



The Impact of Technology Integration on the Development of Language Skills in English Classrooms: A Comprehensive Analysis

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Abstract

This research studies the effect of technology on developing language proficiency in English classrooms. In recent years, technological tools such as YouTube, TED Talk, and gamified learning platforms such as Quizlet have been increasingly integrated into classrooms to facilitate language learning. This study analyses how these tools influence students' language acquisition, engagement, and learning outcomes. A mixed-method approach was employed to gather relevant data, combining quantitative data from student responses and qualitative insight from teacher interviews. The research seeks to explore the effectiveness of technology integration across various classroom settings. Findings reveal that technology significantly boosts language skills, particularly in listening and speaking, through interactive exercises. However, in the Albanian context, challenges such as limited access to technology, insufficient teacher training, and the need for balanced pedagogical approaches persist. The study offers useful recommendations for educators who are trying to maximize language skill development in this digital era and contributes to ongoing discussions about the best practices for incorporating technology in English language instruction.

Keywords: technology integration, language learning, student engagement, challenges, interactive exercises

Introduction

Nowadays we no longer think of education without technology. We can say for sure that it has revolutionized education through the use of new tools, platforms, AI and methodologies, which facilitate the teaching and learning process. We can no longer think of the traditional classrooms. The learning platforms, immense educational resources and applications have transformed those classrooms into dynamic learning environments. In language education, more specifically, technology gives access to various authentic materials, interactive exercises, and personalized learning experiences. In this way, students can develop linguistic skills more effectively. Online learning platforms, gamified resources, and applications help learners engage in innovative ways, in this way facilitating the language acquisition process. Platforms such as YouTube, TED Talks, Quizlet, etc. give learners access to authentic language input, hence allowing learners to improve their skills in listening, speaking, reading, and writing. Moreover, online platforms enable real-time assessment, feedback and personalized instruction, which suit different learning styles and language levels. Additionally, technology motivates students by making learning more dynamic and accessible beyond the classroom.

Nevertheless, despite these benefits, there are still some limitations such as technology accessibility, lack of teacher training, and pedagogical balance. These remain key considerations in implementing technology-driven instruction.

Aim of the study

This study aims to examine the effect of technology integration in English classrooms on the development of language skills. The purpose is to analyze how technological tools such as YouTube, TED Talks, Google Classroom, and gamified learning platforms (e.g., Kahoot, Quizlet) facilitate students' language acquisition. Moreover, this study shed light on the challenges associated with integrating technology into English language classrooms, particularly in the Albanian educational context. In this context, a research question arises: How does the use of technology impact the development of language skills in English classrooms?

Literature Review

When studying the impact of technology on the development of language skills, numerous theories come into play. In recent decades, the integration of technology in language education has revolutionized traditional teaching paradigms, fostering more learner-centred and interactive approaches. A significant body of research highlights the role of multimedia tools in facilitating language acquisition and boosting student motivation. Theories such as Multimedia Learning Theory (Mayer, 2005) and Communicative Language Teaching (CLT) provide a solid theoretical framework for understanding the pedagogical advantages of technology-enhanced language instruction.

The Multi-modal Learning Theory underscores the idea that learning becomes more effective when multiple sensory modalities—visual, auditory, and textual—are involved. In classrooms enriched with technology, these modalities are activated through videos, audio recordings, and interactive exercises that cater to diverse learning styles, thereby enhancing language retention and skill development. Additionally, Mayer's Multimedia Learning Theory posits that individuals learn better when information is delivered using both verbal and visual formats. This principle supports the integration of videos, animations, and interactive tasks in language

instruction, as they engage multiple cognitive channels and improve retention. For instance, videos can enhance learners' ability to comprehend features, non-verbal cues, and context-rich language input, leading to greater proficiency in comprehension and production (Mayer, 2009)

Aligned with this, CLT and Task-Based Learning (TBL) focus on real-life communication and learner interaction as key components for developing fluency. Digital platforms such as video conferencing tools, speech recognition software, and collaborative forums enable learners to engage in authentic communication scenarios. (Richards, 2006) emphasizes how CLT benefits from technology through contextualized tasks that encourage negotiation of meaning, particularly in second language acquisition (SLA).

