IMPROVING STUDENTS' LISTENING ABILITY USING EDPUZZLE INTERACTIVE VIDEO

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(Received: 2-12-2021; Review: 10-12-2021; Revised: 15-01-2022; Revised: 20-01-2022; Accepted: 23-01-2022; Published: 28-02-2022).

Abstract:
The problems faced by the students in this listening class were identified as the difficulty of recalling memory and managing concentration during listening. Therefore, this classroom action research solution is Edpuzzle interactive video because the teacher can easily embed questions, notes, and recording voices into the video. When students play the video until it reaches a particular minute of the timeline, it will automatically pause, and a question will appear. This study revealed that this media could increase the students' listening skills. The students were more motivated to listen using Edpuzzle because they liked the "rewatch" feature and the automatic feedback. The teacher's role in presenting a clear tutorial and directing the listening process is crucial to the success of this research. Moreover, the teacher paid more attention to the content of the video, and the complexity of the questions adjusted to the students' listening ability level.

Keywords: Listening, Edpuzzle, Interactive Video.

INTRODUCTION

Since English is the primary communication language between nations, English is a significant subject in every country, including Indonesia. However, teaching English to Indonesian students is tricky because it is a foreign language, not a first or second language (Goh, 2013). Moreover, teachers must teach four English skills in every single class. One of the skills is listening, which is sometimes neglected by teachers because it is assumed as a receptive skill to learn vocabularies that can be replaced by reading. Mustofa and Sari (2020) debated the assumption by stating that teachers should teach listening and reading skills. The primary reason is that ignoring one can negatively impact a learner's total competency, including productive skills, namely speaking and writing (Mustofa & Sari, 2020).
The many problems evidence the challenge of teaching listening occurred in the listening class. Several studies discussed the issues. Rakhman et al. (2019) revealed that the students faced problems caused by short-term memory or recall problems, pronunciation, vocabulary mastery, especially homophones, and speaker speed or speech rate (Rakhman et al., 2019). Additionally, Otair and Aziz (2017) added strange accents, text length, limited time, and unrepeatable listening. More problems are discussed in other studies (Otair & Abd Aziz, 2017). However, the problems can be categorized based on the factors: the listener's comprehension level, listening material, and media (Yildiz & Albay, 2015). Most studies are concerned with comprehension strategies to increase students' listening ability. Therefore, the other factors, listening material, and media deserve further research.

In some listening classes, teachers commonly used videos from Youtube as the listening material. This media is chosen because a video is considered more effective than audio-only media. Video contains content-related visual effects that increase students' acquisition and concentration (Lesnov, 2017). However, using video for listening experiences some obstacles, especially in presenting the material and comprehension questions. The preliminary study of this research revealed two problems. First, because listening comprehension questions were given after the video, students had problems with memory. After watching the video, the students cannot recall their memory about the explicit content of the video. The length and speed also influence this problem. Second, in several moments, the teacher gave the questions before listening. It turns out that it makes students less focused on listening because they also have to pay attention to the questions when the video is running. There was an idea to edit or split the video into parts and insert several-second freeze videos in every part for the students to answer the questions. However, this is not technically possible because it is challenging and causes overload works for the teacher. Those obstacles can be categorized as short-term memory and concentration problem. Therefore, the solution to this problem is finding a listening media that is more effective, interactive, and practically easy to use by both teachers and students.

The other problem faced in the listening class happened during the covid-19 pandemic. When students are finally able to study at school, they are free from the technological constraints of online learning but face the problem of learning loss. Based on the preliminary study on the English class of Grade 11 at SMAN 1 Kraksan, the learning loss problem is proven by the number of competencies students have not achieved. The students' grade book shows
that 18 of 25 students (72%) have listening scores under the standard of Kriteria Ketuntasan Minimal (KKM). It means the teaching listening process needs to be fixed and repeated. It is necessary to accelerate the teaching and learning process to make student competencies return to being linear with the competencies set by the curriculum.

Based on the previous studies and the problems at the school, the researcher attempted to find a media to solve the problem. After searching and reading some sources, an interactive video was chosen. Bakla (2017) has revealed that interactive features support interactive video (BAKLA, 2017). These features allow users to annotate, tag, label segments or objects, interact with the objects in the video, and interact with other users synchronously. Previously, this technology was the latest technology often used in marketing to promote products using interactive videos. In e-learning, this is also starting to be utilized. Several platforms are comprising interactive video. One of them is Edpuzzle.

