

# Senior High School Teachers' Responses Towards the Use of Power Point in Developing Teaching Materials in Indonesian Context

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**Abstract**—This study aims to investigate senior high school teachers' responses towards the use of PowerPoint in preparing teaching materials in their classroom context. This study involved 40 participants coming from several senior high schools in Malang Regency. The data were collected by using questionnaire and observation sheet. The questionnaires were distributed after the implementation of the workshop about the use of multimedia for teaching and learning activities. The results show that the teachers have positive responses towards the use of PowerPoint in their classroom because it helps them prepare the materials well as well as provide interesting media for their students to avoid boredom. The PowerPoint features which are frequently used are animation, pictures, video and audio recording. The next researchers are suggested to investigate further about the use of PowerPoint or other types of multimedia in different grades and levels of education.

**Keywords**—*Multimedia, PowerPoint, Teaching Media, Teaching Materials*

## I. INTRODUCTION

Nowadays, technology has become unavoidable thing in the digitalization era. With the implementation of industry revolution 4.0, technology has also become one of important things in the education section. Some of the popular technology devices which are widely used in the education is laptop, PC, and cellphones. Following this, what we call as "multimedia" has been also widely implemented in education context. According to [7], multimedia is a combination of digitally manipulated text, photographs, graphic art, sound, animation, and video elements. One of the features that can be found in those devices is the so-called PowerPoint.

In the context of education, many teachers have been familiar with what PowerPoint is. However, there is still a need to investigate more whether they

can use it for their teaching and learning activities or not. According to [6], there are many tutorials, books and other resources for using presentation technologies, like PowerPoint. However, most deal only with the mechanics of creating slides and presentations and the general principles of good design from a graphic design and business perspective. There is very little about effectively teaching with PowerPoint. Furthermore, based on the researcher's preliminary study in the teacher forum in Malang regency, not all teachers are familiar enough with all features provided in the PowerPoint. Even though they have been familiar with the term "PowerPoint", the surprising fact shows that not all of them are familiar with the features. Thus, the researchers have conducted a workshop focusing on how to prepare materials using PowerPoint features well. The researchers then intend to find out what the teachers' responses towards the use of PowerPoint after they have been trained in using the features to prepare their teaching materials.

The second issue that make the researchers consider the present-study essential is that there is still debatable result concerning the effectiveness of using PowerPoint to help teachers in teaching compared to the conventional methods in teaching [1-4]. Therefore, a further investigation is still needed to find out what the teachers feel in relation to the use of PowerPoint for their teaching activities. Are they able to make PowerPoint which leads to student-centered activities? Do they face difficulties? Do they really feel it is helpful or the other way around?

To fill in those gaps, a further study is needed. Those questions are still important to be addressed as the focus of the present study. Thus, the aim of this study is to find out senior high school teachers' responses towards the use of PowerPoint in preparing teaching materials. The results of this study are

expected to enlighten the issue concerning whether PowerPoint is helpful for teachers or no which can then contribute to the body of knowledge in education section in Indonesian context.

## II. RELATED WORK/ LITERATURE REVIEW

As what has been stated by [1], [3], and [4], one of the most important uses of technology is that it makes it easy for instructors to incorporate multimedia into their teaching. In order to help students, learn, teachers need to teach as many of these preferences as possible. Therefore, teachers can incorporate these multimedia tools in their curriculum activities so that students are able to succeed in their classes. This also goes in the same vein with what has been done by [2] who highlighted that teachers need to learn how to maximize the use of multimedia to make use of the multimedia applications as an effective tool in education. More specifically, [5] has revealed that using PowerPoint as one of multimedia is effective to enhance teaching and learning activities if teachers can provide interactive activities for students.

A study conducted by [6] focuses more on how teachers can really make use of PowerPoint in their teaching activities in Iranian context. In their study, they looked at general design principles that apply to any PowerPoint presentation. Then, they have seen how teachers can use PowerPoint presentations specifically in their teaching. Finally, they presented the ways that it might be employed within the classroom besides the simply didactic and look at how an educational model might be applied to act as a framework and checklist for design. Thus, the difference between study conducted by [6] and this study is that the present study focuses on EFL teachers' responses towards the use of PowerPoint in their teaching in Indonesian context. This result focuses more the answers of teachers' responses towards the use of PowerPoint rather than explaining the steps or the ways how to make use of PowerPoint in teaching context.

## III. METHODOLOGY

This study belongs to qualitative research because it observes what is really going on to the teachers' opinions towards the use of PowerPoint. In other words, the main data of this study are the teachers' answers and explanations towards the questions being asked related to the use of PowerPoint in their teaching activities.