Empirical studies consistently highlight the positive impact of technology on language learning outcomes. These studies show that incorporating technology into English language classes significantly enhances learning effectiveness. When used appropriately, digital tools and platforms can positively influence language acquisition. For example, (Tran & Nguyen, 2024) found that TED Talks significantly improved EFL learners' listening comprehension, vocabulary acquisition, and cultural awareness. Similarly, (Sibatuara U. D., 2021) observed that learners who utilized interactive platforms like Quizlet and Kahoot demonstrated higher motivation and better vocabulary retention compared to learners receiving traditional instruction.

(Brown, 2019) emphasizes that video content not only captivates learners but also serves as a model for speaking and creative expression. According to his research, videos offer numerous benefits in classroom settings. They effectively engage students, as children particularly enjoy watching videos online, making them an ideal medium for introducing new knowledge. Moreover, videos improve communication skills and encourage learners to explore new topics. Videos also serve as a template for learner output, inspiring students to create their content and fostering interactive activities. Brown further notes that videos integrate the outside world into the classroom, connecting learners to real-life contexts. Similarly, (Harmer, 2015) highlights the importance of videos in providing visual stimuli—such as settings, emotions, and gestures—that enhance language production and practice. He points out that a key advantage of using videos is that learners can both hear and see the language simultaneously.

When it comes to listening skills, (Almalki et. al. 2022) demonstrated that combining video with orthographic input significantly improves EFL learners' pronunciation and listening comprehension. Their findings advocate a dual-input approach, in which learners simultaneously access visual, auditory, and written language elements. Likewise, Botirca (2007) notes that videos immerse learners in real-life contexts, offering access to facial expressions, gestures, and situational language that cannot be fully conveyed through books or audio recordings.

Despite these advantages, integrating technology into language education is not without challenges. (Ganimian et. al. 2020) caution that while digital tools can enhance engagement, they may also distract learners from core educational goals if used improperly. Furthermore, barriers such as inadequate teacher training, insufficient infrastructure, and resistance to pedagogical change can impede successful implementation, particularly in developing contexts like Albania (Gjinali et. al. 2023).

The existing literature supports the integration of technology—especially video-based content and gamified platforms—as an effective approach to improving language skills. However, for technology to maximize its benefits, its implementation must be guided by sound pedagogy, robust infrastructure, and ongoing teacher training. This study builds upon existing literature by

empirically exploring the effectiveness of video-enhanced instruction in improving language outcomes at an Albanian university.

Methodology

The research was an experimental investigation. The purpose of choosing this study design is to observe the impact of different experimental applications on experimental groups. Two groups of students with the same level of proficiency were part of the study, an experimental group and a control group. Each group involved the same lessons but not the same methods. For the Experimentation group, there are incorporated videos and other technological tools, while for the Control group, it is used only the audio and traditional forms of the lessons. Tests and exercises using mainly Quizlet were administered at and end of the course, and then the data was statistically analyzed.

To bring more data to the study, the observation method was also incorporated. The aim is to measure the following data for both groups:

Table 1. Observation sheet to measure data from both groups		
	Experimentation Group	Control group
Motivation		
Feedback/Response		
Teamwork		
Participation		
Grand mean		

Through the systematic observation of both groups during the experimentation, this study aims to collect empirical data to provide deeper insight into the impact of technology on language skills development.

Population and Sample of the Study

The population of this study comprised 100 II-year bachelor students of Informatics, at the Faculty of Natural Sciences of University of Tirana in the second semester. They were all intermediate students studying English as part of their curriculum. There were two groups, namely B1 and B2.

Table 2. Population of the study					
Nr	Class	Male	Female	Nr.of Population	Kind of Sample
1	B1	27	28	55	Experimental Group
2	B2	19	26	45	Control Group
	Total	36	34	100	

Since the number of the population is relatively small, all population is taken as a sample.

