Utilization of Learning On Line Course in Perspective Education Management

Elfrianto[1*], Bahdin Nur Tanjung[2]

Universitas Muhammadiyah Sumatera Utara (Indonesia)

e-mail: elfrianto@umsu.ac.id; bahdinnur@umsu.ac.id

Abstract

This study aims to see how far the impact of the use of learning using learning on line courses in the learning process. It can be seen that learning objectives and motivation play an important role, because by paying attention to the motivation of students, such as the desire to expand their knowledge, become specialists, and others. Then several factors that have the use of some of the features developed are learning systems. Management system in the form of plugins and themes. The development in the form of plugins and themes is intended so that the e-learning system based on massive open online courses can be installed flexibly on various other systems if needed. You can also see Mooc user data, Based on the analysis of user profiles registered in the e-learning system based on massive open online courses, it was found that 39% of users are male, while 61% of users are female. This study uses a literature study approach from several sources that have an empirical approach.

Keywords: Learning, On Line, Management, Education

Introduction

Science and technology is developing very rapidly, without limitations on time and geographical location. The impact is increasingly open and the spread of various information globally. Its influence is also very broad in various aspects and fields of life, including education. Education as a means of building human resources in a country, it is hoped that through education students will be able to manage life problems and problems rooted in society by engaging in society and being able to compete in the era of globalization. (Burrough et al., 2015). Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state. (Chinn & Duncan, 2021). This emphasizes that education is a very important foundation in the process of forming human resources in a country to develop the potential that exists in each student, it is hoped that later it can be useful for the needs of themselves, society and the nation and state.

To provide education services by guaranteeing quality to every citizen, and fulfilling the rights of every citizen in education so that every citizen has the same rights in obtaining quality education and can reach remote areas, the role of technology is very much needed in equal distribution of education today. (Povorina et al, 2021).

Considering the geographical condition of Indonesia, which consists of 13,487 islands, making Indonesia the largest archipelagic country in the world, this can be an obstacle to the uneven distribution of education in Indonesia. Education is a need and at the same time a basic right of every citizen without discriminating against race, ethnicity, age, gender (gender), social status and geographical location, meaning that every individual has the same rights in education to obtain education. (Cho et al., 2021). Various educational obstacles that arise have become the responsibility of the government to find the right solution in unraveling problems in the world of education.

One of the problems in the world of education today is the uneven distribution of education in Indonesia. Distance education is the right solution to describe educational problems that are constrained by geographic locations that do not allow conventional learning. The distance education system is one of the right solution choices to be able to fulfill the rights of every citizen in obtaining education. (Boatca, 2021). The rights and obligations of citizens in education have been regulated in the 2003 national education system law (1). Every citizen has the same right to obtain quality education. (2). Citizens who have physical, emotional, mental, intellectual, and or social disabilities are entitled to special education. (3). Citizens of remote or underdeveloped areas as well as remote indigenous peoples are entitled to special education services. (4). Citizens who have the potential for intelligence and special talents are entitled to special education. (5). Every citizen has the right to have the opportunity to improve education throughout the life of the National Education System in (Baruno, 2022).

Distance education itself has been regulated in the 2003 national education system law, section 10, Article 31, which reads: (1). Distance education can be held in all lines, levels, and types of education. (2). Distance education serves to provide educational services to community groups who cannot attend face-to-face or regular education. (3). Distance education is carried out in various forms, modes, and coverage supported by learning facilities and services as well as an assessment system that ensures the quality of graduates in accordance with national education standards. (4). Provisions regarding the implementation of distance education as referred to in paragraph (1), paragraph (2), and paragraph (3) shall be further regulated by a Government Regulation (Fatimah, 2021). (Stewart & Lowenthal, 2022). Therefore, the use of this distance-based learning model is termed a massive open online course as a form of equalizing the learning process from the past to the present in the era of covid 19. Each educator tries to know how the process is implemented, how is the signal condition in the areas where participants are students live, how is the assessment process carried out by the teacher.

