Media Need Analysis of Learning Practicum in the Covid-19 Pandemic

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ABSTRACT

The Covid-19 pandemic has an impact on changing the learning model in Indonesia, from conventional learning to virtual learning. This causes a high gap in practicum learning. Where practicum learning that was originally in the laboratory can be applied at home. The purpose of this study was to determine the need for practical learning media for students. The research method used is descriptive quantitative. The research subjects were all UST PKK study program students. Determination of the sample through purposive sampling of 77 respondents. The validity test of 31 statements about the instrument was declared valid. Meanwhile, all instruments were declared reliable with high reliability (0.705> 0.7). The total score averaged 87.35 which means it is highly expected. This result explained that the need for practical learning media using videos with clear instructions. So that further research needs to develop barcode-based e-job sheets according to the needs of learning media during the COVID-19 pandemic and the development of the digital generation era.

Keywords: E-Job Sheet, Practical Learning, Covid-19

INTRODUCTION

In early 2020 the world was shaken by the emergence of a virus known as Corona Virus Disease (COVID-19). Data on the distribution of the COVID-19 virus affected 216 countries, one of which was Indonesia with a positive exposure of 172,053 people, 7,343 people died [1]. This virus spreads very quickly and has spread to almost all countries, including Indonesia in just a few months. A drug to prevent COVID-19 has not been found, which has led to more people becoming infected and dying. This caused the government to adopt a policy, one of which was a learning policy during the Covid-19 pandemic.

The Ministry of Education has taken steps in every school and university to conduct online learning. Following the learning pattern in 2020/2021, tertiary institutions in all zones must be implemented online for theoretical and practical courses [2].

Some of these policies make learning methods and media also change. The virtual learning method with media that can be accessed anywhere is one of the most appropriate ways to deal with a pandemic.

Media in the teaching and learning process tends to be interpreted as graphic, photographic, or electronic tools to capture, process, and reconstruct visual and verbal information so that students can acquire knowledge, skills, attitudes [3]. Learning media includes tools that are physically used to convey the content of the teaching material [4]. In other words, media is a component of learning resources or a physical vehicle that contains instructional material in the student environment that can stimulate students to learn [5]. The use of appropriate and varied media can lead to learning motivation, allowing more direct interaction between students with the environment and reality, allowing students to learn independently according to their abilities and interests [6]. Where the learning process using interactive multimedia (MMI) can generate learning motivation in increasing learning outcomes [7].

Therefore, it is necessary to develop electronic-based media to balance learning virtually. Where electronic-based media can encourage a change in mindset in technology and networking [8]. Electronic media such as e-job sheets can create fun learning according to the character of students as technology users [9].

The development of e-job sheets is one of the uses of learning media in the form of digital pocketbooks which are very suitable for use in learning in the cookies and candies courses [10]. Interactive learning media in the digital era, there are 3 types of interactive learning media, namely e-learning based interactive multimedia learning, software-based interactive media online learning media, and android application-based interactive learning media.

Learning using job sheets encourages students to manage learning material both individually and in groups. Practical activities are currently carried out following the job sheet given by the teacher to find out students' mastery of overall behavior change, covering all areas of behavior [11]. Job sheets provide abilities and skills, as well as guide students to actively develop their thinking processes during the practical learning process because more activities are carried out by students while teachers act as facilitators and mentors only. This is because the development of job sheet media is very suitable to be used as a practical learning medium [12],[13].

The problem that occurs is that students have difficulty understanding the material for practicum steps using manual job sheets because the practical learning system that was originally implemented in schools requires practice to be done at home. Besides, students also have difficulty finding similar material.

During the Covid-19 pandemic, the patisserie course learning model was carried out boldly so that it needed the right media, namely digital job sheets or e-job sheets. This e-job sheet is used to make it easier to understand how to understand practical work in a bold manner. The benefits of developing an e-job sheet are making a practical contribution to practical learning during the COVID-19 pandemic.

RESEARCH METHODS

This study used a quantitative descriptive method to analyze the needs for an e-job sheet in practicum learning. The research procedure begins with determining the problem of practicum learning media needs based on the results of a preliminary survey, a theoretical study of the e-job sheet, and relevant studies. Then determined the population which is the object of research. The population is 157 UST PKK students. The research sample was taken using purposive sampling with 77 respondents. To find out the media requirements, an instrument with interactive media indicators was made which can be seen in table 1. Indicators are used to determine the average final media requirement.

Table 1. Research instrument grid

Variable	Indicator	Item Questions
Media needs in practicum learning	Method Supporting Facilities Media	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31

The instrument consisted of 31 statements that were tested on 30 students using Karl Pearson's product-moment analysis where 26 statements were declared valid and 5 statements were declared invalid. Whereas seen from the reliability test using Cronbach Alpha, it was found that all instruments were declared reliable where 0.705> 0.7 Furthermore, data distribution was carried out to all PKK Study Program students in the even semester 2019/2020

using the google form application accessed at http://bit.ly/2instrumenmedia and can be seen in Figure 1.

Figure 1. The Instrument Application on Google Form

Furthermore, a descriptive analysis was carried out to determine the media's needs for practical learning.

