PPT-Audio; The Alternative Audio-Visual Media for Online Learning during the Corona Pandemic

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Abstract. The Corona outbreak has affected many sides of people's lives, including the learning process. Many students, teachers, and parents experience problems, both when teachers explain the learning material and when students understand the subject matter well. Therefore, this study explains the use of PPT-Audio in learning process during the Corona pandemic. It's used a qualitative design with semi-participatory observation and interviews via WhatsApp (group) during May-July 2020. The references review is also carried out on concepts, studies, and the conditions of audio-visual learning. The results are: (1) learning process during the Corona pandemic experienced many obstacles: the explaining process by teachers, the understanding process by students, and the mentoring process by parents. In general, the learning process only takes the form of giving assignments by the teachers. (2) The use of PPT (audio) is very helpful for the teacher while explaining the subject matter and students with their parents while watching and listening to teacher's explanation. (3) PPT-audio becomes an offering alternative media of attractive learning that can foster student’s imagination, creativity, and motivation while learning, especially accompanied by interesting pictures and narration.

1. Introduction

Education is a social fact that forms the habits or actions of each individual learner who are part of a general need in a society [1]. It can be said that education is an important need for society, especially school-age children. Therefore, learning is organized and carried out in a conditioned way at school. However, the implementation of learning in schools is hampered by the condition of the Corona pandemic which has spread widely throughout the world, including in Indonesia which has been going on since March 2020. It has greatly affected community activities; everything should be done from home to break the chain of the virus spread. Likewise, it has happened to the learning process that carried out by online.

In the distance learning process by online (PJJ daring), there are many complaints from students, especially parents when assisting learning at home. Basically, the learning process for students is maximized when it is implemented by actualizing the audio and visual abilities of students, such as when listening to the teacher’s explanation in the classroom. However, the conditions of this pandemic have changed that process. Learning is also carried out remotely, both in (online) and outside the network. The distance learning process in networks can be carried out by the people who have adequate technological facilities, as well as good quality internet networks. On the other hand, the condition of Indonesia's territory which has not been fully reached by the internet network (still around 64.8% of
Indonesians who can access the internet, Kompas.com [2] and its hilly natural features which are dominated by waterways make the children in remote areas are difficult to access education. Therefore, during this Corona pandemic, some teachers and schools implemented an off-network distance learning policy. It means that the teacher goes directly to the students in their area of residence so that the learning process still continues even though it is not optimal in terms of time, energy, media, and facilities.

The online PJJ (the distance learning process) activities requires good cooperation between students' parents, teachers, and schools as well as the learning process in schools known as “triangle involvement” [3]. As it is known that parents have a role, one of which is assisting learning activities at home [4]. For online PJJ process, apart from mentoring parents at home, teacher creativity is needed to prepare learning media and choose the right platform. It is to minimize complaints from students and also parents. Such the complaint is about the availability of internet quota which is applied more frequently (more widely used) when downloading learning media or using certain platforms when doing face-to-face online learning. In addition, the complaints of students and parents are related to learning media models that are not easy for students to understand, do not help parents to be able to re-explain material to students and are not quota friendly.

Basically, the interesting learning process is carried out by involving the experiences of students. It is in line with experiential learning theory outlines the manner in which learners gain knowledge and understanding through experiences. Another application of experiential learning is in the field of e-learning [5]. By using the e-learning model which is currently known as PJJ, the right media is needed to represent the teacher’s presence. That media is a medium that attracts students’ attention, both visually and audio. The use of sound and audio media in education, among others, greatly increases oral communication due to the fact that audio content may come in touch with emotions, create emotions, give life to the past by activating memory, and generally sensitize the deeper elements of people’s culture [6]. One of the media that can be used is audio power point (PPT-Audio), besides being easy to use, it is also internet quota friendly.

PowerPoint (PPT) is a part of the MS Office Suite released by Microsoft for the purpose of creating presentations. PPT has been used in many fields, especially in business and education where presentations provide an effective way of putting forth a concept or idea to an audience [7]. In other words, the use of PPT in the learning process is very effective for conveying concepts or ideas on subject matter to students. The use of PPT-audio can also stimulate the reading and listening skills of students at one time. It is in line with the dual-coding theory introduced by Paivio. This theory confirms that there are two ways a person could expand on learning material, namely verbal associations and visual imagery [8]. This dual-coding theory postulates that both visual and verbal codes can be used when recalling information [9]. It means that the use of PPT-audio can stimulate dual coding (audio and visual), so the students are easy to recall the information that they have received during online distance learning from home.