Research methods

In this research method, the researcher uses a literature study approach by collecting as much data from previous research as possible in order to describe the research results that will be revealed in the results and discussion section. (Brennen (2021) Literature studyis astudiesused in collecting information and data with the help of various materials available in thelibrarysuch as documents, books, magazines,

journals and historical stories. The stages of this literature study research method can be seen in the following figure.
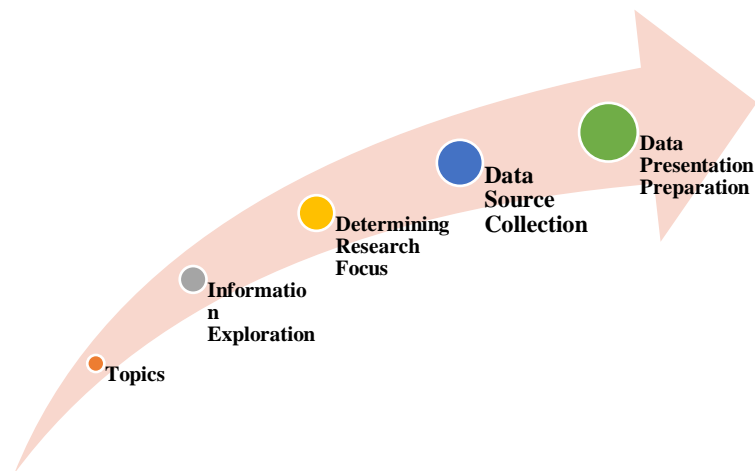
Research result

A.   MOOC Media Participation for Education

The history of the presence of the MOOC-based learning method began in 2008 with the brilliant idea of Dave Cormier and Bryan Alexander. the second is an academic from the University of Prince Edward Island, Canada. Both collaborate with Stephen Downes and George Siemens as one of the drivers of open educational resources. This step is taken as an effort to form an online-based course that can facilitate users from various circles regardless of space and time. The range of MOOC is very broad, because it can be accessed by users remotely which is done synchronously and asynchronously (Aggarwal et al., 2021). By utilizing internet technology, the MOOC method can be done online with a large number of participants anywhere and anytime. By utilizing technology, users are able to communicate and share learning experiences to improve independent learning competencies. The method used in classroom-based and non-class-based MOOC teaching with communication techniques between instructors and students built through a good online management system (Feng & Sun, 2021).

Based on the previous explanation, the Massive Open Online Course (MOOC) is composed of four words that have their respective meanings. first Massive, MOOC has the principle of infinite scalability which means that as long as the capacity of the server device is still able to accommodate all data and has a good algorithm, any number of participants can still join. Because MOOC does not limit the number of participants (Pozon et al., 2021). second, Open, or openness in its membership while still observing firmly the code of ethics and norms. Some sites usually provide various facilities and programs. Some are paid or free. Several educational and non-educational institutions have developed the MOOC platform by inviting as many participants as possible in order to spread knowledge and new experiences to the wider community. Third Online, online-based MOOC can be accessed remotely, but MOOC also provides facilities to support face-to-face learning, all materials, reading materials, assignments, practice, exam questions and others are all uploaded to the MOOC system (Chahuán et al., 2021).

The material is presented synchronously and asynchronously so that users have the opportunity to meet face-to-face with tutors and ask questions directly or indirectly based on an agreement with their respective tutors. Fourth Courses, MOOC has a complete form for a course by controlling class arrangements, material presented, reading material, practicum, assignments, implementation of exams and assessments. The main objective of this course is to increase the engagement of course participants so as to make it easier for teachers to monitor the progress of the learning process of students during online courses (Thumvichit, 2021). There are 2 models of communication approach in MOOC, namely cMOOC and xMOOC, cMOOC is a course method with a connectivism approach to connect communication between students. Furthermore, xMOOC uses a more structured behaviorism approach. cMOOC learning is based on interaction and communication between MOOC media users. Students are encouraged to pursue assignments in online classes independently as well as self-regulate their participation (Yousef & Sumner, 2021).

