The Effectiveness of Youtube as a Digital Learning Medium in Improving Listening Comprehension of Eleventh Grade Students

Ridwan*, Riska yanti

Sekolah Tinggi Ilmu Tarbiyah Simeulue Aceh, Aceh, Indonesia
ridwn778@gmail.com

ABSTRACT

This study investigates the effectiveness of YouTube as a digital medium for improving listening comprehension among eleventh-grade students at MAS Miftahussalam Simeulue Timur, a rural Islamic senior high school. Employing a quasi-experimental design, the research involved 60 students divided into an experimental group, which received YouTube-based instruction, and a control group, which relied on textbook materials. Pre-test results showed comparable proficiency between the two groups. After a four-week intervention, the experimental group achieved a mean score of 78.90 (SD = 6.85), reflecting a significant gain of 16.50 points, while the control group improved moderately to 68.23 (SD = 7.01), with a gain of only 6.36 points. Statistical analysis, including paired and independent sample t-tests, confirmed that the experimental group's progress was significantly greater ($p < 0.001$). Classroom observations further supported these findings, showing that YouTube fostered higher engagement, motivation, and confidence. Features such as subtitles, playback control, and authentic input enabled learners to interact more effectively with English. The study concludes that YouTube is a highly effective and low-cost tool for enhancing listening comprehension, even in resource-limited contexts. It highlights the potential of digital platforms to bridge educational disparities in rural schools while offering practical implications for teachers, curriculum designers, and policymakers.

Keywords: YouTube, Listening Comprehension, rural school

INTRODUCTION

Listening comprehension is undeniably a fundamental skill in learning English as a Foreign Language (EFL), acting as the essential foundation for communication and enabling the progress of all other language abilities like speaking and writing [1]. Experts agree that listening is not just a passive activity; rather, it's an active mental process [2]. This process requires learners to quickly grasp sounds, interpret vocabulary within context, and infer meaning beyond the literal words. Because of this complexity, many EFL students struggle to become proficient listeners, a difficulty particularly acute in Indonesia, where listening is often cited as the most challenging skill to master [3]. While students in urban schools can often overcome these hurdles through extra courses or frequent exposure to English media, learners in rural areas, such as those attending MAS Miftahussalam Simeulue Timur, face unique, significant barriers: minimal exposure to authentic English, limited resources, and an over-reliance on traditional teaching methods that may lack engaging content [4].

Fortunately, digital technology offers powerful new solutions. Video-sharing platforms like YouTube have become incredibly popular [5]. YouTube gives students access to real-life conversations, diverse accents, and multimodal input, combining audio and visuals which is highly beneficial for learning [6]. Its user-friendly features, such as adjustable speed and readily available subtitles, make it a flexible tool [7]. Research in technologically advanced settings

confirms that YouTube can boost student motivation and improve listening skills [8,9]. However, most of this strong evidence comes from urban schools or universities where reliable internet and adequate technology are taken for granted. This reality is sharply contrasted by rural Islamic schools, or madrasah, which often struggle with poor infrastructure, limited funding, and a scarcity of digital resources.

This is the crucial research gap we address. Despite the proven benefits of YouTube, its effectiveness in these specific, resource-constrained rural and religious school settings, specifically the eleventh grade at MAS Miftahussalam Simeulue Timur has not been adequately studied. Rural madrasah deal with multiple, simultaneous challenges: lack of authentic English resources, limited teacher training in digital tools, and technical constraints. This context leads to critical questions that guide this study: Can the educational benefits of YouTube, observed in well-equipped urban areas, genuinely be achieved in remote locations? What effective teaching strategies are needed to integrate YouTube successfully when local infrastructure is deficient?

Therefore, this quasi-experimental study aims to fill this void by focusing specifically on the eleventh-grade students at MAS Miftahussalam Simeulue Timur. The research has three main goals: (1) to determine if instruction using YouTube leads to a significantly greater improvement in students' listening comprehension compared to standard textbook methods; (2) to assess the degree of progress in specific listening sub-skills, such as identifying main concepts and making inferences; and (3) to analyze the practical teaching implications of using YouTube in rural madrasah and similar contexts. The importance of this study is twofold: theoretically, it contributes to the body of literature on multimedia learning by testing its applicability in a unique, underresourced Southeast Asian context; practically, our findings will offer clear, cost-effective recommendations for educators and policymakers, thereby supporting the Ministry of Education's goal of using ICT to reduce the significant educational divide between urban and rural regions, particularly by demonstrating a viable solution for MAS Miftahussalam Simeulue Timur.

