



The Effect of a Flipped Classroom with Youtube Integration Towards Students' Listening Skill in SMAN 1 Seririt

Luh Aprilia Utami^{1*}, Putu Eka Dambayana¹, Luh Gd Rahayu Budiarta¹

¹Universitas Pendidikan Ganesha, Bali, Indonesia

*aprilia.utami@undiksha.ac.id

ABSTRACT

This study investigated the impact of integrating YouTube into a flipped classroom model to improve students' listening skills at SMAN 1 Seririt. The aim was to determine whether this strategy significantly improved students' listening comprehension compared to conventional teaching. This study was motivated by the observed challenges that students faced in comprehending English listening materials using traditional teaching methods. The focus of this study was on the implementation of the flipped classroom approach, where students watched educational videos from YouTube before class, so that class time could be used for interactive and practical activities. Two eleventh-grade classes were selected as the experimental and control groups, using a quantitative method with a quasi-experimental approach. The experimental group received instruction through the flipped classroom method using YouTube videos, while the control group followed traditional instruction. Data were collected through pre-tests and post-tests assessing listening skills and were analyzed using descriptive and inferential statistics, including t-tests. Supported by a medium effect size (Cohen's $d = 0.61$), the findings indicated that the experimental group showed statistically significant improvements in listening skills. Thus, integrating YouTube in a flipped classroom setting effectively improved students' listening comprehension and offered a student-centered, engaging, and flexible learning experience.

ARTICLE INFO

Keywords:

English Language Learning;
Flipped Classroom;
Listening Skills;
YouTube Integration

How to Cite in APA Style:

Utami, L. A. ., Dambayana, P. E. ., & Budiarta, L. G. R. (2025). The Effect of a Flipped Classroom with Youtube Integration Towards Students' Listening Skill in SMAN 1 Seririt. *IJLHE: International Journal of Language, Humanities, and Education*, 8(2), 509–526.

<https://doi.org/10.52217/ijlhe.v8i2.1914>

This is an open access article under [CC-BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/) license.



INTRODUCTION

The educational landscape continues to evolve in the digital era, especially through the integration of technology into classroom practices. One of the most

significant innovations is the flipped classroom model, which reverses the traditional teaching paradigm by shifting content delivery outside the classroom (Nja et al., 2022). Usually through videos while using class time for interactive and student-centered activities (Al-Zoubi and Suleiman, 2021). According to van Alten et al. (2019), often learning content in the form of videos is studied outside the classroom, then class time is devoted to interactive activities such as discussions and problem solving in this model. According to Baig and Yadegaridehkordi (2023), this model has become famous for its potential to increase student engagement and academic performance. However, the downside is that the effectiveness of the flipped classroom is highly dependent on student motivation and access to technology (Lepkova et al., 2024). According to Kusuma et al. (2021), compared to the control group, students using the flipped classroom method showed greater active engagement, increased speaking confidence, and significant improvements in speaking scores. The flipped classroom paradigm has several drawbacks despite its many advantages, including increased student independence and engagement (Andewi & Hastomo, 2022). Students must be prepared to learn independently and have adequate access to technology for the flipped classroom to be successful, because flipped classroom learning can be much less effective if students lack the discipline to study the material before class and have poor access to devices and internet connections (Kusuma, 2020). Thus, this strategy is seen as effective in promoting student-centered learning (Kusuma, 2020).

According to Kutlu and Aslanoğlu (2009), listening skills are one of the important components in language acquisition, but this skill still receives less attention in conventional English teaching. Due to the lack of opportunities to process auditory input at their own pace and limited exposure to authentic materials, students often have difficulty understanding the material they hear (Woottipong, 2014). According to Liubinienė (2009), effective listening involves decoding sounds and interpreting meaning using prior knowledge. Because children will indirectly learn vocabulary, grammar, pronunciation, and even speaking fluency through active listening, listening should be a top priority or in other words, speaking ability is not only improved by speaking practice, but also through extensive exposure through continuous listening practice (Ratminingsih, 2012). Therefore, traditional methods often fail to address these complexities, resulting in low student motivation and passive learning behavior (Hastomo et al., 2025). According to Kusuma (2022), students' listening skills are significantly enhanced by teachers' ability to select and deliver relevant audio-visual content using the flipped classroom method. Students have more opportunities to independently and thoroughly comprehend spoken input when listening resources in the form of recordings or videos are provided for them to watch or listen to before class (Kusuma, 2022).

According to Guillén-Gámez et al. (2024), educators can now provide rich multimodal input to students that supports self-directed learning with the increasing availability of video-sharing platforms such as the YouTube application. This is because YouTube offers diverse and authentic audiovisual materials, while also allowing students to engage with content at their own pace and revisit challenging segments as needed (Sharma & Sharma, 2021). According to Ampa (2015), YouTube is an application with a variety of educational and authentic content, which offers students the ability to control their learning pace such as pausing, rewinding, and rewatching videos as needed to strengthen student understanding. Research conducted by Maziriri et al. (2020) explains that integrating YouTube into a flipped classroom model improves student performance by promoting active learning and catering to a variety of learning styles, especially in listening comprehension. Students are encouraged to actively participate in all stages of learning, from planning and implementation to reflection, through the use of technology in the flipped classroom, which includes instructional films, courageous conversations, and teacher feedback (Kusuma, 2020).

