

DESIGN DEVELOPMENT OF MOOCS FOR COMMUNITY SERVICE

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Abstract

Information technology is a study of the design, development, application and management of computer-based information systems for hardware and software. The influence of this information technology in the world is getting bigger and bigger, including in open access such as Massive Open Online Courses or known as MOOCs. The design of the MOOCs application development applied by the Open University for the Community Service (PKM) program is expected to provide a means to present MOOCs material material. One of the MOOCs materials developed is about Plastics: their utilization and dangers. The design of the PKM MOOCs program development, contains component components in developing a PKM MOOCs design or model based on the Learning Management System. There are n component components are; Outline of MOOCs program (GBPM), initiation material in the form of power points, discussion forums, quizzes, task completion forums, and ending with the work on summative tests. The results of the trial of 15 trainees showed that the development design of these MOOCs can be classified as good based on the clarity of the steps to be followed, the clarity of the stages of presentation, k hopefully the use of developed teaching material products, as well as the presentation of the ingredients.

Keywords: Training materials, Design MOOCs, Community Service.

1 INTRODUCTION

Massive Online Open Course or MOOC is a short lecture online yang available for free. MOOCs are online with the maximum and unlimited registration, which is open to anyone around the world. These short online lectures or MOOCs are usually delivered in the form of short explanatory videos that can be watched at any time, reading texts, discussion forums and tests, and online assessments Massive Open Online Courses (MOOCs) are a new type of online class that allow anyone, anywhere, to participate via video lectures, computer graded tests, and discussion forums.

The definition of MOOC itself is used as a means to develop potential for anyone who wants to increase knowledge through online learning. Currently, many institutions have developed MOOCs including Higher Education institutions. The various models and designs it has developed, and generally uses... Learning Management System (LMS). The MOOCs developed are not only related to the course but can also be used for the topic of discussion which can later

be accumulated into the equivalent of one course. The presentation of MOOCs for each topic of discussion at the Open University is known as the MOOCs of Community Education (PKM). In this regard, how to develop MOOCs for PKM, and the purpose of this study is to get information and input on the MOOCs that have been developed.

2 METHODOLOGY

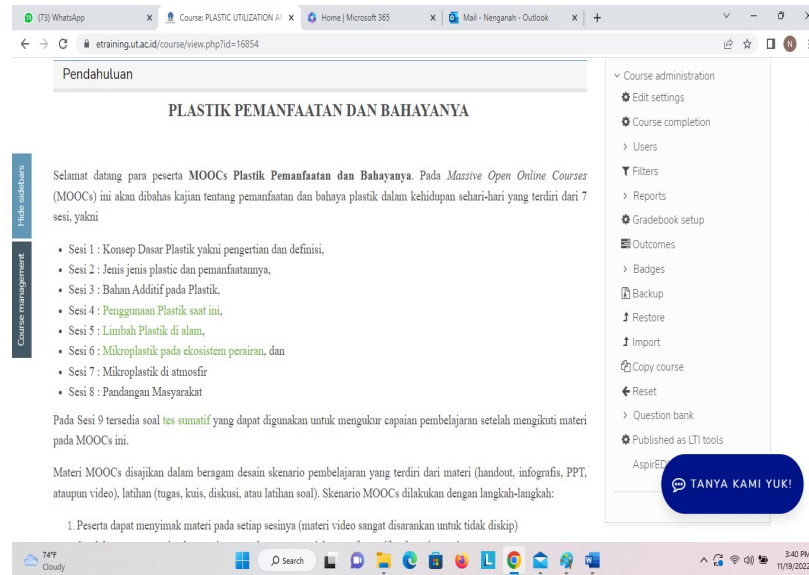
This research is a development research, which is to develop the design of PKM MOOCs. The eyes chosen are Plastic. This material was chosen because plastic is a material that is often used by the general public and is widely found in the surrounding environment. The developed MOOCs are analyzed or reviewed by material experts and developers of online teaching skills. The results of this development were tested on 15 espondents from teachers, employees, and lecturers. The selection of respondents was based on that they still wanted to learn or increase knowledge even though they did not have to pursue a degree. All respondents were given training on how to use the program and were given a questionnaire as an instrument of this study The data obtained were analyzed descriptively qualitatively.