There is little research about the use of Edpuzzle in English class. One of them is written by Aula (2020) that the use of this application to learn vocabularies and pronunciation from songs (Aula, 2020). He stated that Edpuzzle could be the students' favorite media because they will get notifications and access to the scores. It can grow their motivation and curiosity. Therefore, he suggested further research for this topic in another listening context, such as listening to a transactional conversation with comprehension questions. Above all, this application is easy to use for both teachers and students, detailed analytic toward students' achievement and participation, free access, and enable to improve students' engagement in learning (Ware, 2021). These advantages encouraged the researcher to choose this platform to enhance students' listening skills.

**Edpuzzle**

Edpuzzle is a website containing interactive videos for learning purposes. Auer and Tsiatsos (2018) have written an article reviewing this media (Auer & Tsiatsos, 2018). They explained that Edpuzzle is a helpful internet website (Figure 1) that permits teachers to create a lesson using content material published from YouTube, Khan Academy, TED Talk, National Geographic, and other Video resources. Teachers can trim the video and embed teachers' recordings, audio commentary, several kinds of questions, notes, and further references at the videos. Teachers also can use their videos as the lesson on this website. This web can be categorized as Learning Management System (LMS) because it allows teachers to monitor the students' behavior in learning. Teachers can check the actual time the students watch the videos,
the time the students spend finishing the lesson, the assessment completion, and the assessment (Emiliya Hidayat & Dzulfiqar Praseno, 2021). It is also a Mobile-Assisted Language Learning (MALL) media because this simple website can also be accessed through its application on smartphones (Figure 2).

Figure 1. Edpuzzle (website version).

![Edpuzzle (website version)](image)

Figure 2. Edpuzzle (mobile version)

As mentioned above, the main problem is the students’ difficulty recalling their memory and managing concentration. Otair and Aziz (2017) explained that listening problems might occur because the video is too long, limited time to finish the task, or the students cannot repeat
some video segments (Otair & Abd Aziz, 2017). Repeating from the beginning may not be their decision since it is time-consuming. Therefore, Edpuzzle can solve this problem because it allows students to repeat some video parts repeatedly. In addition, the questions have been embedded in the video to focus more on the screen and increase concentration. These reasons are supported by Saleh (2019), who conducted experimental research and revealed that Edpuzzle is significantly effective in increasing listening to comprehension and allowing learning autonomy (Saleh, 2019).

Based on the preliminary study and the review of previous studies, the researcher decided to conduct classroom action research. This study uses Edpuzzle interactive video to improve students’ listening ability in grade 11 of SMAN 1 Kraksaan. The research problems of this research are

1. Can Edpuzzle interactive video improve the students’ listening ability? An
2. How to use Edpuzzle interactive video to improve the students' listening ability?

**METHOD**

**Design**

The method of this study is Classroom action research (CAR), adopting the theory of Kemmis &. McTaggart (1988, as cited in Burns, 2010) (Burns, 2009). They explained that the procedure of CAR is the plan, action, observation, and reflection (Figure 3). Before planning, a preliminary study has to be conducted to identify the problem and select an appropriate action (Latief, 2011).

![The procedure of CAR.](image)

**Figure 3. The procedure of CAR.**
**Research Subject**

This research was conducted in SMAN 1 Kraksaan. The participants were 25 students of class 11B in the 2021-2022 academic year.

**Instrument and Data**

This study employed two instruments: test and observation. Both instruments harvested two kinds of data in this study namely quantitative and qualitative data. The quantitative data refers to the students listening scores recorded from a listening test at Edpuzzle. The qualitative data results from the observation checklist by a collaborator who sat in the class to observe the students' behavior. The students' feedback toward the learning process supports data for this research to know the students' opinion about listening using Edpuzzle.

**Procedure**

1. **Plan**

   The teaching-learning process in this study was prepared in planning. The process begins by activating the student’s schemas by asking the student questions about the opinion material, such as: Do you know how to ask someone's opinion in English? How to express your opinion? After that, the teacher explains the purpose of the learning process. Then the teacher explains the application to be used, namely Edpuzzle. Explain the application's function, how to use it, and what features can be done by the application. The teacher also explained the rules in doing the practice questions and how they did the exercises. Afterward, the teacher gives a class code for students to join and do the activities on the application with the time available.

   After all, students have finished doing the exercise. Then, it is time to discuss it together with classmates and teachers. Next, the teacher replayed the video and worked together while showing the correct answer. The last step is the teacher giving feedback on the students’ works.

2. **Action**

   During the implementation process, researchers and collaborators worked together. The researcher carried out the activities planned in class, and the collaborator acted as an observer while listening class. They ensured that everything was in good working order.

3. **Observe**

   This step is explained in Data Collection.

4. **Reflect**
This step is explained in Data Analysis.