The data were collected by distributing questionnaires to 40 senior high school teachers as the participants of the study. The questionnaire was distributed after the workshop has been done. The questions were divided into 2 types of questions, namely 7 questions related to human resource readiness in preparing teaching material before the

workshop was held and 8 questions related to the implementation of how far the understanding and improvement of teachers' pedagogic skills in making teaching materials using Power Point through workshop. In addition, observation during the workshop was also done to find out teachers' attitudes towards the use of PowerPoint as the main topic of the workshop. Next, interview session was also done to ask more information related to the teachers' answers in the questionnaire.

## IV. RESULTS AND DISCUSSION

This part covers the results and discussion of the study. The results are focused on two areas which are teachers' perception on multimedia and teachers' perception on the implementation of multimedia in a classroom.

### A. Teachers' Perception on the Use of Power Point in Developing Teaching Material

From the results of the questionnaire on human resources readiness questions, researchers identified several problems related to the existing human resource conditions, including how far the use of teaching materials, the type of teaching media used so far, the use of Laptop / PC aids, how far the use and operation of Laptop / PC, use of Power Point, how far to use Power Point, and what features are often used in Power Point. While the workshop implementation question identifies how far the understanding and improvement of teachers' pedagogic abilities in the use of multimedia learning in this case is Power Point.

From the results of the questionnaire on the question of human resource readiness, there are enough English teachers in Malang Regency who use teaching media in providing teaching. This can be seen from the dominance of the answers of the workshop participants, where 35 teachers answered that they had used teaching media, while 5 teachers still used conventional methods as we see in Fig 1. This condition can be interpreted as a pedagogic ability of English language teachers in Malang Regency in providing innovations in teaching so that students do not feel bored.

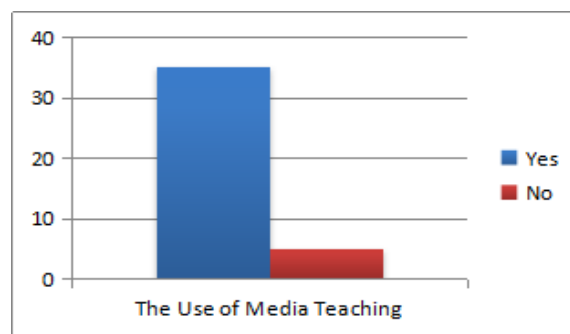


Fig. 1. The result of questionnaire question about the use of teaching media.

In the next question regarding the teaching media used, 20 teachers can choose to use Power Point, 15 use conventional teaching aids, and 5 others choose the video as we see in Fig. 2. This result shows that most teachers are familiar with the Power Point software, but the use is not maximal according to the capabilities of the Power Point software.

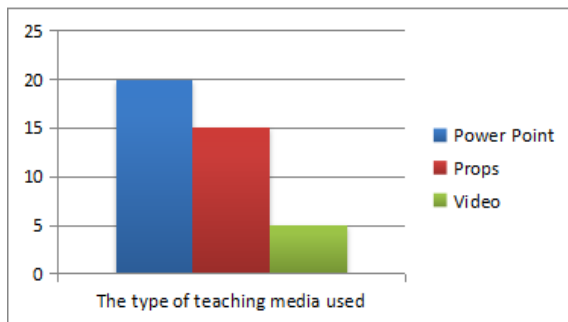


Fig.2. The result of questionnaire question about the type of teaching media used.

The existence of multimedia teaching media cannot be separated from the ownership of PC / Laptop. From these questions, all 40 teachers identified as having had a PC/laptop as we see in Fig. 3. This can support multimedia workshops running smoothly because the teachers are used to and have a PC / Laptop. The next question is identifying the teacher's ability to operate a PC / laptop. From the results of the questionnaire can be seen that 40 people (all teachers) have used and operated a PC / Laptop. This points out that the pedagogical ability of teachers in innovating the preparation of teaching materials is quite good by involving hardware in the form of PC / Laptop.

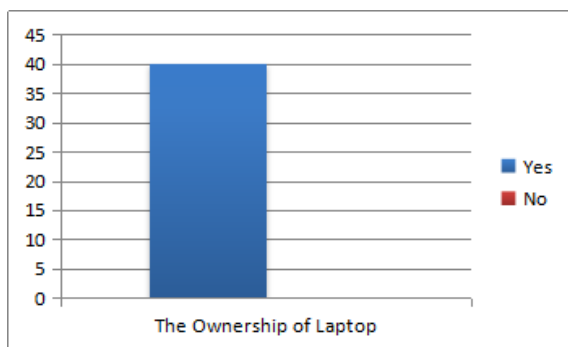


Fig.3. The result of questionnaire question about the ownership of Laptop.