METHODOLOGY

This study employed a quasi-experimental design featuring pre-test and post-test control groups to evaluate the effect of YouTube-based instruction (independent variable) on students' listening comprehension performance (dependent variable) within a real-world classroom setting, a methodology often favored when random assignment is impractical (Cohen et al., 2018). The participants were 60 eleventh-grade students from MAS Miftahussalam Simeulue Timur, selected via purposive sampling and divided equally into an experimental group (n=30) and a control group (n=30). Both groups were taught by the same experienced teacher to minimize variability. The research context a rural *madrasah* with limited resources is crucial for testing YouTube's viability as an accessible, low cost platform in a challenging environment [10]. The primary tool was a reliable and validated 30-item multiplechoice listening assessment (Cronbach's α=0.82) designed to measure four key sub-skills: identifying main ideas, recognizing details, contextual vocabulary, and making inferences. Additional qualitative data were collected through observation notes to contextualize the numerical results [11].

The intervention was conducted over four weeks. Initially, both groups completed the pre-test to establish baseline equivalence. During the two-week intervention phase, the experimental group used curated YouTube videos, leveraging features like subtitles, while the control group utilized standard textbook audio recordings. Following the intervention, both groups sat for the post-test. Data analysis involved descriptive statistics and inferential T-tests (Paired Sample and Independent Sample) to compare intra-group and inter-group performance, with significance determined at the P<0.05 threshold. The study adhered to all ethical guidelines, including securing parental consent and ensuring confidentiality through student coding. This rigorous approach guarantees that the findings offer both statistically sound and contextually relevant insights into using digital media for EFL instruction in resource-limited schools.

RESULTS

The results of the quasi-experimental study provide compelling evidence regarding the efficacy of YouTube-based teaching compared to traditional methods in improving students' listening comprehension.

Table 1. The Results of the Quasi-experimental Study

Group	N	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	Gain Score
Experimental	30	62.40	7.12	78.90	6.85	16.50
Control	30	61.87	6.95	68.23	7.01	6.36

The mean score of the experimental group soared from 62.40 to 78.90, signifying an increase of 16.50 points, whereas the control group's mean climbed from 61.87 to 68.23, only gaining 6.36 points. These findings indicate that both teaching methods aided in enhancement, but the experimental group attained a significantly greater level of development.

The standard deviations reveal that the variability within each group stayed relatively constant from pre-test to post-test, implying that the enhancement in the experimental group was steady among most participants.
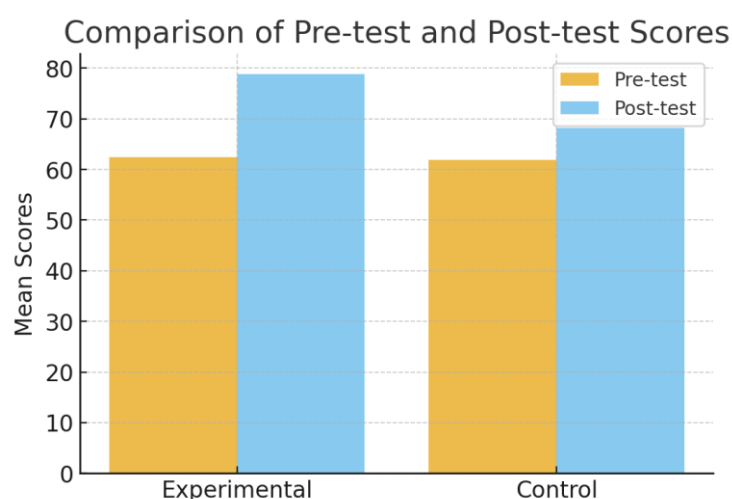
Figure 1. Conparison of Pre-test and Post-test Scores

To assess whether the advancements within each group were statistically notable, a paired sample t-test was performed, contrasting pre-test and post-test scores for both groups. The outcomes are detailed in the table below:

Table 2. Paired Sample t-test

Group	t-value	df	Sig. (2-tailed)
Experimental	12.84	29	0.000
Control	5.73	29	0.000

Both groups exhibited notable advancement ($p < 0.05$). Nevertheless, the experimental group registered a significantly higher t-value (12.84) in contrast to the control group (5.73), suggesting that the extent of enhancement was markedly superior for students educated via YouTube-based instruction.