Existing research, especially those focused on university-level teaching, has paid limited attention to its implementation in high schools despite the growing literature on flipped classrooms and digital learning (Margawidjaya et al., 2024). Furthermore, few have specifically investigated the integration of YouTube in flipped classrooms aimed at improving listening skills in the context of Indonesian high schools, despite numerous studies supporting the use of video content in language learning. Thus, observations at SMAN 1 Seririt revealed that students often face difficulties in understanding the meaning of English audio during listening tasks in class, which is characterized by a lack of focus, motivation, and comprehension in students.

This study attempts to fill this gap by examining the effectiveness of a flipped classroom model integrated with YouTube in improving the listening skills of eleventh grade students at SMAN 1 Seririt. The innovation lies in the combination of flipped pedagogy with a widely accessible digital platform to meet students' learning needs in a flexible, engaging, and independent manner. Also, the novelty of this study lies in its focus on the application of the flipped classroom method with YouTube integration in high school level in an area that has been under-explored in previous studies. By focusing on listening skills, which are often overlooked aspects of language learning, this study contributes to theory and practice by offering a scalable solution that aligns with the demands of the Merdeka Curriculum. According to Cholilah et al. (2023), the Merdeka Curriculum emphasizes student autonomy and digital literacy. Thus, the findings of this study are expected to inform educators, policymakers, and curriculum designers in developing effective, technology-enabled English language instruction for 21st-century learners.

METHOD

To test the effect of the flipped classroom model integrated with YouTube on students' listening skills at SMAN 1 Seririt, a quantitative method with a quasi-experimental design was used in this study. The classroom setting set by the school made the quasi-experimental approach chosen because the researchers could not group students randomly. Thus, two intact classes were selected into 2 groups, namely the experimental and control groups. The experimental group taught using flipped classroom learning with YouTube videos, while the control group taught using traditional methods without video integration.

Eleventh grade students enrolled at SMAN 1 Seririt during the 2024/2025 academic year became participants in this study, with a total population of 389 students in eleven classes. A complete sampling technique was used to determine the study sample. This involved two full classes selected based on the school's administrative grouping. Students' English scores from the previous semester report cards were compared to ensure that both groups had the same level of English proficiency before the treatment. Therefore, the experimental group was the first class, where the first class received instruction using a flipped classroom model supported by YouTube. While the control group was the second class, where the second class continued with the traditional instruction method without using YouTube videos or out-of-class learning activities.

The procedure in this study lasted for eight sessions, consisting of one pre-test session, six instructional meetings, and one post-test session. Three types of texts were used as instructional content that focused on listening practice. The three texts used were narrative, descriptive, and report texts. During non-class hours, students in the experimental group were assigned to watch YouTube videos selected by the researchers, which ranged in length from five to seven minutes. These videos were carefully selected to suit the language abilities of the students and ensure alignment with the national curriculum. Meanwhile, class time was dedicated to collaborative discussions, comprehension tasks, and guided feedback sessions. On the other hand, the control group received the same learning materials but delivered through traditional classroom lectures, without the video-based component.

Original YouTube videos with educational content related to the research theme were used as materials and media used in the experimental group. The videos were selected based on clarity, speed, visual quality, and suitability for high school students. In addition, other additional learning materials included printed listening worksheets, comprehension exercises, and learning modules prepared by the teacher. Students in the experimental group completed interactive tasks based on the video content, while the teacher facilitated understanding through questions, discussions, and practical activities during class sessions.

The pre-test and post-test, both consisting of 10 questions, were the instruments used to collect data. The test was designed to evaluate students'

listening comprehension. Also, the test included three types of items, namely 4 multiple-choice questions, 3 true or false statements, and 3 short-answer questions. The test materials were developed based on the listening texts and videos used during the study, to assess students' ability to understand main ideas, specific details, and contextual meaning. On the other hand, the researchers also used the researchers' observation notes so that during the learning process the researchers could document classroom dynamics, student engagement, and any implementation challenges. Therefore, these qualitative notes can provide valuable contextual support for interpreting the quantitative data.

In this study, descriptive and inferential statistics were used to analyze the data. Before and after the treatment, descriptive statistics such as mean, standard deviation, and range were calculated to summarize the performance of students in both groups. On the other hand, several tests were applied for inferential analysis. To validate the assumptions required for parametric analysis, normality test and homogeneity test were conducted. Independent Sample T-Test was used to determine whether there was a significant difference in the post-test scores between the experimental and control groups. Also, paired Sample T-Test was conducted in the experimental group to measure the improvement of students' listening skills before and after the treatment. The effect size was calculated using Cohen's *d*, which resulted in a value of 0.61, which indicates a moderate effect of the flipped classroom model with YouTube integration on the development of students' listening skills.

Table 1. Normality Test

Interpretation of Normality Test	
$p < 0.05$	The data distribution is not normal
$p > 0.05$	The data distribution is normal

Table 1 presents the interpretation criteria for the normality test results. When the *p*-value is less than 0.05, it indicates that the data distribution deviates significantly from normality, suggesting a non-normal distribution. Conversely, when the *p*-value exceeds 0.05, the data distribution is considered to meet the assumption of normality. This interpretation framework is commonly used in statistical analyses to determine the appropriate subsequent tests, whether parametric or non-parametric, based on the distribution of the dataset.