In this workshop, Power Point software was used as a reference in making innovative teaching materials. To identify this, the researcher asks several questions regarding the use of Power Point during teaching. Of the 40 teachers who were respondents and as training participants, 30 people have been using Power Point, and 10 other people have not used Power Point as what is presented in Fig.4. This shows that most English teachers, in Malang Regency, have known and utilized Power Point as a medium for giving teaching material to students.

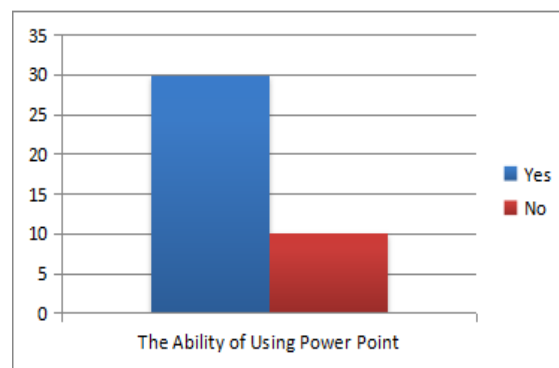


Fig .4. The result of questionnaire question about the ability of using PowerPoint

The mapping conditions of human resources that are pedagogically utilizing Power Point need to consider how far this Power Point is used. From the results of the questionnaire can be seen the variation of the variety of answers to this question, where 15 people always use Power Point in providing teaching materials, 20 people do not always use Power Point because it depends on their subject, and 5 people using Power Point less than 5 times in 1 term as we see in Fig. 5. This shows that there are still many teachers who use conventional teaching tools compared to using Power Point.

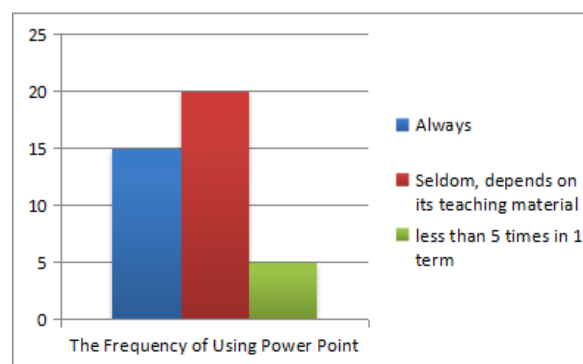


Fig .5. The result of the frequency of using PowerPoint

Basically, Power Point is indeed designed to facilitate the presentation process of teaching material delivery. This can be seen in the variety of special features in Power Point that can help the teaching process to be more interactive and innovative. For this reason, the research team needs to know the ability of the workshop participants to make teaching material on the Power Point and the effectiveness of using Power Point features that are often used by workshop participants. Of the 40 participants, 40 often used animation features, 40 participants also used the image insert feature, and 20 participants used the video insert feature as we see in Fig. 6. Broadly speaking, each participant has sufficient expertise in using features in the Power Point software, but through workshops, researchers expect to be able to improve the ability of participants in designing teaching materials with more interactive by using audio features visual in Power Point.

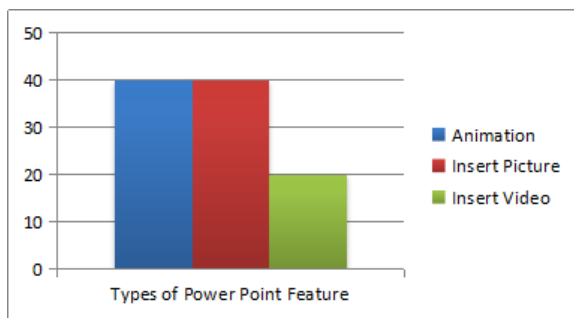


Fig. 6. The result of questionnaire question about the types of power point feature

From the results of the human resource readiness questionnaire, it can be concluded that the teachers in Malang Regency who became participants in the power point-based multimedia workshop had used teaching media in the form of power points. From the teacher perception, power point as a multimedia-based teaching media is only limited to visuals, but it does not involve audio features because of the limited knowledge of the teachers.

#### A. Teacher Perception on the Implementation of Multimedia in the Teaching and Learning Process

The result of distributing questionnaires indicated that some of the teacher notice and apply multimedia in a classroom. It is supported by the data shown at Table 1 that a half of the respondents agreed and implemented multimedia in their classes.