Research Instruments

The instruments and materials used for this research include: YouTube, TED Talk, and Gamified learning platforms such as Quizlet are being used in classrooms as a means to facilitate the language learning process. After each video, there were used video-based exercises such as true-false, multiple-choice, fill-in-the-blank, etc. Post-tests of listening comprehension directed to both groups of students from the same intermediate proficiency level were conducted

as well. The content was designed for 5 sessions of instructions for different learning objectives for both groups. There were also additional materials such as 5 lesson plans used for the instruction; hard-copy tests and sheets.

5 short English language videos on this topic, level B1: “English Conversations Dialogues”, “Beyond the Numbers: A Data Analyst Journey”., “The Daily Routines”, “Opposing Linking Words”, “Describe Feeling and Emotions” where each video was 10-20 minutes in length. Each video was followed by different exercises and tests.

Data Collection Instruments

Two classes were part of the study: “Class B1,” the experimental group and “Class B2,” the control group. Both groups were part of 5 lessons of 60 minutes for each one. Depending on the topic the students were firstly presented with the video, with a brainstorming activity about the topic or a discussion. Both groups were given 5 sessions of instruction which lasted 60 minutes for each session.

The teaching process for Class B1 (the experimental group) across all five sessions followed the overall lesson planning framework as succeeding which comes from the task-cycle concept.

This study was conducted in three phases:

Phase 1 – Preview activities. To set the scene, the professor prepared students by using warm-up questions, brainstorming keywords etc. In this way, students anticipated the content of the video which helped to perform well in the upcoming activities.

Phase 2 – View. Following the preview phase, instructors played the video first for general comprehension – to allow students to get the main idea or the general story. Then, they replayed it several times for students to grasp more details. The pause button was used as needed to focus on sections students had difficulty understanding. Next, students were given an exercise related to the activity and asked to complete it while watching the video.

Phase 3 – Review (Post-Task Phase). During this phase, students were asked comprehension questions and were given activities using *Quizlet*. This included: filling the gaps, multiple choice, forming sentences and translating new words. Additionally, students were asked specific tasks after viewing specific segments of the video.

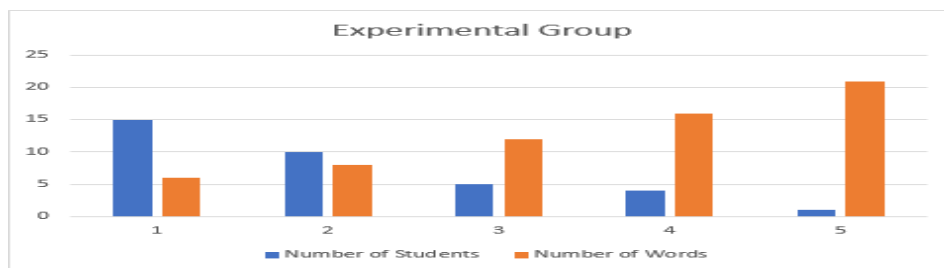
Data Analysis

Experimentation 1

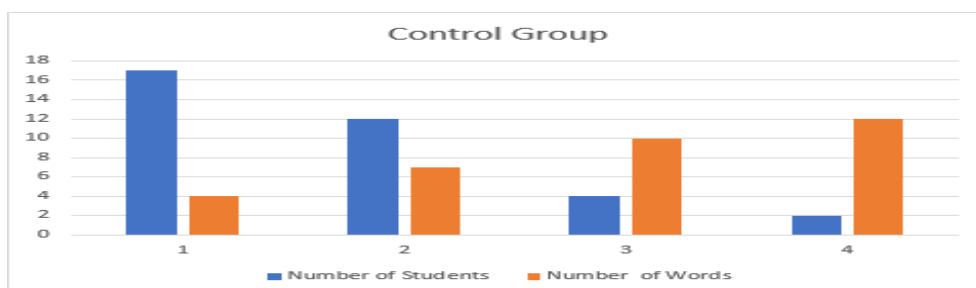
Based on the lessons planned by the professor, the first was a carefully chosen video (English Conversation Dialogues) to present to the students. For the experimental group, class B1, the video was played so that students watch it with subtitles. Meanwhile, the same video was played only as an audio file (in the traditional way) for the control group, class B2. However, for the initial activity, we chose to use a traditional form of assessment for both groups, a simple sheet of paper. Later, tests and quizzes using *Quizlet* were introduced.