**Data Collection**

The Data collection in this research uses three instruments: test, observation, and questionnaire. In the teaching process, the students' answer in Edpuzzle is recorded as the result of the listening test. While the teacher conducted the teaching process, the collaborator sat in the classroom and observed the teaching and learning process, especially the students' behavior. The instrument used is the observation checklist. It provides some clear indicators about students' behavior and participation in the form of Likert scale questions. This research used a 4-point Likert scale of 1, 2, 3, and 4. The numbers show the answer level. The questions are: *do they look so excited in the classroom? Do they enjoy the class? Do they understand the teacher's instructions about Edpuzzle? Are they able to access Edpuzzle and answer the questions? Do they have any obstacles when using Edpuzzle? Do they actively participate in the discussion?*

The questionnaire recorded the students' feedback toward the teaching and learning process, especially in using Edpuzzle as listening media. The question uses closed-ended questions such as "*Do you like learning English using an Edpuzzle? Do you understand the teacher's instruction about the procedure of listening in Edpuzzle?, Can you easily access Edpuzzle and join the class? Is the video easy to listen to? Are the questions easy? Is doing listening questions on Edpuzzle easier than listening in general?." The last question is open-ended; *do you have any obstacles accessing or working on questions in Edpuzzle? If you have, write it down below. If you have no obstacle, leave it blank.*

**Data Analysis**

The data was analysed by reflecting the result of every research cycle. This classroom action research is considered successful if the success criteria are achieved. The criteria are that at least 85% of students who achieved KKM (75) are motivated, and the student's feedback on the learning process is positive. To analyze the first criterion, quantitative data, the researcher used a simple statistical calculation, namely percentage. The formula is:

\[
\% = \frac{\text{part}}{\text{whole}} \times 100
\]

Explanation:

\% = percentage

*part* = the number of students achieved KKM

*whole* = Total Number of students.
After calculating the percentage, the researcher analyzed whether the result achieved success criteria (85% of students achieved KKM).

The other criteria, the students' motivation and feedback were analyzed from the observation result. Since the data is qualitative, it used inductive analysis. It is conducted in three steps: reducing data, displaying data, and drawing conclusions or verification. If all success criteria are achieved in the first cycle, the action is analyzed as successful. However, the researcher can report it if the first cycle is analyzed as unsuccessful because some or all criteria are not fulfilled. Then, it becomes a fundamental consideration to revise or develop the learning process and plan to conduct the next cycle. The whole process of citation, either in-text citation or list of references, uses a referencing tool of Mendeley with model offline automatic desktop (Turmudi, 2020).

RESULT AND DISCUSSION

Result

The first research question of this study is whether Edpuzzle can improve students’ listening skills. The researcher collected the data and analyzed whether it met the success criteria. The first criterion is that at least 85% of students achieved KKM, a minimum of 75. The test result of cycle 1 showed that only 16 students, or 64% of the class, reached KKM while nine students or 36% had scores under KKM (Table 1). Thus, the first criterion has not been achieved.

<table>
<thead>
<tr>
<th>Students' Scores</th>
<th>Cycle 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieved KKM</td>
<td>16</td>
<td>64%</td>
</tr>
<tr>
<td>&lt; KKM</td>
<td>9</td>
<td>36%</td>
</tr>
</tbody>
</table>

The second criterion is that the students are motivated to learn listening. Based on the observation results at cycle 1, this criterion was not achieved because there were several problems in the listening process. First, the students did not play the video simultaneously due to the earlier external problems. So, some students were left behind in the process of answering questions. They tend to ask many questions about technical constraints. It means they are not ready to do the task and do not understand some of the instructions given by the teacher. This conclusion is understandable and considered normal. When applying a new application or...
method for the first-time students, they need to adjust and explore the latest thing to use it. In addition, the asynchronous process provides opportunities for students to cheat by exchanging answers. Indeed, this can be a reliability test in the first cycle.

The second problem is about a feature within the Edpuzzle app itself, called the "rewatch" button. The feature allows the students to replay the video segments between the current question and the previous one. It triggers students who feel insecure in listening to click the button several times. This idea makes them more transparent in listening, resulting in high scores. However, the teacher has to wait for all students to finish the re-listening activity, which is time-consuming. The third problem occurred when the students were given multiple-choice questions with more than one correct answer. Some students did not pay attention to the instructions because they thought all the answers lay in the last dialogue of the conversation. So, they felt that the questions presented were of the same type. On the other hand, because both types of questions have the same choice icon, most students only chose one option for all kinds of questions.