Table 2. Homogeneity Test

Interpretation of Homogeneity Test	
$p < 0.05$	The data distribution is not homogeneous
$p > 0.05$	The data distribution is homogeneous

Table 2 outlines the interpretation criteria for the homogeneity test results. A p-value less than 0.05 indicates that the data distribution lacks homogeneity, suggesting significant differences in variances across groups. In contrast, a p-value greater than 0.05 signifies that the data distribution is homogeneous, meaning the variances are statistically equal. This interpretation is essential for determining whether the assumption of homogeneity of variances is met, which influences the choice of appropriate statistical tests in subsequent analyses.

RESULTS AND DISCUSSION

Results

1. Description and Frequency of Experimental Group and Control Group

The listening skills of students in the experimental group were significantly improved due to the flipped classroom model with YouTube integration. The higher increase in the mean score compared to the control group, the decrease in the number of students with low scores, and the greater proportion of students who obtained high scores above 80 supported the improvement quantitatively. These results confirmed the effectiveness of the flipped classroom model in encouraging active learning and improving English listening comprehension among students of SMAN 1 Seririt. Thus, the results of the study are presented to compare the pre-test and post-test results of the experimental group and the control group in the form of tables, histograms, and detailed verbal descriptions.

Table 3 below presents the pre-test results of the experimental group consisting of 36 students and the scores are distributed into seven class intervals. Meanwhile, the histogram for the pre-test of the experimental group in Figure 1 shows a normal distribution with most students scoring in the range of 50–79, where the mean score is 60.56 with a standard deviation of 15.108. This indicates that students' listening ability is at a moderate level before treatment with relatively high variance.

Table 3. Pre-Test Score Distribution of Experimental Group

Class Interval	Frequency (f)	Percentage
30 - 39	2	5.6%
40 - 49	3	8.3%
50 - 59	8	22.2%
60 - 69	9	25.0%
70 - 79	8	22.2%
80 - 89	4	11.1%
90 - 99	2	5.6%
Total	36	100%

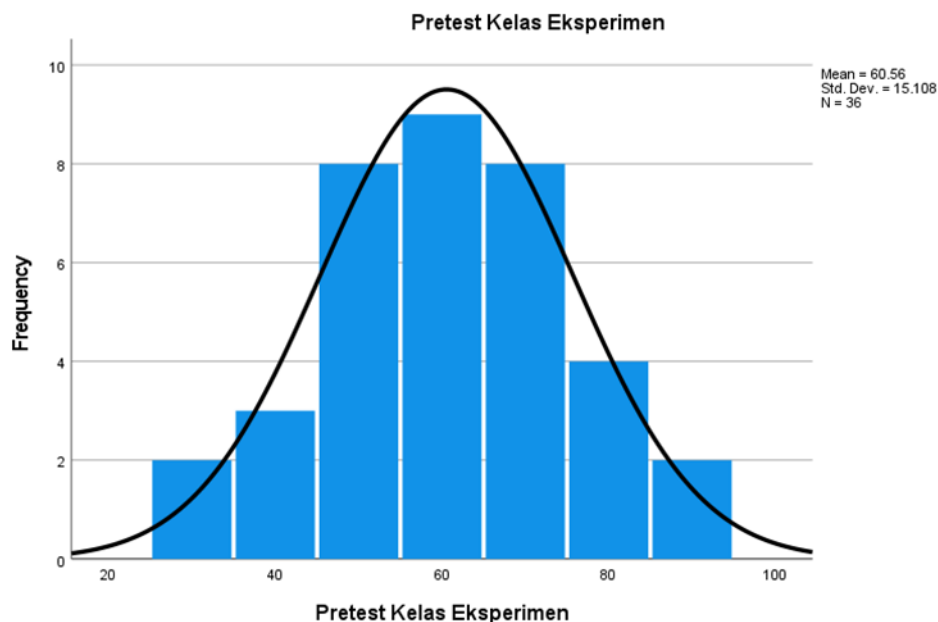


Figure 1. Histogram Pre-Test Experimental Group

In Table 4 below, students in the experimental group showed significant improvement in their post-test scores after undergoing the flipped classroom approach using YouTube. Meanwhile, the histogram of the post-test scores of the experimental group in Figure 2 shows a clear shift towards higher scores, where the mean value increased to 80.28 with a standard deviation of 14.038. Thus, most students scored above 80 which shows significant improvement after students were given the flipped classroom model with YouTube.