Nevertheless, the graphs below clearly show the difference between groups. They introduce the number of students correlated with the number of words they wrote. On the left side, in the experimental group, only (10%) of students wrote 21 words (the highest number of words) and (65%) wrote an average of 7 words, (35%) wrote an average of 14 words that sounded familiar to them. On the other side, in the control group, around (80%) of students wrote an average of five words and only (20%) of students wrote an average of 11 words.

The students that watched the video, wrote more words than the students that just listened to the audio. There is a difference of more than 8 words between the students who wrote the highest number of words and a difference of 2 words between the students who wrote fewer words.



Graph 1. Results of the words written by students while watching English Conversation Dialogues

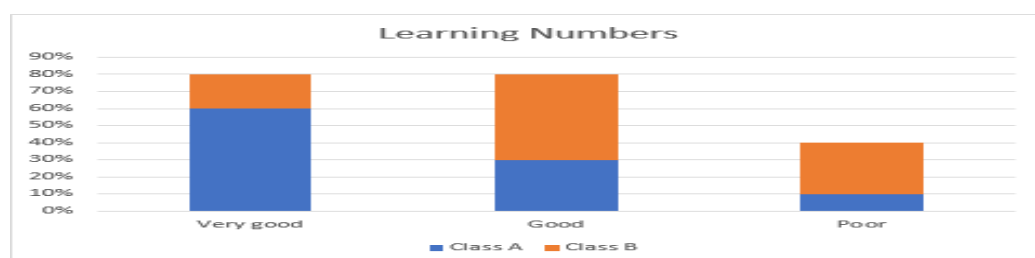


Graph 2. Results of the words written by students while listening to the video from English Conversation Dialogues

Experimentation 2

The other experiment is related to data analyses and numbers. The experimental group watched a video from the *TED talk* platform entitled “*Beyond the numbers: A data analyst journey*”.

Meanwhile, the control group listened to the same video only as an audio file. During the video, the teacher paused the video time after time to explain and repeat together with the students the data. By the end of the lesson, students were asked to write the data mentioned in the video. (60 %) of students in the class, B1 completed the test correctly. They were attracted by the images and the way the speaker used nonverbal language. Consequently, it was easier for them to remember the data. On the other hand, class B2 listened only to the audio version of the video. The results of the test are presented in the graph below:



Graph 3. Overall results of the test from Experiment

As seen in the chart, Class B2 represented by orange color showed a lower performance compared to the other Color B1 represented by blue colour. Only (10 %) of students wrote the data correctly. (70 %) of students wrote some numbers not listed correctly and with grammatical errors too. (20 %) of them wrote a medium of 3 data.

Experimentation 3

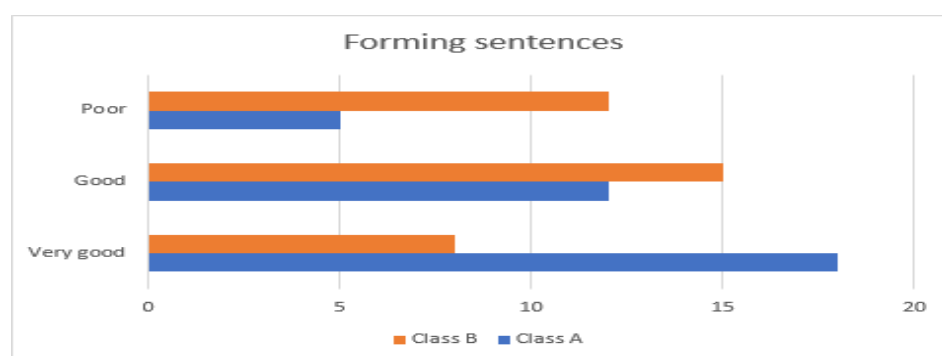
Another experiment was done with the students focusing on *Daily routines*. A short video from YouTube was carefully chosen, and illustrated with subtitles. First, they were asked to write the activities that sounded familiar. In both groups, students mentioned one or two activities. Nevertheless, they showed difficulties in spelling and grammar. Then the video was played again and after this the teacher gave the tests to students, using *Quizlet*. The first exercise is to list all the daily activities mentioned in the video, fill in the gaps and choose the right answer.