The last criterion is about the students' feedback toward the learning process. Most of the students stated that learning using Edpuzzle is quite tricky because of some obstacles, such as (1) differences in specification of the devices affecting different video performance, (2) forgetting to bring earphones, so they were easily distracted by external distractors, (3) internet connection problem, and other technical problems. It means that success criteria in positive feedback had not been fulfilled.

After reflecting on Cycle 1, the researchers revised and improved the plans to be implemented in cycle 2. Four things were changed. First, the listening instructions using Edpuzzle are explained with a visual tutorial comprising the procedure and the rules. The teacher presented the explanation using an LCD projector connected to her smartphone to demonstrate the application. This process aims to make the listening activity run smoothly without interruptions.

The Second revision is that the teacher's listening process is carried out synchronously and is directed. The students are prohibited from continuing to the next question if there are still those who have not answered the current question. When all students have answered the first question, click "Continue" simultaneously. At the end of listening, they complete all the questions simultaneously. Third, revision is when the students click "rewatch" only once, so
they do not have to wait for each other for too long. Fourth, multiple-choice questions with incorrect answers are omitted. All multiple-choice questions are correct answers.

The results of the second cycle test showed that the students' scores had achieved the criteria of success. 92% of students achieve KKM, only 8% or two did not reach the KKM. The percentage achievement of cycle two is presented in Table 2.

<table>
<thead>
<tr>
<th>Students' Scores</th>
<th>Number of students</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieved KKM</td>
<td>23</td>
<td>92%</td>
</tr>
<tr>
<td>&lt; KKM</td>
<td>2</td>
<td>8%</td>
</tr>
</tbody>
</table>

The students' feedback at cycle 2 showed no complaints about the difficulty of the work, and the students stated that they liked this application. One of their comments is that they like this application because the question appears in the video immediately after the conversation and stops when the point to be asked is finished. So, there is no need to pause the video and find the correct answer manually. Other students also stated that they liked it because the scores and correct answers appeared in real-time at the end of the video. About the video, most of the students commented that it was pretty easy to listen so they could easily understand the material and answer the questions.

The result of observation at cycle two is also satisfying since the learning process looked conducive. No more interruption can disturb the concentration of the students in listening. Clear instructions and explanations from the teacher make students more familiar with Edpuzzle. Thus, the students seem more ready to learn and potentially improve their learning outcomes. In addition, the synchronous listening process executes their works also completed simultaneously, so the process runs faster and continues to the discussion process. In the discussion, the students looked very active and confident. It is because, from the automatic feedback of the application, they had known that their answers were mostly correct.

The previous paragraph already explained the success of cycle 2 in achieving the success criteria. More than 85% of students achieved KKM (75), the students were motivated, and the student's feedback on the learning process was positive. Accordingly, implementing the Edpuzzle interactive video in Cycle 2 successfully improved listening ability. Therefore, to
answer the second research question of this study, "How to use Edpuzzle interactive video in increasing the students' listening ability?", the final scene is as follow:

1. The teacher activates the student's prior knowledge by asking questions; Do you know how to ask someone's opinion in English? How to express your opinion? After that, the teacher tells the purpose of the teaching and learning process.
2. The teacher explains the listening procedure using Edpuzzle with a visual tutorial (presented through an LCD projector). The teacher also explained the rules in listening to the video and answering the questions.
3. Students work synchronously from their smartphones and use earphones. Students are allowed to click "rewatch" only once on each question. After that, students click "continue" simultaneously to the remaining segments and questions until the end of the video.
4. After the students finish their listening activity, the teacher discusses the correct answers and concludes the lesson.
5. The teacher provides positive feedback verbally on the students' participation and activeness in the learning process.

Discussion

Based on the scenario of applying the media, the teacher provides a stimulus by asking some questions to the students related to the topic and giving an opinion in the initial stage. The questions were 1) Do you know how to ask someone's opinion in English? Furthermore, 2) How to express your opinion? This activity helps students activate their prior knowledge not to be shocked by the material. This pre-listening activity is supported by Bilokcuoglu (2014) argument that background knowledge that is activated before listening comprehension can facilitate and improve the process of understanding a spoken language (Bilokcuoğlu, 2014). This process is called top-down strategy. It referred to the interaction between the listener's prior knowledge (top) and the knowledge in the listening material (down), in which the listener uses all relevant background knowledge to understand the incoming input (Alberto & López, 2020). This interaction can also build good chemistry between teachers and students to create a comfortable and conducive learning atmosphere. The students' answers at brainstorming activity can also lead the discussion to the lesson's topic and the purpose of the learning process.