While xMOOC has a more structured system, through video lectures, regular assessments, auto-graded quizzes, peer or self-assessment, and online. It is hoped that students will be able to emphasize individual learning. The parties that usually offer the xMOOC system are universities because xMOOC is more centralized. cMOOC learning can use media such as weblogs to create a forum as a means of group discussion by carrying out a particular theme (McMinn, 2021). In the cMOOC environment, using connectivist pedagogical techniques that assume that all participants are considered learners. With the initial stage of delivering discussion material which is then listened to and corrected by platform users. The cMOOC instructional design approach seeks to collaborate between users in order to solve a common problem or project in order to build shared knowledge between learners. xMOOC or can also be called eXtended Massive Open Online Course is an online course that has a target of expanding university level users because it is based on traditional university programs (Venega & Maciel, 2021). The concept of xMOOC is to provide a different position between teachers and students, where each individual is a student or teacher. Some practitioners argue that xMOOC has lower quality because there is no direct interaction between teacher and student and the students involved also tend to be limited. The xMOOC platforms that thrive on the internet are edX, Coursera, and Udacity (Fuller et al., 2021).

The assessment of participants based on the two types of MOOC is different. In cMOOC the focus is on self-assessment and peer-assessment. Meanwhile, xMOOC focuses on the use of traditional tests, while the assessment on quizzes uses e-assessments. Based on the characteristics of each of the MOOC models, it provides wide-open learning opportunities in an effort to improve the quality of learning for MOOC users (Pham et al., 2021). The ease of users in accessing learning resources based on knowledge and experience is supported by technological features such as interaction, collaboration, self-reflection and evaluation systems. In supporting the delivery of learning materials, the MOOC literature requires media that can be grouped into three categories, namely collaboration, assessment, and analytical tools. (Hope & Campbell, 2022). Tools that can be used by students to support communication with each other can be in the form of forums, blogs, video broadcasts, social networks, and dashboards. The function of the MOOC learning analysis tool is based on several

related studies including learning analysis as monitoring the learning process, identifying problems, determining learning patterns, providing feedback, and providing support to students in reflecting on the learning experiences they have taken. But apart from this, MOOC still needs new breakthroughs to upgrade features to provide the best service. One of the unfinished homework is how to provide personal feedback to a large number of students taking online courses (Edwards & Lane, 2021).

B. Mooc Constraints in the Concept of Education Management

In the analysis stage, motivation and learning objectives are determined. Also in this phase, the limits and conditions of the system are also defined. At this stage the following activities are carried out: Learning objectives and motivation play an important role, because by paying attention to the motivation of students, such as the desire to expand their knowledge, become specialists, and others (Gil-Arias et al., 2021). Therefore the system design must adapt to this. To facilitate the motivation of students, the system that will be created will apply the classification of the material presented. This classification is useful so that students can adjust the material captured with the goals of the students themselves.

Classification	Information
Base	The material presented is suitable for beginners who just know the basic idea of the lesson or not at all.
Continue	The material presented is suitable for advanced levels who have mastered the basics of the subject or have completed the basic level.
Success	The material presented is suitable for advanced levels who have mastered advanced teaching or have completed advanced levels.

Table 1 Management of Learning Materials

Analysis of the material that will be presented online also needs to be done. This is to judge whether a material is suitable or not if it is given online. Because, there are some subjects that are categorized as difficult to present online, such as subjects that require speaking activities. Constraints and conditions that may affect the system are also analyzed. In Indonesia, there are several limitations and conditions that become obstacles in conducting online learning. Some of them such as human resources, infrastructure, and implementation are summarized in Table 2.