Table 3. Overall results of the test from Experimentation 3

Class B1	Class B2	Evaluation
60%	35%	Very good
25%	30%	Good
40%	60%	Poor

The table indicates that both groups had difficulties in memorizing daily activities accurately. A large percentage of *poor* marks was taken by both groups (class B1-40% and class B2-60%). Meanwhile, a *good* evaluation was respectively (25%) class B1 and (30%) class B2. On the other hand, comparing the percentage of the mark “*Very good*”, there is a difference of (25%) between groups. Group B1 had more students who had taken higher results. By these results, it is concluded that videos with subtitles were a good choice in this case. They helped the students match three elements at the same time: listening to the word, illustrated with figures and seeing the word written with letters.

Since new information was presented through audio listening/ videos, there were also new words that students were tested on at the end of the experiment. However, after watching and analyzing the video, the teacher wrote the new words on the board and explained the meaning through elicitation. By the end of the lesson, students were asked to form sentences with the new words. There were three exercises (with different topics), and in total 15 sentences were to be formed. The first one was about daily activities and some of the new words using adverbs of frequencies. The second was about learning the opposites. Students were asked to write five sentences using the opposing linking words.



Graph 4. Results from the exercise with sentence formation, focus: Daily routines

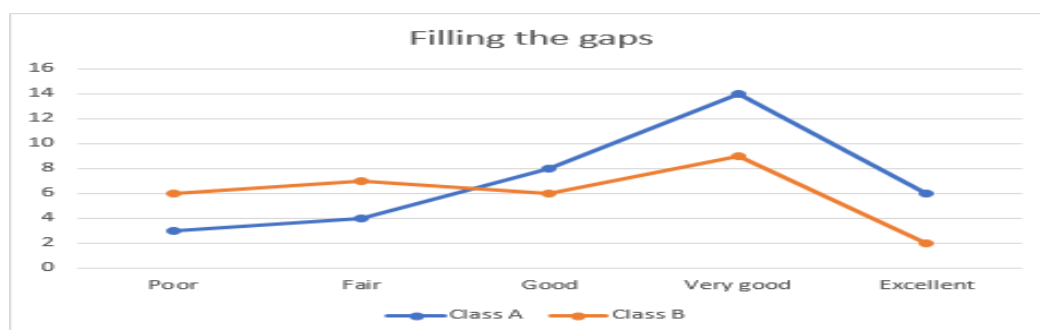
The findings indicate a difference in outcomes between class B1 depicted in blue and class B2 in orange on the chart. Class B1 had a higher number of students who did very well on the test. On the other hand, in class B2, there were three students more than in class B1 that took a “*good*”. According to the evaluation “*poor*”, there is a big difference between groups. Respectively, class B1-5 and class B2-12. By these results, it is concluded that the video helped the students of class B1 memorize the new words and helped them create more correct sentences. Most of the sentences were short and some of them were alike in the video. Meanwhile, students of class B2 were likely to form less than 5 sentences and make grammatical errors.

Experimentation 4

The fourth experiment involved the use of a video entitled “Using opposing linking word”. Students found it challenging but at the same time interesting. After the video, the first activity for the students was a gap-filling exercise. The results are shown in the graph below, where these evaluation methods are used.