2. Method
This study used a qualitative design because through qualitative research, it is possible for a researcher to explore and understand social problems in depth [10]. Actually, the data is all subjects matter at the elementary, junior high, and senior high school levels with the sources of data are students at those education levels (about 5 students), parents (5 parents), and teachers (2 teachers). The data collection technique was carried out by semi-participatory observation as well as observation of the communication in WhatsApp Group of the students’ parents and interviews via WhatsApp from May-July 2020. Furthermore, the reference review is also carried out on concepts, studies, and the conditions of audio-visual learning in particular. Data from observations, interviews, and references are reduced to several important notes. Then, the data is displayed and the conclusions are drawn.
3. Discussions

3.1. The Learning Process During the Pandemic

The learning process during the outbreak has many obstacles, such as the explaining process by teachers. Some teachers just give assignments to the students via WhatsApp group. The teachers use this way because there are no study guides during a pandemic because everything happens suddenly. This condition makes students just learn by doing the assignments from several platform. Sometimes, some students are lazy to do the assignment because they do not understand about the material.

Furthermore, the learning process by online also need parents’ mentoring to the students while studying at home. Most of parents are working from home and using their smartphone or personal computer too. It makes students cannot have online learning process because they do not have smartphone or computer. Besides that, the students do not get their parents’ mentoring too, so the learning process cannot go well.

3.2. The use of PPT (Audio)

After several months in outbreak period, teachers try to find some online media to share the material of subject matter to the student. Some teachers use various platform, like YouTube, Edmodo, Geschool, and others. For some reasons, the use of those online media is helpful for the teacher to make video or written texts of learning material. Furthermore, other teachers also use PPT with or without audio because it is easy to be made.

Meanwhile, the use of various media makes students and parents confused in operating those media. Most of them just use some online media for studying. Because of that, some of them preparing to learn by using PPT with or without audio from teachers. They think that they just download the application and use it. Their parents also can accompany them by reading and or listening PPT (audio) together. The explanation of the teachers can be understood through watching and or listening PPT (audio).

3.3. PPT-Audio Becomes an Alternative Learning Media

PPT-audio becomes an alternative learning media. It can bring out and strengthen students’ imagination, creativity, and motivation when they are learning, especially using interesting pictures and narration.

3.3.1. Experiential Learning. The experience of online distance learning (online PPJ) is a new learning experience for all learners during the pandemic. Not only for students but also teachers and parents. All parts involved in education have a culture shock, from using classical learning in the classroom, turning into online distance learning. There are many obstacles, especially on media use. Many of the students, teachers, and parents stutter using online media, so there are many questions about how to apply the media shared by the teacher on the WhatsApp group, such as the following opinions of parent quoted from the parents’ WhatsApp group of an elementary school in Yogyakarta:

(a) “Aduh Pak, Edmodo itu apalagi? Kemarin sudah pake Geschool dan Google form. Timbanglah kami orang tua yang harus mendampingi anak-anak di rumah. Masak kami juga harus belajar ekstra sih.” (Wednesday, 6th May 2020)
("Oh sir, what's more the Edmodo? Yesterday we have used Geschool and Google form. You must consider us as parents who have to accompany our children at home. Really, we should also have to study extra anyway.")

Based on the opinion at point (a), parents also have an experience learning through new impression how to use the various online media. Although there are complaints, parents indirectly undergo the experiential learning process about technological developments. By continuing to face this situation, then parents get used to and can use a variety of learning media with various platforms. This experience can be passed on to students when explaining how to use the media before explaining the subject matter at home. Likewise, the use of PPT-audio. Most of the parents think that this media is very easy to understand in use so really helps students and parents comprehend the learning material that distributed by the teacher. It is like the opinions of junior high school student's parent in Yogyakarta through WhatsApp message communication as transcript below:

(b) “Alhamdulillah, power point ini sangat mudah dipakai, tinggal download aplikasi di hp bisa langsung dipakai. Saya dan anak saya mudah memahami materi apalagi ada suara gurunya.”
(Friday, 8th May 2020)

("Alhamdulillah, this power point is very easy to use, I just download the application on my cellphone and use it immediately. My children and I easily understand the material, especially when there is a teacher's voice.")

As the parent’s said at point (b), the use of PPT is easy to be downloaded and used. The parent also learns the use of PPT. Then, the parent can accompany student in learning at home because the PPT uses audio.