This outcome underscores that although traditional methods still led to some improvement, the incorporation of YouTube afforded students a more robust and effective

learning opportunity, especially in the skill areas assessed by the test: identifying key concepts, recognizing specifics, interpreting language, and drawing conclusions.

A t-test for independent samples was carried out to investigate if there existed a notable difference between the post-test results of the experimental group and the control group. The findings are presented in the table below:

Table 3. A t-test for Independent Samples

Group Comparison	t-value	df	Sig. (2-tailed)
Experimental vs Control	5.12	58	0.000

The findings indicate a noteworthy statistical disparity ($p < 0.05$) in the post-examination results of the two groups. The experimental cohort's enhanced performance substantiates that instruction utilizing YouTube proved more beneficial than conventional textbook-based approaches in enhancing listening comprehension.

DISCUSSION

This study demonstrates that YouTube is a more effective instructional medium than conventional textbook-based methods in improving the listening comprehension of eleventh-grade students at MAS Miftahussalam Simeulue Timur. Learners in the experimental group not only achieved significantly higher post-test scores but also showed a greater degree of progress compared to those in the control group. These findings lend strong support to Mayer's multimedia learning theory [12], which posits that comprehension improves when information is delivered through both auditory and visual channels. Unlike scripted and monotonous textbook recordings, YouTube provides authentic exposure to diverse accents, contexts, and communicative situations. Features such as subtitles, playback controls, and visual cues further allowed learners to adjust the material to their individual pace, thereby enhancing both bottom-up and top-down listening processes. These results are consistent with earlier studies reporting that YouTube strengthens comprehension of authentic language while expanding cultural knowledge [13].

Equally important, YouTube fostered greater learner engagement and motivation. Students in the experimental group were more enthusiastic, interactive, and willing to participate in discussions, while the relatable nature of the videos helped reduce anxiety and create a more supportive learning environment. This outcome resonates with Krashen's affective filter hypothesis [14] and aligns with Kelsen's findings that YouTube can enhance learner motivation [15]. In contrast, students in the control group often adopted a passive stance, relying on teacher explanations without the same level of active involvement.

A distinctive contribution of this research lies in its rural Islamic school setting, where access to authentic English input and technological resources is limited. Unlike many prior studies conducted in urban or better-equipped schools, this study demonstrates that low-cost, widely accessible platforms such as YouTube can be integrated effectively even in resource-constrained contexts. Teachers can, for example, download videos in advance for classroom use and select content that aligns with both curriculum objectives and the cultural values of a madrasah. Such practices also reflect broader educational policies in Indonesia promoting the use of digital technologies, though persistent challenges such as weak connectivity, limited infrastructure, and insufficient teacher training remain significant barriers.

Comparison with prior research further strengthens the reliability of these findings. Earlier studies confirmed the value of authentic audiovisual input for listening comprehension [16], and this study validates those insights while extending them to rural contexts. The results challenge assumptions that digital innovation in education is limited to urban or technologically advanced environments.

The findings carry practical implications at multiple levels. For teachers, YouTube can serve as a primary or supplementary tool in listening instruction through carefully designed pre-listening, while-listening, and post-listening activities. For curriculum developers, the integration of authentic digital resources is recommended alongside traditional materials to make instruction more engaging and relevant. For policymakers, the evidence highlights the potential of affordable, accessible technologies like YouTube to narrow the educational gap between rural and urban schools, provided adequate investments are made in teacher training and infrastructural support.

Several limitations must be noted. The sample size was restricted to 60 students from a single institution, which may limit the generalizability of results. The four-week duration may not fully reflect long-term learning outcomes, and the study focused only on listening comprehension without considering other skills such as speaking, reading, or writing. Future research should broaden the sample, extend the duration, and incorporate qualitative methods such as interviews or focus groups to capture deeper insights into learner experiences.