Table 3. Means of evaluation

Value of mean scores	Meaning
5	Excellent
4	Very Good
3	Good
2	Fair
1	Poor



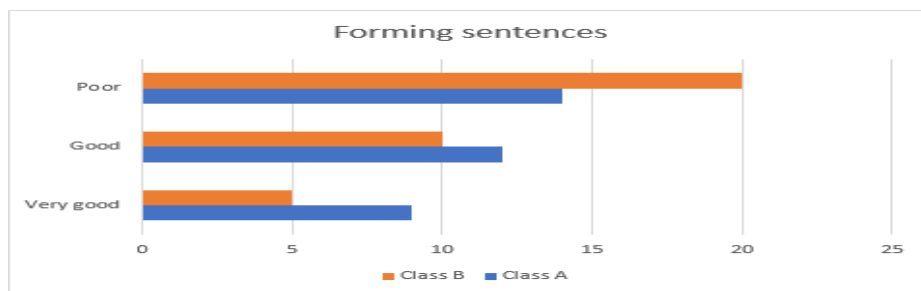
Graph 5. Experimental Results: Gap-Filling Tasks on Opposing Linking Words

The above graph illustrates the distribution of student achievement in the gap-filling task on opposing linking words across Class A and Class B. The data highlight that a higher percentage of students in Class A achieved a "very good" evaluation compared to Class B, suggesting a stronger overall performance in this group. Moreover, Class A resulted in a lower proportion of students receiving "poor" and "fair" evaluations, indicating fewer difficulties with the task.

Nevertheless, Class B still demonstrated a generally positive performance, with a substantial number of students scoring in the "good" category. While there is some variation between the two groups, the results suggest that students in Class A may have benefited more from the instructional approach, particularly in achieving higher performance levels.

The next activity following the video is: Forming sentences.

Students faced difficulties in accurately applying opposing linking words, both in grammar and spelling terms. Consequently, a significant number of students in both groups were evaluated with a "poor" evaluation. Similarly, the number of students achieving a "very good" evaluation was relatively low. However, a comparable number of students in both groups received a "good" evaluation.

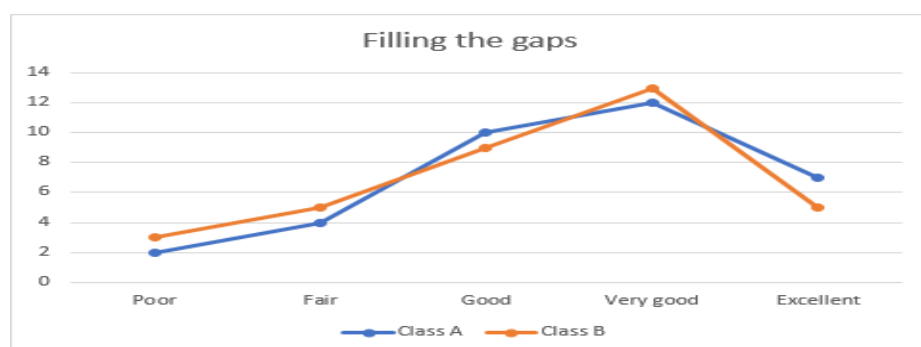


Graph 6. Results from the experiment: "Forming sentences with opposing linking words"

Despite these challenges, a slight difference in performance between the groups suggests the potential benefits of incorporating videos into classroom instruction. Specifically, when comparing the two groups, students in Class B1 (represented in blue in the chart) demonstrated higher achievement, with a greater number receiving a "very good" mark and fewer students receiving a "poor" mark. This trend indicates that video-based instruction may positively influence learning outcomes.

Experimentation 5

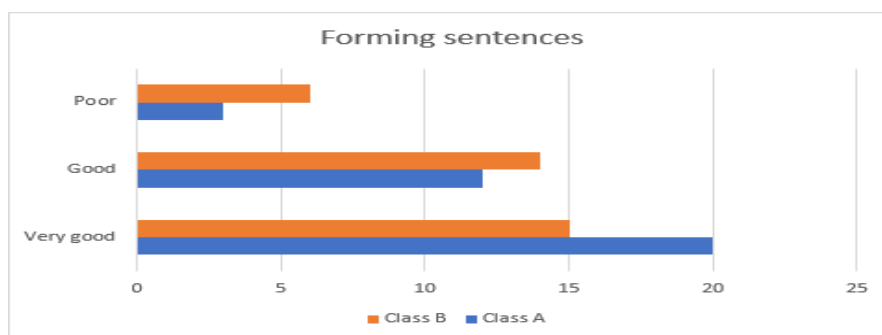
The other topic seems to have attracted more students. They were presented with a video of 18 minutes on *Feelings and Emotions*. On the other hand, the students in class B2 listened to the same video, but it was displayed as audio-only.