After brainstorming, the teacher explains the procedure of using Edpuzzle and what features can be utilized in the application. As illustrated in cycle 1, the learning process was
considered unsuccessful because of some problems. The first problem happened because the students did not understand the teachers' explanation about the application, the procedure, and the rules. The revision made in cycle two explains the process using a visual tutorial presented through an LCD projector connected to the teacher's smartphone. The improvement aimed to demonstrate more clearly how to use the application. It was also beneficial in making the listening activity run smoother without too many interruptions (Majidi & Aydinlu, 2016).

Entering the listening activity, the students work independently through their smartphones. They install Edpuzzle, join the class using the class code, and listen to the assigned video. According to Yildiz and Albay (2015), the problem of listening is the difficulty of managing concentration (Yildiz & Albay, 2015). This problem is solved here because the teacher has already edited and embedded questions into several timeline points in the video (Figure 4). When the students play the video until it reaches a timeline, it will automatically pause, and a question will appear. This feature makes the students more focused on the screen. As a result, their concentration was well-managed during listening and answering questions.

Figure 4. Screenshot of Edpuzzle (the embedded questions).

There are two buttons under the questions. The first is the "rewatch" button on the left side to replay a video segment. This feature is supported by Otair and Aziz (2017) argued that listening material should be repeatable to ease the students' comprehension (Otair & Abd Aziz, 2017). This argument is proven here by the student's feedback toward Edpuzzle. They stated that they like this feature because they can replay some segments to ensure their answer.
Therefore, this feature is also a factor in improving the students' scores. However, the mistake of cycle 1 is that there was no rule about how many times they could click "rewatch." Hence, some students clicked the button several times, and it was time-consuming. Therefore, in cycle 2, the teacher added a rule to replay only once. This decision aligns with Holzknecht (2021), who found that using a double play strategy improves test results (Holzknecht, 2021). He further found that this strategy minimizes concept-irrelevant variables, improves construct representation, and makes the students less in taking a test.

The right button "submit" is to submit the answer and continue to the next question. Directly after they click it, automatic feedback pops up and shows whether the answer is correct or not. After that, they continue to the following segments and questions. At the end of the video, the overall score is also reported. Some students also like this automatic feedback because knowing whether the answer is correct or incorrect is satisfying and motivates them to answer the following question. This feeling is like playing a game. The students' feedback is associated with Cavalcanti et al. (2021) found that automatic feedback improves student performance in listening, accelerates the process, and helps the teacher's jobs easier (Cavalcanti et al., 2021).

The listening process explained in the previous paragraphs was carried out independently by the students without any control by the teacher. As a result, some problems happened, such as too many interruptions that distract their students' concentration. Some students are left behind and time-consuming. Therefore, the teacher guided the listening activity at cycle two synchronously. This decision aimed to make the listening process more conducive and efficient. It is in line with Metruk (2019) stated that applying MALL in language class should be integrated by an appropriate teaching method (Metruk, 2019). There are some drawbacks of learning English using students' smartphones. Some schools do not facilitate the English class with a language laboratory. The use of smartphones directed and controlled by the teacher is the appropriate solution.

**CONCLUSION AND IMPLICATION**

**Conclusion**

There are two conclusions of this study. First, this research inferred that Edpuzzle interactive video could improve the students' listening skills. It is evidenced by the fulfillment of the criteria of success in this research; the learning outcomes achieved the standard, the students were motivated, and their feedbacks toward this learning process were positive. The
second conclusion is that Edpuzzle interactive video is applied successfully using an appropriate teaching scenario. In the scenario, the synchronous listening process directed by the teacher and a clear explanation of the procedure and rules using visual tutorials become the key to success. Moreover, the teacher gives more attention to video complexity and questions that have been adjusted to the level of the students' listening ability.

**Implication**

This research has theoretical and practical implications. Theoretically, this research contributes to reviewing an alternative media or MALL teaching listening. This study also proposes ideas for further research such as an experiment of the effectiveness, students' and teachers' perception, or classroom action research of Edpuzzle toward the other skills. This research could reveal more advantages of this application for the EFL context.

Practically, the study also contributes to English teachers using Edpuzzle as an alternative media in listening class. The teachers, for instance, might do some experiments in teaching listening through this media. As a result, it can help their work assign listening, scoring, and evaluating the students' achievement. Teachers can be motivated to explore more alternative MALLs to apply in their classes, and it potentially benefits the improvement of their students' abilities.

**ACKNOWLEDGEMENT**

We acknowledge the support of the principle of SMAN 1 Kraksaan, Bambang Sudiarto, S.Pd., M.M.Pd., who allowed this research at the school. We also gratefully thank Markhumah, S.Pd, the English Teacher of SMAN 1 Kraksaan, who has recommended her class for this classroom action research.

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