3 FINDINGS AND DISCUSSION

3.1 Development of MOOCs Desain

The development of these MOOCs begins with developing a MOOCs Program Outline MOOCs (GBPM) that contains a small topic topic of knowledge. The developed GBPM contains 8 sessions and ends with a summative test to determine the achievement of the learning program. Furthermore, the teaching process was developed which consisted of material sajian, both in the form of power points, material descriptions and program videos. Furthermore, a formative test was developed for participants to work on to find out how much the level of mastery was after participating in learning in session 1. If the participant has reached a score of 80 from the results of his formative test, he can continue in session 2. And so on until session 8 and ending with a summative test. If the participant has successfully completed the summative test well and has completed all his learning activities, the participant gets a certificate of completion of learning through MOOCs are given.

The series of MOOCs developed, among others, are presented as follows as stated in attachment, but among them are illustrated as follows at Figure 1.



> Sesi 1
> Sesi 2
> Sesi 3
> Sesi 4
> Sesi 5
> Sesi 6
> Sesi 7
> Sesi 8
> Tes Sumatif dan Sertifikat

Figure 1. Part of the MOOCs design steps

3.2 Student response to the MOOCs Design

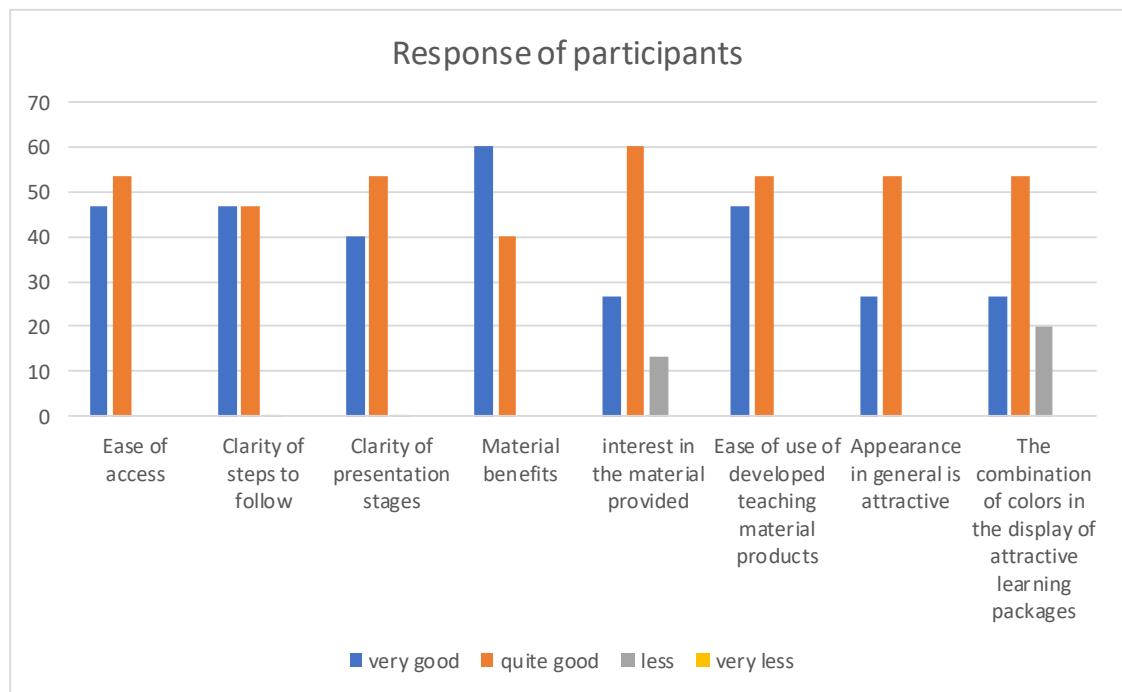


Figure 2. Participant's Response about MOOCs Design

The participants' responses were described as stated in Figure 2.

Through the Figure 2, it can be explained that the results of the development of these MOOCs can be classified as good based on the clarity of the steps to be followed, clarity of presentation stages, usefulness of the material, interest in the material provided, ease of use of developed teaching material products, the general appearance is attractive, the combination of colors in the appearance of the learning package is attractive.

4 CONCLUSION

MOOCs have not been in great demand by many people to follow suit. However, MOOCs have several advantages including being available at an affordable price, very far from the price of public lectures. can be accessed anytime and from anywhere, so everyone around the world can start learning as quickly as possible. The development of MOOCs is expected to make participants more excited.

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