

Analysis of Learning Media in Training: A Case Study of the Use of Sticky Notes and Virtual Whiteboards in Communication Skills Training at Ministry of Finance

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ABSTRACT

Learning media is everything that can be used to stimulate students' thoughts, feelings, attention, and abilities or skills so that they can encourage the learning process. This paper aims to analyze the use of learning media in sticky notes and virtual whiteboards in The Communication Skills Distance Training Batch II at Financial Educational and Training Agency Yogyakarta. Distance Training is implemented through a synchronous and asynchronous system via Zoom and training assignments in all subjects. The type of research is qualitative research using action research. The study used primary data sources. The data collection technique was by distributing questionnaires to 19 respondents, participants of Communication Skills Distance Training Batch II. The data analysis used was descriptive analysis method. The results showed that all respondents liked sticky notes media and virtual whiteboards in online classes. The advantages of this learning media are that it can create an interactive atmosphere, the class becomes more lively, there is an interaction between the trainer and the participants, and between the participants, and also the participants can focus on the learning material. The weakness of this learning media is that it takes time to explain how to use it because not everyone is familiar with this media. In addition, internet access constraints at specific locations caused difficulties for some participants when using this media.

Keywords: learning media, online learning, virtual sticky note, virtual whiteboard.

1. INTRODUCTION

1.1. Distance Learning

The Financial Education and Training Agency (FETA), as the education and training provider at the Ministry of Finance (MoF), feels the impact of the changing pattern because of Covid-19 pandemic as a global disaster [1]. Before Covid-19, the training system was held face-to-face (f2f) and adjustment to pandemic conditions, remote training system at BPPK using online media [2][3]. One of the training during pandemic is the Communication Skills Distance Training (Comskill DT). This training aims to improve the ability of MoF employees to manage themselves and communicate effectively with others to improve performance and support the implementation of their respective duties and functions.

The implementation of remote training has problems. Some of the results of the evaluation of distance training include, the interaction is not felt because the interaction between the facilitator and the training participants is not direct, there is a saturation of participants participating in online training, a decrease in the motivation of participants to take part in the training due to an unstable internet network.

The responsibility for learning lies with students because learning is an active student activity in building meaning or understanding. Teachers are responsible for creating an atmosphere that encourages initiative, motivation, and responsibility for learning throughout their lives—improving and developing learning systems in line with the times [4]. Online learning is used in a distance system with information and communication technology (ICT) networks in the learning process, a liaison for learning and learning activities, both asynchronously

and synchronously [5]. The characteristics of online learning are (a) there is content or learning materials related to learning objectives, (b) the use of appropriate learning methods, (c) the use of learning media in various forms such as visuals, texts, multimedia, videos, and so on, (d)) learning activities can be carried out synchronously and asynchronously [6]. Educators in online learning have an essential role in creating a dynamic learning environment and fostering a strong community spirit through teaching styles and attitudes to students [7].

1.2. Learning Media

Learning media has a strategic role in learning activities, provides learning opportunities to be faster and broader for learners. In practice, the teaching-learning process uses various ways to help students absorb information and strengthen their understanding [4]. Two critical components in the teaching and learning process are teaching methods and learning media [8]. Media has sharpened the message so that it is not too text-minded, raises a passion for learning, more direct interaction between learning resources and students [9]. Learning media can clarify the meaning of material accompanied by varied teaching methods [10]. The unique benefits of learning media include: (a) Clearer message delivery, (b) Limitations of time, space, and senses can be minimized, (c) Flexibility of objects and motion, (e) Can be used to capture past events, and for complex objects, (f) Flexibility of media concepts, expanding or narrowing, (g) reducing passive participants, and (h) Emerging experiences, and the same perception [11].

The learning media used in this research are sticky notes (or post-it) and virtual whiteboards. Sticky notes are small, colorful paper with an adhesive that sticks and takes off quickly. How to use manual sticky notes is that participants write down the idea of a theme on the sticky notes that are distributed. The sticky notes are then collected and grouped according to the theme discussed. The development of information technology allows virtual sticky notes from various applications, for example, in Windows 10 or the Zoom meeting application.

The use of post-it in education is not a strange thing. Will Fastiggi stated that there are five benefits of using post it, (1) Classroom Management, (2) Assessment, (3) Storyboards, (4) Reminders, (5) Digital Post It-Note7 [12]. Then Susan Verner suggested things that can be done using post it in learning [12]. The meaningful learning process using post-it media or sticky notes is very effective in classes with students who have high enthusiasm and achievement. This high enthusiasm and seriousness make the learning process very relevant to the learning objectives prepared in the learning process.

Students are described as mastering the material very well [12].

Whiteboard animation is almost similar to motion graphics, where motion graphics itself is defined as a combination of various visual-based digital art forms, including photos, images, illustrations, graphics, and so on combined with music [13]. In the zoom meeting application, there is a virtual whiteboard facility that can be shared by users or participants of the zoom meeting. A virtual whiteboard is a concurrent virtual whiteboard that allows sketching using a web-based platform (Figure 1).