Table 4. Post-Test Score Distribution of Experimental Group

Class Interval	Frequency	Percentage
60 – 69	7	19.4%
70 – 79	6	16.7%
80 – 89	9	25.0%
90 – 99	7	19.4%
100 – 109	7	19.4%
Total	36	

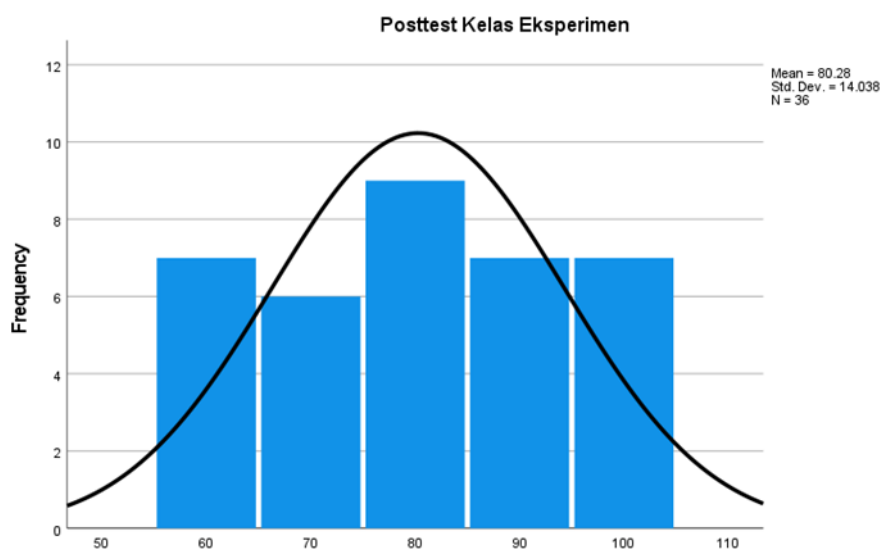


Figure 2. Histogram Post-Test Experiment Group

On the other hand, the control group consisting of 36 students was taught using the traditional method. Table 5 below shows the distribution of pre-test scores of students from the control group. Meanwhile, the histogram of the mean score in Figure 3 shows 61.11 with a standard deviation of 14.497. Thus, the pre-test results of the control group are centered in the middle range and indicate a moderate level of ability.

Table 5. Pre-Test Score Distribution of Control Group

Class Interval	Frequency	Percentage
30 – 39	2	5.6%
40 – 49	2	5.6%
50 – 59	8	22.2%
60 – 69	10	27.8%
70 – 79	7	19.4%
80 – 89	6	16.7%
90 – 99	1	2.8%
Total	36	100%

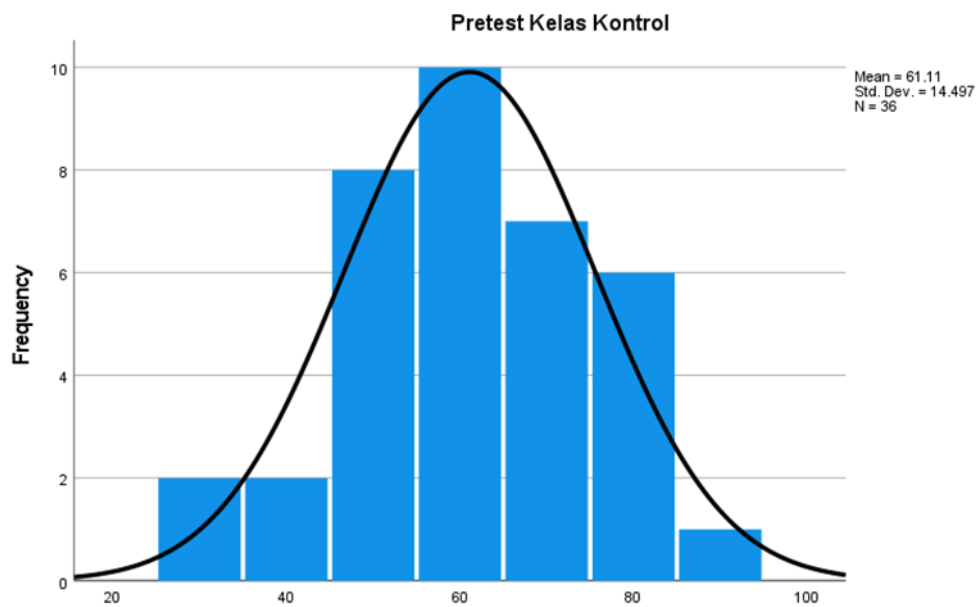


Figure 3. Histogram Pre-Test Control Group

In Table 6 below, the post-test results for the control group show some improvement, although not as dramatic as those for the experimental group. The post-test histogram for the control group in Figure 4 shows a modest improvement, with the mean score rising to 71.94 with a standard deviation of 13.484. Thus, the improvement was not as large as that observed for the experimental group, although there was a shift toward higher scores.

Table 6. Post-Test Score Distribution of Control Group

Class Interval	Frequency	Percentage
50 – 59	4	11.1%
60 – 69	8	22.2%
70 – 79	9	25.0%
80 – 89	8	22.2%
90 – 99	6	16.7%
100 – 109	1	2.8%
Total	36	100%