The use of PPT-audio media is a new learning experience for most students. The new experience causes them enthusiastic on taking part in learning because they gain both learning material from the teacher and knowledge of how operating technology media which is new for most students. Furthermore, students' enthusiasm for learning also arose because they can read the material presented and listen to the teacher's explanations for certain subject directly in one time. They feel their teacher is around them. It is like the opinion of an elementary student in Yogyakarta from a parent's recording that sent via WhatsApp message communication as transcript below:

(c) “Wah, pokoknya enak belajar dengan ini (PPT-audio) karena aku bisa dengar guru kasih tau pelajarmya. Trus, kadang-kadang ada guru yang kasih gambar juga, lucu.”
(Tuesday, 14th July 2020)

("Wow, anyway it's nice to learn with this (PPT-audio) because I can hear the teacher telling me the lesson. Then, sometimes there are teachers who give pictures too, it's funny.")

Related to student’s opinion at point (c), it can be discussed that PPT-audio is the most interesting learning media for (elementary) students at home. They can see the text and also hear the explanation of teachers. In addition, some teachers add attractive pictures other than written texts. The students in the scope of basic education (elementary school and junior high school) are still interested in pictorial learning media. It can arise students’ imagination, creativity, and motivation while learning at home by using online media. The example of pictorial learning media in PPT-audio as shown in figure 2 (on PPKn and Science subjects for 5th grade) below:
Figure 2. PPKn dan Science Learning Material of V Grade with PPT-Audio.

Figure 2 shows the use of texts, pictures, and audio in learning material by PPT-audio. The use of them makes students easy to remember the subject matter. It is in line with dual coding theory which is discussed below.

3.3.2. Dual Coding. As described above based on dual coding theory, the use of PPT-audio can stimulate the reading and listening skills of students at one time. It can develop students' ability in learning and understanding subject matter because they receive written and voice information in one time. The information received by reading and listening simultaneously activates the brain's ability to store long-term information and maximum recall information. This condition as shown at figure 3 below:

Figure 3. Paivio’s Dual Coding Theory in Learning Process (in Classroom and Online).

Figure 3 gives the information that the dual coding theory in learning process is closely related to the senses of both sight and hearing through conventional means (in classroom) or electronic media (using computer in online learning).

Theoretically, our cognition is a complex process that is capable of dealing simultaneously with language input and nonverbal objects and events. This condition is related to the opinion of the elementary school student's parent in Yogyakarta:

(d) “Media power point yang ada suara penjelasan guru seperti ini memudahkan saya untuk menjelaskan materi pelajaran ke anak saya di rumah. Anak saya juga cepat paham dan hafal pelajarannya lebih lama.” (Thursday, 16th July 2020)

(“The power point media with the teacher's explanation audio like this makes me easy to explain the subject matter to my child at home. My child can also understand the lesson quickly and memorize it longer.”)

The parent's opinion at point (d) also emphasizes that the PPT-audio media is very easy to use, both for parents and students. In addition to the parent's opinion above, it is also the opinion of one junior
high school student in Yogyakarta that the PPT-audio media can make students memorize the subject matter longer:

(e) “Dengan media itu, saya lebih mudah belajar, lebih cepat paham, dan lebih lama ingat tentang materi pelajaran. Apalagi kalau pelajaran IPA yang ditambah dengan gambar oleh guru, saya jadi lebih semangat.” (Wednesday, 22nd July 2020)

(“With the media, it is easier for me to learn, understand faster, and remember the subject matter longer. Especially, if the teacher adds the pictures in sciences subject, I feel more enthusiastic.”)

The opinion of student at point (e) confirms that PPT-audio is easy to use, it makes student understand the subject faster and remember it longer, especially when there are pictures.

3.3.3. Literacy Activities. The online distance learning using PPT-audio is very helpful in strengthening students’ literacy activities. The students are accustomed to reading (as well as listening to the teacher’s explanation). This reading process will improve literacy skills at the level of reading comprehension, at least students like reading from home. In addition, parental mentoring also involves parents to read with the students the material distributed by the teachers. This joint reading activity can create an attractive literacy atmosphere for students and parents. It is like conveyed by elementary student in Yogyakarta via the WhatsApp audio as transcript at point (f) below:

(f) “Aku senang sekali dengan bahan yang dibagi guru karena aku bisa membaca dan mendengarkan guru menjelaskan.” (Thursday, 16th July 2020)

(“I really like the material which is shared by the teacher because I can read the subject matter and listen to the teacher explanation.”)

By seeing figure 4, it can be understood that PPT-audio makes student has literacy activities at home while listening to the teacher’s explanation. This condition is also strengthened by the student’s opinion at point (f).