Graph 7. Experimental Results: Gap-Filling Tasks on Feelings and Emotions

As we can see from the first view of the graph, there is not a large difference in groups while comparing the results. A group of words were given as part of the requirement and the students had to use them in sentences. After the students listened again to the video (class B1): and audio (class B2), it was easier for them to complete the exercise. There is a difference of 1-2 students between groups per each category of evaluation. Students in class A performed better.

Another chart reinforces the above results. There is a higher number of students in both groups evaluated as "very good" and a low number of students evaluated as "poor". There is a difference of 2-5 students more or less. Students that watched the video were more attentive and had also a greater performance when repeating by memory the dialogues next class. They also tried to perform the dialogues with gestures that appeared in the video.



Graph 8. Experimental Results: Forming sentences with words related to Feelings and Emotions

Referring to the above chart, the students in class B1 (blue colour) were presented with a video of 18 minutes on *Feelings and Emotions*. On the other hand, the students in class B2 listened to the same video, but it was displayed as audio-only. As the graph above shows, a larger percentage of students in class B1 were evaluated with a good mark, than class B2. It also has a lower percentage of “poor”

and “fair” compared with class B2. However, most students in class B2 performed better. Regarding the teaching process, the observation results from both groups for each of the observed aspects are detailed in the table below:

Table 6. The observation results

	Experimentation Group	Control group
Motivation	3.6	2.4
Feedback/Response	2.6	2.1
Teamwork	2.6	2.1
Participation	2.7	2.1
Grand mean	2.7	2.2

Table 6 shows that there was a significant difference between the means of the observed aspects from the video group with those from the audio group. The video outperformed the audio group by approximately 0.5 points across all four aspects. Moreover, the grand means achieved by the video and the audio groups are 2.78 and 2.23, respectively.

Lastly, an open discussion was conducted with the students at the end of the experiment, they stated that they found the video fun, interesting and useful in developing their English listening. They agreed that it was a good idea to attract the student’s attention and most importantly allowed them to listen to the real English spoken by natives. However, some of them mentioned “difficulty”, “fast speech” and “idioms” as drawbacks of using videos in English listening class.

Conclusion

Based on the data and analysis presented above, this study found that there was a significant difference in the mean scores between the video and the audio groups. Both groups showed a significant improvement in language proficiency, especially in listening and speaking skills, after being taught with video and audio as teaching materials. This indicates that both tools were able to improve students’ listening comprehension significantly. However, the video group(the experimental group) demonstrated a greater improvement compared to the audio group (the non-experimental group). This is

evident from the evaluation results, where the mean score for the video group was over 2.5 times higher than that of the audio group.

Recommendations

The analysis and the discussions suggested that the use of videos in English classrooms, accompanied by various tasks, is very suitable for teaching and improving language proficiency. For ELLs (English Language Learners), watching a speaker's body language and context is particularly beneficial in understanding the language.

Moreover, in today's digital age, we can access the mass of online video with all that is new and at the most advanced stage of creativity. The rise of video-sharing platforms has allowed for the availability of various videos. Language teachers can select materials from their learners' particular experiences for listening, speaking, reading, and writing activities as well as evaluating their progress.

As a valuable listening tool, video significantly improves the language skills of English as a Foreign Language (EFL) students. Through video incorporation into English classrooms, teachers can introduce an innovative dimension to the teaching practice. Videos offer visual elements such as settings, actions, emotions, gestures etc. which serve as strong visual cues that stimulate language production and practice. Additionally, this research confirms that videos are highly effective in improving EFL learners' listening and speaking skills. From both perspectives, a teaching methodology and psycholinguistics, video-based tasks present a realistic, practical, active, and operational approach to teaching and learning listening skills.

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