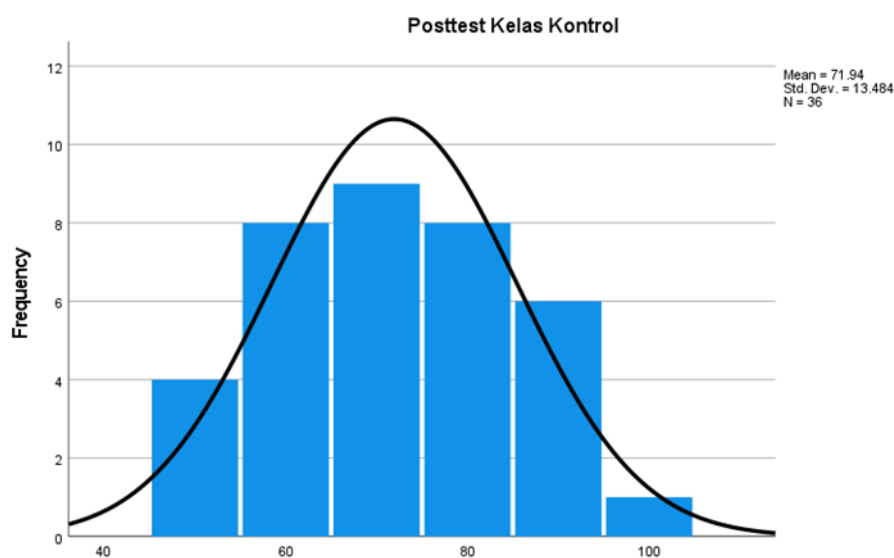


Figure 4. Histogram Post-Test Control Group

Comparison of pre-test and post-test scores in the experimental and control groups showed that the experimental group experienced a more significant improvement compared to the control group. The experimental group's mean pre-test score was 60.56 and increased to 80.28 on the post-test, representing a mean increase of 19.72 points. Meanwhile, the control group showed a smaller improvement with a mean pre-test score of 61.11 which increased to 71.94 on the post-test, representing a mean increase of only 10.83 points. Furthermore, the distribution of scores in the experimental group shifted significantly toward the higher 80s with more students achieving near-perfect scores.

2. Pre-requisite Analysis

It is essential to first ensure that the data meets the assumptions required for parametric statistical analysis before conducting further statistical tests to evaluate the effects of the flipped classroom model with YouTube integration. Specifically, the normality and homogeneity of the pre-test and post-test scores of both the experimental and control groups were examined. This is because these tests determine whether it is appropriate to proceed with parametric testing such as t-test. The results of the normality and homogeneity tests confirmed that all data sets such as pre-test and post-test scores were normally distributed and also the variances between groups were homogeneous. Therefore, the data met the basic requirements for conducting parametric statistical tests and further inferential analysis such as t-test can be reliably applied to test the effectiveness of the flipped classroom model with YouTube integration in improving students' listening comprehension skills.

In this study, the Kolmogorov-Smirnov test with a significance level of 0.05 was used to conduct a normality test. It aims to verify whether the score distributions of the experimental and control groups follow a normal distribution,

which is an important prerequisite for parametric testing. As can be seen in Table 7 below, Table 7 shows that all significance values (Sig.) exceed 0.05. This indicates that the data are normally distributed for the experimental and control groups in both the pre-test and post-test phases. In particular, the control group's post-test score shows the highest normality significance of 0.902, while the experimental group's post-test is in the lowest position of 0.052. Therefore, it is confirmed that all score distributions are suitable for further parametric analysis because no Sig. values fall below 0.05.

Table 7. Normality Test Results Using Kolmogorov-Smirnov

Kolmogorov-Smrinov			
Class	Statistic	df	Sig.
Pre-Test Experimental Group	.142	36	.065
Post-Test Experimental Group	.145	36	.052
Pre-Test Control Group	.126	36	.126
Post-Test Control Group	.142	36	.902

Meanwhile, Levene's Test was used to conduct a homogeneity of variance test. This aims to ensure that the variance across groups is statistically the same. Homogeneous data variance is essential to avoid bias and invalid conclusions when comparing groups using parametric statistics. From the Table 8 below, the significance values for all Levene's test bases are well above the threshold of 0.05. The highest significance value was recorded based on trimmed mean, which was 0.864. Thus, it can be concluded that the variance of the data between groups is homogeneous because all values exceed 0.05. This confirms that significantly in terms of variability, the pre-test and post-test data from the experimental and control groups are not different, which further validates the use of independent and paired Sample T-Tests in further analysis.

Table 8. Homogeneity Test Results Using Levene's Test

Levene Statistic		df1	df2	Sig.
Based on Mean	.041	1	70	.840
Based on Median	.064	1	70	.801
Based on Median with adjusted df	.064	1	69.960	.801
Based on trimmed Mean	.030	1	70	.864

3. Hypothesis

In order to test the research hypothesis, a series of statistical analyses were conducted to determine the significance and effectiveness of the flipped classroom model integrated with YouTube in improving students' listening skills. The analyses

included Independent Samples T-Test, Effect Size or Cohen's d, and Paired Samples T-Test specifically for the experimental group. The results were presented in a combination of tables, verbal descriptions, and interpreted comparisons between groups.

Independent Sample T-Test was used to test whether there was a significant difference in the post-test scores between the experimental group receiving flipped classroom treatment with YouTube integration and the control group receiving traditional teaching. As shown in Table 9 below, the significance value or Sig. 2-tailed is 0.012, which is less than 0.05. This result means that the null hypothesis or H_0 is rejected and the alternative hypothesis or H_1 is accepted according to the decision-making criteria. Thus, it can be concluded that there is a statistically significant difference between the experimental group and the control group. Therefore, the flipped classroom approach with YouTube integration has a positive effect on improving students' listening skills.