TABLE 1. THE GENERAL KNOWLEDGE OF MULTIMEDIA

NO.	INDICATORS	SCALE				
		1	2	3	4	5
1.	How well do teachers recognize multimedia?	0	5	13	20	2
2.	How well do teachers use multimedia in teaching process?	2	5	10	18	5

In addition, the data showed that a lot of the teachers (35 of 40) apply slides in PowerPoint (PPT) as the media in teaching process instead of audio (5 of 40) and film (10 of 40). By providing colorful pictures and point per point, teachers can explore more the materials and can be used as topics which are possible to be discussed with students so that student-centered learning is able to be reached. Providing pictures and colorful background can help teachers to catch students' attention, to hold it, to build rapport, and to simplify the information. Furthermore, it can be concluded that PPT is nominated as the favorite media for teachers.

PPT is one of the multimedia which can be used to display the teaching materials attractively. Almost teachers use it as the media of any subjects. Even, teachers attempt to make slides creatively by identifying every single feature in PPT and one of them audio recording feature. Moreover, most of the teachers also well recognize the use of audio visual in

PPT. It was shown at figure from questionnaire that 35 of 40 teachers agreed with the statement. Furthermore, it was proven that they (32 of 40) enjoyed joining the flow of training. No significant barrier (8 of 40) found among the teachers applying audio recording feature in laptop. This shows that they have already used audio recording feature not in a short period.

Regarding the implementation of multimedia, most of the teachers (38 of 40) convinced to be able to make the audio-visual slide independently since they can perform enthusiastically in the training venue. This occasion can be indicated that multimedia is needed to be used in teaching process in order to ease teachers deliver the materials, and multimedia can occupy millennial learners' needs in learning. Furthermore, 36 of 40 teachers declared to use audio visual PPT in their classes as the instructional media. They also stated that the use of it will create independent learning in the classroom. The points and examples listed in the slide to slide and the explanations stated in the audio. In some occasions, the multimedia is able to be used as the representative of teacher attendance but, of course, the role of teacher as the facilitator cannot be denied in the class.

The last data showed that teachers also expect to gain more how to develop and use other multimedia such as how to make video, how to record voice in a mini studio, how to make short film and animation in the context of teaching and learning process. It explains that the needs of multimedia are higher to occupy 21<sup>st</sup> century demands in education field

#### B. Discussion

The result which shows that most of the teachers have used teaching media in delivering materials during the teaching and learning process in the classroom context is in line with what has been revealed by [1], [2], and [3]. They agree to say that the use of multimedia in the class have been proven to be effective in helping teachers delivering the materials in a fun way. Moreover, the result showing that PowerPoint is the most frequently used type of multimedia by the participants has strengthened the previous studies conducted by [5] who says that PowerPoint can be a good medium in supporting the teaching and learning activities as long as it meets the students' needs and can shift from the teacher-centered approach to the student-centered one. In other words, the use of PowerPoint in the classroom has enlightened the variety of media usage for learning activities, since there are a lot of features that can be used in the PowerPoint application to support the teaching and learning activities.

Besides regarding the practicality of the PowerPoint that makes senior high school teachers often use it in the classroom context, PowerPoint has also helped them in developing interesting materials so that the students do not get bored easily. The



teachers often use animation or inserting pictures when preparing their teaching materials. This help them a lot because students pay more attention to them whenever they show animation or pictures in their PowerPoint slides. Then after the workshop has been conducted, the teachers consider the other PowerPoint features, such as audio recording, can be also practically used to help them explain materials during the teaching and learning process.

Overall, results of the present study tend to support the use of PowerPoint in helping teachers prepare their teaching materials. However, one thing that need to be highlighted is that even though PowerPoint has been preferred a lot by teachers in terms of its practicality and variety of features, learning activities in the classroom must be meaningful. In other words, teachers still need to provide interactive activities and avoid teacher-centered activities in delivering the materials. This is in line with what is stated by [8] that a professional teachers must possess not only personal, social, and professional competences, but s/he also has to possess good pedagogical skills which can be seen from the ways how s/he prepare, implement and evaluate his or her teaching activities.

## V. CONCLUSIONS

The researchers conclude that senior high school teachers have positive responses towards the use of PowerPoint in preparing teaching materials. This can be seen from their positive attitudes towards the implementation of the workshop as well as their statement given in the questionnaire. They have stated that PowerPoint has helped them a lot in preparing teaching materials as well as in creating interactive activities in the classroom context. Animation and pictures have become the most frequently used features in their PowerPoint. Moreover, audio recording and video have been also used in their PowerPoint so far. However, the investigation on

teachers' responses towards the use of other types of multimedia in different grades and levels of education still need to be done in order to contribute more to the body of knowledge related to education in Indonesian context.

## ACKNOWLEDGMENT

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