RESULTS AND DISCUSSION

The results of the analysis of student needs regarding the needs of student learning media as a whole obtained mean values: 16.83; median 17,24; the standard deviation of 1.68 and mode 18. The analysis of media needs shows that most students during the pandemic need media, one of which is e-job sheets for practicum learning with a score of 87.35%. The need for e-job sheets for learning in detail can be described in

methods, supporting facilities, and learning media.

The first needs analysis seen from the learning method desired by students can be seen in table 2.

Table 2. Learning Methods

Learning methods	Percentage
Lecture	21,5 %
Tutorial	19 %
Assigment	77,2 %
Demonstration	6,3 %
Webinars	16, 5 %
Praktice	29,1 %

The learning method used in online learning shows that the largest percentage is in the assignment method. This shows that students are required to learn independently, both theoretical and practical learning. Where students develop assignments given by the lecturer. Therefore, lecturers need the right media so that learning can run well. Where the media used must be interactive. One of them is using electronic media that can provide a pleasant learning experience, practice activities are clearer and learning objectives can be achieved [14].

So that electronic media can be well applied to online learning. Required analysis of needs at learning support facilities. The facilities used by students as a means of learning can be seen in Figure 2.
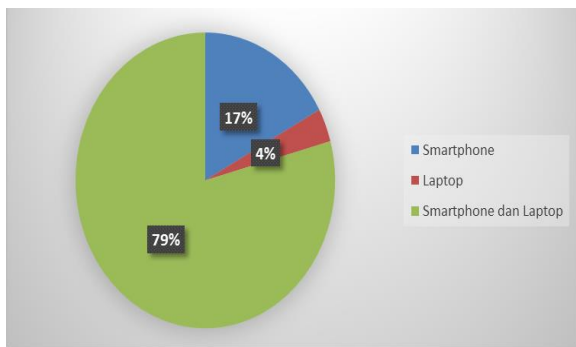
Figure 2. Supporting Facilities

Supporting facilities owned by students in helping learning obtained 79% using smartphones and laptops. This data shows that smartphones and laptops are supporting facilities needed by students. The use of smartphones and laptops is very flexible, easy to carry so that students can get information quickly.

Smartphones and laptops can also be used to access electronic-based learning media. Such as electronic magazines, electronic job sheets, and many other media. The use of these supporting facilities helps students in improving learning outcomes. Can be applied to vocational education in helping to improve hard skills by learning objectives. Therefore, it is necessary to develop electronic-based media to balance learning virtually [15]. Where electronic-based media can encourage a change in mindset in technology and networking [8].

Choosing the right and varied use of media can lead to learning motivation, allowing more direct interaction between students with the environment and reality,

allowing students to learn individually according to their abilities and interests [6]. At the same time, it can create fun learning according to the character of students as technology users [9].

Furthermore, the right media is needed to be developed in practicum learning. The learning media used by students in online learning are very diverse. Therefore, in the third needs analysis, research was carried out with the results which can be seen in table 3.

Table 3. Learning Media.

Learning Media	Percentage
Power point	39,2%
Module	15,2%
Job sheet	31,6%
Handout	22,8%
Video	72,2%
Magazine	5,1%
Book	13,9%
Youtube	40,5%
Others	1%

The results obtained indicate that the media needed by students is in the form of instructional videos. The need for media such as video, youtube is a virtual medium where students can more easily see the practicum process boldly. However, if the learning video is not supported by working steps properly. Students will experience difficulties in following the learning. So that media needs such as power points used by lecturers to explain material and job sheets used as practical guides are needed by students.

The use of e-job sheets provided by lecturers has been limited to pdf format. Where the pdf format can only present

pictures and writing as instructions. This often makes students less clear in practice because lecturer assistance is very lacking. One solution in practicum learning is the need for an electronic-based job sheet with video to help student learning. E-job sheets as a practical learning guide and media convenience in which there is a video linked to a link to YouTube or a video are needed by students. This serves to help students achieve learning goals. So that a more attractive design is needed and packaged in the online form [16].

The use of e-job sheets in learning is strengthened by research which explains that there are significant differences in the average competence of students in using e-job sheet-based diagnostic questions [17]. Besides, the use of e-job sheets in the control system practice shows that they are effective [18]. Likewise, the student response to the e-job sheet obtained 89.08% with a very good category based on diagnostic problems in checking brake system competence [17]. Android-based e-job sheet research shows a score of 52.81% on the aspect of ease of use [19]. Based on product feasibility, electronic-based media was declared very feasible with scores of 84%, 90.6%, and 100% [15]. The use of e-job sheet software that is made must contain clear and detailed material, contain video clips of work stages and SOPs that are presented systematically, and are easy to operate. This shows that e-job sheets are very suitable to be used as learning media for online practices during the Covid-19 pandemic. So that this e-job sheet is one of the uses of learning media in the form of digital pocketbooks, which is very suitable for use in learning [10]. So that video-based e-job sheets can be developed according to the learning pattern in 2020/2021. Where universities in all zones must be implemented online for theoretical and practical courses [2].

CONCLUSION

Based on the research results, it was found that an average value of 87.35% of the use of electronic-based media was very much needed in online learning.

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