Table 9. Independent Sample T-Test Result

		Lavene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Post-test Scores	Equal variances assumed	.027	.871	-2.569	70	.012	-8.333	3.244	-14.804	-1.863
	Equal variances not assumed			-2.569	69.887	.012	-8.333	3.244	-14.804	-1.863

Descriptive statistics were analysed to observe the difference in mean scores between the two groups. This was done to support this conclusion. As can be seen in Table 10, the experimental group had a higher mean post-test score of 80.28, while the control group had a mean score of 71.94. Thus, the difference of 8.34 points in favour of the experimental group confirms that students who learned through the flipped classroom strategy using YouTube performed better in listening comprehension compared to those who were taught traditionally.

Table 10. Post-Test Mean Comparison Between Groups

Group	Mean	Std Deviation	N
Experimental (M ₁)	80.28	14.038	36
Control (M ₂)	71.94	13.484	36

According to Cohen's guidelines, Cohen's d = 0.61 produced falls into the medium effect size category. This means that the flipped classroom intervention has

a practically meaningful impact on students' listening outcomes. It is not only statistically significant but also educationally relevant. Cohen's *d* is calculated to measure the magnitude of this difference using the following formula.

$$d = \frac{M1 - M2}{SD_{pooled}} = \frac{80.28 - 71.94}{13.765} = \frac{8.34}{13.765} = 0.61$$

Furthermore, in order to strengthen the findings, a Paired Sample T-Test was conducted on the experimental group to directly compare their pre-test and post-test scores. This test evaluates whether the observed improvement was due to the flipped classroom treatment. From Table 11 below, the mean difference of -19.722 indicates that the average student score increased by almost 20 points from pre-test to post-test after the flipped classroom intervention. The significance value <0.001 confirms that this difference is highly statistically significant.

Table 11. Paired Sample T-Test

		Paired Differences							
		95% Confidence Interval of the Difference							
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pre-test and Post-test Scores	-19.722	9.407	1.568	-22.905	-16.539	-12.579	35	<.001

Discussion

The results of this study indicate that the flipped classroom model integrated with YouTube significantly improves students' listening skills, especially Grade XI students at SMAN 1 Seririt. Students in the experimental group were given YouTube videos by the researchers related to the topic of listening outside of class hours. To learn at their own pace such as pausing, rewinding, and replaying segments that students find difficult, this asynchronous exposure provides flexibility to students. This result is in line with research from Alqahtani (2022), whose findings showed that YouTube-supported instruction significantly improved EFL learners' listening comprehension. Also, research findings from Guillén-Gámez et al. (2024) explained that the use of multimedia platforms such as YouTube fosters students' autonomy, motivation, and multimodal learning experiences. Therefore, it is essential to improve listening comprehension by having the ability to combine visual, auditory, and textual cues that can cater to various learning styles.

In this study, statistical analysis strengthens the theoretical claim. There is a

significant difference in listening scores between the experimental group and the control group, namely $\text{sig.} = 0.012$, which is indicated by the Independent Sample T-Test. Significantly, the mean post-test score of the experimental group is higher, namely $M = 80.28$, than the mean post-test score of the control group, namely $M = 71.94$. Also, the effect size in this study or Cohen's $d = 0.61$ confirms the moderate but significant impact of the flipped classroom model. In addition, from the results of the Paired Sample T-Test applied in the experimental group, it was revealed a substantial increase between the pre-test and post-test scores with a mean difference $= 19.722$, $\text{sig.} < 0.001$. This pattern confirms that the treatment is statistically significant and pedagogically effective. This finding is in line with the research findings of Zainuddin and Halili (2022), their findings explain that the flipped classroom increases student engagement, learning autonomy, and achievement. Also, to foster 21st-century skills such as critical thinking, collaboration, and digital literacy, research findings conducted by Santos and Serpa (2020) emphasize the potential of the method.

In addition, a study conducted by Heredia-Arboleda et al. (2024) found that flipped learning significantly improved EFL students' listening skills in Ecuador. Another study was conducted by Vaezi et al. (2019), where their study documented short-term and long-term improvements in listening comprehension among Iranian students using a similar model. Furthermore, Kien and Hong (2022) showed their research findings, namely positive student perceptions of flipped classrooms in Vietnam, especially for listening instruction. Also, a study conducted by Thatphaiboon and Sappapan (2022) was similar to the current study, where their study highlighted the effectiveness of an online flipped model using videos in improving Thai students' listening skills.

Traditional teaching still dominates in Indonesia, making this study provide new evidence that YouTube-powered flipped classrooms can be a transformative approach to English language learning. This model overcomes common challenges in teaching listening by giving students control over their learning process and maximizing classroom interaction. Examples of these common challenges include lack of motivation, limited practice time, and passive learning habits. This is in line with research conducted by Pangestu et al. (2024), which states that YouTube is an educational tool that can improve understanding and encourage student engagement, especially when paired with active learning strategies.

The results of this study also acknowledge that the success of a flipped classroom depends on contextual factors such as student readiness, video quality, and access to technology. Research conducted by Gustian et al. (2023) supports this research by emphasizing that careful media selection and planning are essential to prevent gaps in learning outcomes. In line with research conducted by Hosein et al. (2022), where their research warns that teacher readiness plays a significant role in its implementation and not all learning environments are equally ready for flipped learning. The findings of this study are not directly applicable to other language domains such as writing or grammar, although YouTube-based flipped learning is very effective for listening skills. This is

supported by research conducted by Zhao and Yang (2023), which found that flipped learning had a stronger impact on writing skills than listening, indicating that instructional design should be aligned with specific learning objectives.