Figure 1. Virtual Whiteboard Display in Zoom App

1.3. Communication Skill Distance Training

The objective of the Comskill DT is to increase the ability of MoF employees to manage themselves and communicate (interact) with others to improve performance and support the implementation of tasks and functions in their respective units [14]. The expected competency standards after participating in the communication skill distance training, participants are expected to be able to (1) explain the basics of communication, (2) understand communication styles, (3) use active listening techniques, (4) use verbal and non-verbal communication, (5) using interpersonal communication techniques, and (6) using persuasion communication techniques.

Comskill DT Batch II is conducted online using distance training methods, learning using video conference applications. The minilab training courses are carried out using the coaching method where participants are divided into two large groups, each group being guided by one coach through WhatsApp group media or online zoom meetings, according to needs. Evaluation method of Comskill DT was carried out in pretest and post-test.

It is necessary to investigate whether the use of sticky notes and virtual whiteboards impacts learning. The formulation of the problem is (1) what are the participants' opinions about the use of sticky notes learning media in Comskill DT Batch II? (2) what are the participants' opinions about using virtual

whiteboard learning media in Comskill DT Batch II? What are the advantages and disadvantages of using sticky notes and virtual whiteboards in Comskill DT Batch II? The purpose of this study was to analyze and evaluate the use of sticky notes and virtual whiteboard learning media in Comskill DT Batch II. This research is helpful as an evaluation material for teaching media and as an evaluation material in implementing Comskill DT Batch II.

2. RESEARCH METHODOLOGY

The type of research is qualitative research using action research design. This research is to reveal someone's experience and understand something behind the use of sticky notes and virtual whiteboards to gain insight into something little known [15]. Data were collected from primary sources in the form of a questionnaire distributed to the 19 participants of the Comskill DT Batch II. This training becomes the object of research because it applies learning media in sticky notes and virtual whiteboards in synchronous learning. This training is a type of soft skills training to improve employee communication competence. Data analysis used descriptive methods to present data, to get a complete picture of sticky notes and virtual whiteboards in the virtual classroom.

3. FINDINGS AND DISCUSSION

3.1. The Use of Sticky Notes

All respondents (100%) stated that during other previous training, the teacher had used sticky notes in class. As many as 100% of respondents also liked sticky-note learning media because it was more interactive in class (Table 1).

Table 1. The use of Sticky Notes in Classical Training

Description	Percentage
The teacher used to use sticky notes in class	100
Likes the use of sticky note (post-it) media because it is more interactive in class	100

Source: processed data (2021)

Researchers made observations on the use of sticky notes media in classes that took place at FETA Yogyakarta before the pandemic. The use of this media is very high frequency. Trainers like this media because it can stimulate trainees to write opinions, ideas, suggestions, etc. Therefore, the procurement of post-it/sticky notes is one of the training expenditures. During the pandemic, training uses the distance learning method. Teachers can still create exciting learning media, among others, by using virtual sticky notes. In Comskill DT, the

teacher also uses this virtual sticky note. The respondents were asked for their opinion on using this virtual sticky note (Table 2).

Table 2. The use of Sticky Notes on Distance learning

Description	Percentage
Distance learning through zoom, the use of virtual sticky notes can strengthen the visualization of learning	100
The use of virtual sticky notes makes interactive distance learning classes	100

Source: processed data (2021)

All of the respondents stated that the use of virtual sticky notes in Comskill DT Batch II can strengthen the visualization of learning. In addition, virtual sticky notes also create interactive learning in the classroom. Participants stated that this virtual sticky note has several advantages (table 3).

Table 3. Advantages of Using Sticky Note

Description	Percentage
more interactive, attractive, communicative	36.67
More interesting, more lively, fun, not saturated, variety, not monotonous, fun	33.33
Easier to understand learning	6.67
At the same time ice-breaking	6.67
Putting together answers from all participants	3.33
Participants can focus	3.33
Can convey written messages better	3.33
Can show important points, plot, categorization	3.33
Able to capture the opinion of participants who are lazy to have a direct opinion	3.33
Total	100.00

Source: processed data (2021)

As many as 36.67% of the respondents said that this virtual stickynotes made learning more interactive, attractive, and communicative. It has happened because, through the media, participants actively wrote down what was on their minds. Through different colored sticky notes, participants can explore what is in them. It makes the class come alive, and participants are not easily bored because of

variations in learning. Courses are not monotonous or dominated by the teacher. Participants feel the atmosphere is fun, so it is easier to understand the material.

