understanding of the course content. Blended learning environments facilitate this integration by allowing students to interact with materials at their own pace and through repeated exposure. Conversely, the blended learning approach also supports various forms of language learning output, validated by its pedagogical effectiveness in flipped classrooms (Chang, 2023). Additionally, the incorporation of interactive tasks, personalized feedback, and flexible class management in this study encouraged active learner participation in class activities, subsequently improving their speaking performance.

## V. CONCLUSION

This study was conducted to assess the impact of bi- and multi-modal online inputs on blended speech training in a primary school context. It was found to quantitatively substantiate the impact of multimodal materials on blended grammar instruction. It also revealed that both bimodal and multimodal inputs significantly elevated the grammar performance of ESL learners. These findings underscored the benefits of multimedia resources in boosting learner engagement within blended educational settings, particularly as learners adjust to these input modalities. The study highlights the efficacy of focused, form-driven grammatical instruction delivered through blended learning

environments in improving grammatical accuracy. It also emphasizes the importance of ESL educators incorporating multimedia components into their instructional designs thoughtfully. While multimodal strategies generally enhance learning outcomes, they may increase cognitive demands for some learners, suggesting a need for customized input methods to cater to diverse learner differences in blended language education. Despite its contributions, this study encounters limitations due to its reliance on convenience sampling, which may limit the extrapolation of its findings across broader ESL instructional contexts. Future research should investigate the effects of such instructional methods on varied learner groups with different linguistic backgrounds and proficiency levels. Moreover, further studies could assess learner engagement with digital curriculum components and refine course designs to promote greater learner autonomy. The study holds immense pedagogical implications as it promotes learners' involvement in different learning environments.

#### APPENDIX A

Appendix A provides a structured weekly schedule for a course focused on teaching English grammar—specifically targeting articles, prepositions, plurals, comparatives, and superlatives—through online training materials and face-to-face instruction.

Week	Online Training Materials	Grammar Topics of Practice	Face-to-Face Instruction
02-03	Articles - Definite and Indefinite	Use of articles in greetings and introductions	Unit 1: Start Here and Go Further
04-05	Prepositions - Usage and Types	Application of prepositions in gratitude and invitations	Unit 2: Entertainment on Campus
06-07	Plurals - Rules and Exceptions	Plurals in acceptance and refusal contexts	Unit 3: Interpersonal Communication
08-09	Comparatives - Structure and Usage	Comparative forms in apologies and partings	Unit 4: Be Your Personal Best
10-11	Superlatives - Formation and Use	Superlatives in asking for and giving directions	Unit 5: Festivals and Celebrations
12-13	Review of Articles, Prepositions, Plurals	Expressing personal interests with correct grammar usage	Unit 6: A Bite of the World
14-15	Comparatives and Superlatives - Advanced Practice	Using comparatives and superlatives in stating agreement	Unit 7: An Enjoyable Experience
16-17	Complex Grammar Structures	Complex structures in stating disagreement	Unit 8: A Livable Homeland
18-19	Comprehensive Review and Practice	Shadowing practices 1 & 2 on talking about the weather	Practice & Review

#### APPENDIX B

Topics for the timed description test.

1. Describe your favourite animal and why you like it.
2. Describe the best birthday party you ever attended.
3. Describe your dream vacation spot and what you would do there.
4. Describe your favourite movie and what makes it unique.
5. Describe a science experiment you did in school and what you learned from it.
6. Describe a sport or game you enjoy and why it is fun.

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