Thus, these findings strengthen the theoretical and empirical foundations of this study. It aims to adopt a flipped classroom integrated with YouTube in an EFL environment. This study also shows that the innovation can significantly improve students' listening comprehension through increased autonomy, personalized learning pace, and more dynamic classroom interactions. This model offers practical and evidence-based strategies to make English language teaching more effective, relevant, and engaging as the digital transformation in education continues, especially in high schools in Indonesia.

CONCLUSION

In this study, flipped learning improves students' autonomy and engagement based on their theoretical understanding by testing the impact of diverting content delivery through YouTube videos outside of class hours. While during class hours, only interactive activities will be carried out. Also, the findings showed that there was a statistically significant difference between the experimental group and the control group. There was a greater improvement in listening skills for students who received flipped classroom instruction with YouTube integration, where the average post-test score was 80.28. Meanwhile, the average post-test score in the control group was only 71.94. In addition, the effect size or Cohen's $d = 0.61$ showed a moderate and educationally significant impact. This shows that the model improves scores and does so with practical significance. Substantial learning improvements were confirmed by the results of the Paired Sample T-Test in the experimental group, where between the pre-test and post-test there was an average increase of almost 20 points.

The results of this study are in line with the initial expectations stated in the introduction that to improve listening comprehension, YouTube-based flipped classroom can provide a flexible, student-centered, and engaging way. This method allows students to access and review learning materials at their own pace, reducing cognitive load and increasing students' readiness to interact in class. In addition, the integration of YouTube offers authentic audio-visual input and provides a variety of learning styles. Thus, for further development in the future, this study opens up promising opportunities. In addition, to customize content based on learner needs, educational institutions can explore the integration of other social media platforms besides YouTube. Also, teachers should also focus on improving digital instructional design and curating high-quality YouTube content that is aligned with curriculum objectives.

REFERENCES

- Al-Zoubi, A. M., & Suleiman, L. M. (2021). Flipped classroom strategy based on critical thinking skills: Helping fresh female students acquire the derivative concept. *International Journal of Instruction*, 14(2), 791–810. <https://doi.org/10.29333/iji.2021.14244a>
- Alqahtani, E. T. (2022). *Effectiveness of using YouTube on enhancing EFL students' listening comprehension skills* [Master's thesis, Kingdom of Saudi Arabia Ministry of Higher Education]. <https://www.awej.org/images/Theseanddissertation/EbtissamAlqahtani/ebtissamalqahtanifullthesis.pdf>
- Andewi, W., & Hastomo, T. (2022). Effect of using flipped classroom for teaching writing based on students' motivation: A quasi-experimental research. *Premise: Journal of English Education and Applied Linguistics*, 11(3), 615–631. <https://doi.org/10.24127/pj.v11i3.5511>
- Hastomo, T., Sari, A. S., Widiati, U., Ivone, F. M., Zen, E. L., & Andianto, A. (2025). Exploring EFL teachers' strategies in employing AI chatbots in writing instruction to enhance student engagement. *World Journal of English Language*, 15(7), 93–102. <https://doi.org/10.5430/wjel.v15n7p93>
- Ampa, A. T. (2015). The implementation of interactive multimedia learning materials in teaching listening skills. *English Language Teaching*, 8(12), 56–68. <https://doi.org/10.5539/elt.v8n12p56>
- Baig, M. I., & Yadegaridehkordi, E. (2023). Flipped classroom in higher education: A systematic literature review and research challenges. *International Journal of Educational Technology in Higher Education*, 20(1), 1–22. <https://doi.org/10.1186/s41239-023-00430-5>
- Cholilah, M., Tatuwo, A. G. P., Komariah, & Rosdiana, S. P. (2023). Pengembangan kurikulum merdeka dalam satuan pendidikan serta implementasi kurikulum merdeka pada pembelajaran abad 21. *Sanskara Pendidikan dan Pengajaran*, 1(2), 56–67. <https://doi.org/10.58812/spp.v1i02.110>
- Guillén-Gámez, F. D., Colomo-Magaña, E., Ruiz-Palmero, J., & Tomczyk, Ł. (2024). Teaching digital competence in the use of YouTube and its incidental factors: Development of an instrument based on the UTAUT model from a higher order PLS-SEM approach. *British Journal of Educational Technology*, 55(1), 340–362. <https://doi.org/10.1111/bjet.13365>
- Gustian, K., Aridah, & Rusmawaty, D. (2023). The benefits of flipped classroom model for EFL learners. *Journal on Education*, 5(4), 13918–13935.
- Heredia-Arboleda, E. E., Cadena Figueroa, M. N., Ullauri Moreno, M. I., & Chiriboga Cevallos, A. A. (2024). The flipped classroom to improve the EFL listening skill. *Theory and Practice in Language Studies*, 14(7), 1960–1970. <https://doi.org/10.17507/tpls.1407.02>