Another advantage mentioned by respondents is that participants can focus on learning because sticky notes make participants have to be careful with the material to write down their ideas or opinions through sticky notes media. For participants who object to expressing their opinion directly, the use of sticky notes media will help them to express their opinion through writing. In addition to these advantages, respondents also mentioned that this media has weaknesses. The weaknesses are as follows (table 4)

Table 4. Disadvantages of Using Sticky Note

Description	Percentage
For those who are not familiar with using web-based applications, it may be not easy	26.32
Network problem	10.53
If all the training participants activate, it's hard to control, confusing	10.53
The place to write is narrow	5.26
Writing is sometimes too small if there are too many	5.26
Forced to think	5.26
If use the pen tool, the results are not neat	5.26
Can't explain in detail	5.26
There is not any	26.32
Total	100.00

Source: processed data (2021)

3.2. Use of Virtual Whiteboard

In f2f classes conducted during regular times before the pandemic, trainers usually use a physical whiteboard in the form of a whiteboard in front of the class. The blackboard is a sheet board that can be written on using a marker. Respondents were also asked whether the trainers used whiteboard media during the training before the pandemic. Participants' answers are in the form of a scale of 1 to d. 10, category 1 for strongly disagree, and category 10 for strongly agree. During f2f classes (before the pandemic), the teacher used the conventional whiteboard.

Table 5. The use of whiteboard

Category	Percentage
6	15.79
7	5.26
8	21.05
9	21.05
10	36.84
Total	100.00

Source: processed data (2021)

Based on these data, in f2f classical classes, not all trainers use the whiteboard in class. The reason is the use of other learning media, namely slides driven by LCD projectors. Most of them, namely 36.84% of teachers, still use the whiteboard in class. With whiteboard media, teachers can explain the material in more detail and make connections between materials. In the Communication Skill Distance Training Batch II, the percentage of their opinions about using a virtual whiteboard is as follows.

Table 6. The use of virtual whiteboard

Description	Percentage
The use of a virtual whiteboard in PJJ Communication Skills made me understand the material better.	100%
The use of virtual whiteboards in PJJ Communication Skills is more interactive in the classroom.	100%
The use of a virtual whiteboard in PJJ Communication Skills makes learning visualization available.	100%

Source: processed data (2021)

Respondents considered that the virtual whiteboard on Comskill DT made them understand the material better. In addition, learning is more interactive because there is an interaction between the teacher and the participants. Through a virtual whiteboard, there is a visualization of learning. The visualization can optimize learning, especially in learning with visual learning styles.

According to respondents, of the two learning media, sticky notes and virtual whiteboards on distance learning can be substituted for sticky notes and manual whiteboards. All respondents (100%) agreed with the statement. Learning media serves as learning aids. The aids are so that learning runs effectively and can achieve learning objectives. However, not all learning media can be used properly. Therefore, respondents were asked to write suggestions on the use of sticky notes and virtual

whiteboards. In total, the respondents' suggestions are as follows (table 7).

Table 7. Suggestions for Using Sticky Note Media and Virtual Whiteboards/ Suggestions for Using Other Media

Suggestion Type	Percentage
To keep it in use (not monotonous, interactive)	42.11
Provided instructions for use beforehand	15.79
It can be used for quiz	5.26
Just found out there is this media	5.26
there is not any	31.58
Total	100

Source: processed data (2021)

As many as 42.11% of respondents stated that sticky note learning media and virtual whiteboards should still be used in the classroom, considering the many advantages. Among the respondents, 15.79% suggested that instructions were given for its previous use before the learning media was used. Not all respondents are familiar with the application, so respondents hope to be given more explicit guidance at the beginning. As many as 5.26% of respondents just found out about the application.

Many respondents mentioned interactive words to describe the use of sticky note learning media and virtual whiteboards. Study of Mayer [16], Wahyuningsih [17], and Andrian [12] strengthens this result. The media create interaction between trainers and participants and between trainees. There are obstacles when respondents use this learning media, especially on internet access which is less stable at the participant's location. The unstable access makes not all training participants able to follow and use this learning media. The data processing shows that respondents like learning using sticky note learning media and virtual whiteboards.

4. CONCLUSION

The use of sticky notes and virtual whiteboard learning media in the Communication Skill Distance Training Batch II makes learning more interactive and lively. Respondents also stated that virtual whiteboard learning media in Communication Skill Distance Training Batch II made learning interactive and could make participants better understand the material. The advantages of Sticky Note and Virtual Whiteboard learning media are that they can make learning easier to understand, there is an interaction between teachers and trainees, thus helping participants achieve learning goals. Meanwhile, the weakness of using Sticky Note and Virtual

Whiteboard is that it takes time to explain how to use them, especially for participants who are not familiar. In addition, respondents also mentioned the problem of internet access which is less stable, so that not all participants can participate in Communication Skill Distance Training Batch II.

The author writes suggestions that trainers or facilitators can use learning media to help deliver learning materials. The use of learning media can adjust to needs, both the suitability of materials and media and learning methods, and the suitability of the media with learning participants. In online learning, learning media can be used to interact between learning participants and teachers/facilitators so that learning activities can be more interactive.

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