Meanwhile, reading activities together can create strong chemistry between parents and students. Students feel comfortable when accompanied by their parents, especially when the students can discuss with their parents while reading together. It can fulfill student’s basic physiological needs, especially related the attention and affection of parents. Then, doing literacy together can make students understand themselves and develop their ability of associations with peers. This condition is corroborated by the opinion of elementary school student's parent in Yogyakarta at point (g) below:

(g) “Saya melihat perubahan perilaku anak saya sejak saya meluangkan waktu belajar dan membaca bersama. Anak saya lebih senang membaca dan punya motivasi belajar yang kuat. Anak saya juga semakin percaya diri dan mau membantu adiknya belajar.” (Monday, 11th May 2020)

(“I have seen my child's behavior change since I spent my time for studying and reading together. My child likes reading and has a strong motivation to learn. My child is also more confident and willing to help his younger sibling learn.”)
3.3.4. Effective and Quota Friendly. As well known that based on dual coding theory Paivio, both visual and verbal codes can be used when recalling information. That is, the media used should be able to stimulate the audio and visual abilities of students at the same time. There are a lot of media that can stimulate these two abilities, such as YouTube, but they are not quota friendly, especially in the case of Indonesia’s vast territory and not all of them have good internet access. In addition, many Indonesian people are in the lower middle-class, especially in a pandemic condition that requires many people to lose their jobs. They have been difficult to buy their daily food needs, let alone an internet quota. The alternative media (PPT-audio) that is shared via WhatsApp group of students' parents is very helpful because it does not need much internet quota. It is like the opinion of high school student's parent who was interviewed via WhatsApp audio as transcript at point (h) below:

(h) “Kalau bagi kami orang tua, kalau bisa janganlah gunakan media yang banyak serap kuota. Beli kuota itu harus menyisihkan uang belanja, apalagi masa sulit ini. Kami lebih setuju kalau pakai power point yang ada suara saja karena saat dibuka tidak banyak kuota.” (Friday, 24th July 2020)

(“For us as parents, if it is possible, teachers don’t use media that absorbs a lot of quotas. For buying a quota requires spending money aside, especially during this difficult period. We prefer to use power points with audio because when it is opened there is not much quota.”)

In addition, the opinions of parent at point (h) above are also corroborated by the opinions of high school students in Yogyakarta at point (i):

(i) “Kasihan orang tua saya kalau harus terus-terus beli kuota buat saya. Apalagi Ibu saya sekarang harus jualan. Saya malah senang kalau guru pake PPT yang ada suara guru yang menjelaskan materi pelajaran karena mudah saya pahami dan tidak banyak kuota.” (Monday, 27th July 2020)

(“It is pity for my parents if they have to keep buying quotas for me. Moreover, my mother now has to sell. I am even happy when the teacher uses PPT with teacher’s voice explaining the subject matters because it is easy for me to understand and there are not many quotas.”)

Thus, it can be said that using PPT-audio is very easy to use and does not absorb much internet quota. It really helps students to continue learning easily and understanding the material fast. It also alleviates the expenses of the lower middle-class people at the same time to provide internet quota for their children to study at home.

4. Conclusions
The learning process during the outbreak has many obstacles, such as the way and media use of teachers in explaining the subject matter, students’ understanding in using the media and learning the material, and parents’ mentoring while learning at home using online media.

The use of PPT (audio) is helpful for the teachers to explain the subject matter easily. Then the students with their parents can understand the material by watching and listening to the teacher's explanation in PPT (audio).

The use of PPT-audio is being an alternative media in learning during Corona pandemic. This conclusion is because of some reasons, those are: (a) PPT-audio gives new experiential learning to students, both learning material and technological knowledge in using online material. Besides that, PPT-audio also gives new experiential learning to teachers and parents about technological knowledge; (b) PPT-audio applies dual coding since using reading text and audio. It makes students are able to remember the learning material and recall the information of it maximally in the long term; (c) PPT-audio also creates joint literacy activities between parents and students. It can improve the literacy skills of both students and parents, then it can build an emotional sense between parents and students while reading together; and (d) PPT-audio is effective and quota friendly media of learning. Then, the use of PPT-audio as an alternative media can be drawn in scheme as figure 5.
An experiential learning media

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Creates joint literacy activities ← PPT-Audio ← Effective and quota friendly

↓

Stimulates audio and visual capabilities
(Dual coding theory)

↓

Long term information recall

Figure 5. The Use of PPT-Audio in The Distance Learning Process.

Figure 5 shows that PPT-audio becomes an experiential learning media to students, parents, and teachers, stimulates audio and visual capabilities of students (dual coding theory) to become long term information recall, creates literacy activities (parents and students), and effective-quota friendly media.

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