- Hosein, A., Hashemi, G., Alsadaji, A. J., Mohammed, Z. J., & Masoudi, S. (2022). The effect of flipped classroom on student learning outcomes: An overview. *Med Edu Bull*, 3(2), 431–440. <https://doi.org/10.22034/meb.2022.332357.1052>
- Kien, N. T., & Hong, N. T. P. (2022). The effects of the flipped classroom in teaching English listening skills: Vietnamese EFL learners' experience. *International Journal of Science and Management Studies*, 5(4), 302–310. <https://doi.org/10.51386/25815946/ijsms-v5i4p132>
- Kusuma, I. P. I. (2022). How does a TPACK-related program support EFL pre-service teachers' flipped classrooms? *LEARN Journal: Language Education and Acquisition Research Network*, 15(2), 300–325.
- Kusuma, I. P. I., Mahayanti, N. W. S., Adnyani, L. D. S., & Budiarta, L. G. R. (2021). Incorporating e-portfolio with flipped classrooms: An in-depth analysis of students' speaking performance and learning engagement. *JALT CALL Journal*, 17(2), 93–111. <https://doi.org/10.29140/jaltcall.v17n2.378>
- Kutlu, Ö., & Aslanoğlu, A. E. (2009). Factors affecting the listening skill. *Procedia - Social and Behavioral Sciences*, 1(1), 2013–2022. <https://doi.org/10.1016/j.sbspro.2009.01.354>
- Lepkova, N., Gulsecen, S., & Talan, T. (2024). Flipped classroom method application: Case study analysis. *Baltic Journal of Modern Computing*, 12(2), 150–164. <https://doi.org/10.22364/bjmc.2024.12.2.02>
- Liubinienė, V. (2009). Developing listening skills in CLIL. *Studies About Languages*, 15, 89–93. <https://www.researchgate.net/publication/228757068>
- Margawidjaya, D., Herlina, R., & Irianti, L. (2024). Fostering students' listening skills through YouTube videos integrated with Edpuzzle online platform. *Journal of English Education Program*, 11(2), 123–132. <https://doi.org/10.25157/jeep.v11i2.15477>
- Maziriri, E. T., Gapa, P., & Chuchu, T. (2020). Student perceptions towards the use of YouTube as an educational tool for learning and tutorials. *International Journal of Instruction*, 13(2), 119–138. <https://doi.org/10.29333/iji.2020.1329a>
- Nja, C. O., Orim, R. E., Neji, H. A., Ukwetang, J. O., Uwe, U. E., & Ideba, M. A. (2022). Students' attitude and academic achievement in a flipped classroom. *Heliyon*, 8(1), e08792. <https://doi.org/10.1016/j.heliyon.2022.e08792>
- Pangestu, R. F., Alfatikhah, S. N., & Rachman, I. F. (2024). Efektivitas penggunaan platform YouTube sebagai media pembelajaran untuk meningkatkan literasi digital pada mahasiswa dengan tujuan pembangunan berkelanjutan. *Jurnal Penelitian dan Pengembangan Ilmu Pendidikan*, 1(4), 5–11. <http://jurnalistiqomah.org/index.php/jppi/article/view/1281>
- Putu Indra Kusuma, I. (2020). The investigation of flipped classrooms on students' speaking performance and self-regulated learning. *Pertanika Journal of Social Sciences and Humanities*, 28(3), 2027–2042.

- Ratminingsih, N. M. (2012). Teaching techniques, types of personality, and English listening skill. *Jurnal Ilmu Pendidikan Universitas Negeri Malang*, 18(1), 104–110.
- Santos, A. I., & Serpa, S. (2020). Flipped classroom for an active learning. *Journal of Education and E-Learning Research*, 7(2), 167–179. <https://doi.org/10.20448/journal.509.2020.72.167.173>
- Sharma, T., & Sharma, S. (2021). A study of YouTube as an effective educational tool. *Journal of Contemporary Issues in Business and Government*, 27(1), 2021–2029. <https://cibg.org.au/2686>
- Thatphaiboon, R., & Sappapan, P. (2022). The effects of the flipped classroom through online video conferencing on EFL learners' listening skills. *Arab World English Journal*, 13(3), 89–105. <https://doi.org/10.24093/awej/vol13no3.6>
- Vaezi, R., Afghari, A., & Lotfi, A. (2019). Investigating listening comprehension through flipped classroom approach: Does authenticity matter? *CALL-EJ*, 20(1), 178–208.
- van Alten, D. C. D., Phielix, C., Janssen, J., & Kester, L. (2019). Effects of flipping the classroom on learning outcomes and satisfaction: A meta-analysis. *Educational Research Review*, 28, 1–18. <https://doi.org/10.1016/j.edurev.2019.05.003>
- Woottipong, K. (2014). Effect of using video materials in the teaching of listening skills for university students. *International Journal of Linguistics*, 6(4), 200–212. <https://doi.org/10.5296/ijl.v6i4.5870>
- Zainuddin, Z., & Halili, S. H. (2022). Flipped classroom research and trends from different fields of study. *International Review of Research in Open and Distributed Learning*, 17(3), 313–340. <http://iiste.org/Journals/index.php/JEP/article/view/10648>
- Zhao, X., & Yang, Y. (2023). Impact of social media-supported flipped classroom on English as a foreign language learners' writing performance and anxiety. *Frontiers in Psychology*, 13, 1–12. <https://doi.org/10.3389/fpsyg.2022.1052737>