Despite these limitations, the study contributes meaningful evidence to the field of EFL education by demonstrating that YouTube can significantly enhance listening comprehension in a rural Islamic school context. For students at MAS Miftahussalam Simeulue Timur, YouTube offered rare exposure to authentic English communication, enriching their learning experience beyond the limitations of textbooks. Overall, the findings suggest that integrating YouTube into listening instruction creates more engaging, equitable, and effective learning opportunities, affirming its role as a powerful digital learning medium in resource-limited settings.

CONCLUSION

The findings of this quasi-experimental study demonstrate that YouTube-based instruction is significantly more effective than traditional methods in improving the listening comprehension of eleventh-grade students at MAS Miftahussalam Simeulue Timur. While both groups showed measurable progress, the Experimental Group achieved a substantially greater mean gain, supported by strong statistical evidence from paired and independent t-tests. These quantitative results were reinforced by classroom observations, which revealed that YouTube fostered higher engagement, confidence, and active participation. Features such as subtitles and playback controls enabled students to interact with authentic input more effectively, enhancing both bottom-up and top-down listening processes. Overall, the study provides robust evidence that YouTube is a powerful and practical digital medium for enhancing listening comprehension, particularly in rural Islamic school contexts with limited resources.

REFERENCES

[1]   Pratama SHH, Arifin RA, Widianingsih AWS. The use of Youtube as a learning tool in teaching listening skill. International Journal of Global Operations Research 2020;1:123–9.

[2]   Alqahtani ET. Effectiveness of using YouTube on enhancing EFL students' listening comprehension skills. Saudi Arabia 2014.

[3]   Sembiring HTR, Katemba CV. The use of YouTube English educational videos in improving listening comprehension. Journey: Journal of English Language and Pedagogy 2023;6:161–70.

[4]   Listiani NKM, Suwastini NKA, Dantes GR, Adnyani NLPS, Jayantin IGASR. YouTube as digital learning resources for teaching bilingual young learners. 2nd International Conference on Technology and Educational Science (ICTES 2020), Atlantis Press; 2021, p. 156–62.

[5]   Tahmina T. Students' Perception of the Use of Youtube in English Language Learning. Journal of Languages and Language Teaching 2023;11:151–9.

[6]   Ratnaningsih L, Gumiandari S. The impact of TED Youtube channel to improve listening in English learning students of TBI IAIN Cirebon. International Journal of Educational Qualitative Quantitative Research 2022;1:8–15.

[7]   Chien C, Huang Y, Huang P. YouTube Videos on EFL College Students' Listening Comprehension. English Language Teaching 2020;13:96–103.

[8]   Nasser Al Harbi W. The Role of Social Media (YouTube and Snapchat) in Enhancing Saudi EFL Learners' Listening Comprehension Skills. Arab World English Journal (December 2020) 2020.

[9]   Qomariyah SS, Permana D, Hidayatullah H. The effect of YouTube video on studentsâ€™ listening comprehension performance. Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP 2021;8:67–73.

[10]   Yin RK. Qualitative research from start to finish. 2nd ed. London: Guilford publications; 2016.

[11]   Creswell JW. Research design: Qualitative, quantitative, and mixed methods approaches. 2nd ed. Los Angeles: Sage Publications, Inc.; 2009.

[12]   Mayer RE. Incorporating motivation into multimedia learning. Learning and Instruction 2014;29:171–3.

[13]   Utami TP. An Analysis of Teachers' Strategies on English E-Learning Classes during Covid-19 Pandemic (A Qualitative Research at MTs Sudirman Getasan in the Academic Year 2019/2020). IAIN Salatiga, 2020.

[14]   Krashen SD. The input hypothesis: Issues and implications. London: Longman; 1985.

[15]   Kelsen B. Teaching EFL to the iGeneration: A survey of using YouTube as supplementary material with college EFL students in Taiwan. Computer-Assisted Language Learning Electronic Journal 2009;10:10–27.

[16]   Gilakjani AP. The significance of pronunciation in English language teaching. English Language Teaching 2012;5.