Human Resources	Not all students in Indonesia understand technology. This can affect online learning. Because, if students do not know how to use the system, it will be difficult to follow online learning. It can also be with the lecturer. In general, lecturers are not very familiar with online learning. Submission of material online is different from delivering material in person.
Infrastructure	Internet speed in Indonesia is still relatively slow. This can

	hinder the online learning process, especially if it requires high bandwidth speeds such as the use of audio and video in the learning process. The cost of building a server is quite expensive. This consists of storage costs for storing teaching materials such as videos, audio, and others. In addition, other costs that are also included are the cost of providing access to the server or the cost of bandwidth.
Implementation	For implementation, the conditions that occur are due to delays in implementation apart from Human Resources and infrastructure, another obstacle is choosing the appropriate model to be implemented. Several models that can be chosen in its implementation are supplements, complements, and substitutions.

Table 2 Online Learning Management

To overcome the problems above, the solutions that can be offered can be seen in Table 3 below.

Limitation	Solution
Human Resources	To overcome the problem of using new technology for students and lecturers, a guide is needed. For students, guidelines can be made in the form of online tutorials on how to use the system from the beginning to the learning process. For lecturers, online guides can be made on how to make online teaching materials and also practice various approaches to teaching online.
Infrastructure	To overcome the problem of high speed, the use of learning video and audio media, the file size used is not too large and the duration is not too long. Meanwhile, to overcome the high cost of server development, file storage can be done by using a third party.
Implementation	For the implementation itself, due to several obstacles, the most suitable model if implemented is the supplement model. Students have the freedom to choose whether to use electronic materials or not. In this case, there is no obligation / obligation for students to access electronic materials. Even though it is an option, students who use it will have additional knowledge or insight. This fits the purpose of MOOCs.

**Table 3** On-line Learning Management Solution

C. Equitable Use in MOOC-Based Education Management

Based on the actors, the functions and features of this massive open online courses-based e-learning system are as follows:

(1) Learners as a new user, you need to register first so that your identity is registered as a student. Registered students can log in and choose the courses to be followed or continue to follow the previously selected lectures. Students can read announcement messages from the instructor of the courses they are participating in, Students can take quizzes/tests contained in the learning process, Students can send responses from each learning material if there is material that is not understood.

(2) Instructors Instructors can edit and create new learning materials, Instructors can make tests / quizzes for students, Instructors can see students who have registered for the courses they are taking.

(3) Administrators can manage the entire system, courses, instructors, and students.

The e-learning system based on massive open online courses is implemented with the wordpress content management system. WordPress is a web-based content management system with an open source license where the program source code is free to view, study, develop, and redistribute under certain terms and conditions. This makes it easier for the development team to develop the required features. The features developed are a learning system. Management system in the form of plugins and themes. The development in the form of plugins and themes is intended so that the e-learning system based on massive open online courses can be installed flexibly on various other systems if needed. You can also see Mooc user data, Based on the analysis of user profiles registered in the e-learning system based on massive open online courses, it was found that 39% of users are male, while 61% of users are female. The following is a data visualization of the gender of users of the massive open online courses-based e-learning system that has been developed.
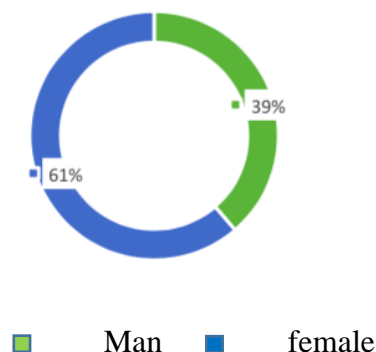
Image 1 Users By Gender

Based on the data above, it can be seen that the majority of users are female. This shows that the e-learning system based on massive open online courses developed is enough to attract women's attention to access education and increase knowledge. According to the OECD (2011), in many developing countries, female students still have low achievement in education, so that gender equality in education not only increases equal employment opportunities, but also helps to avoid early marriage, reduce the rate of fetal death, and improve the quality of life. health and education for future generations OECD in (Alrasheedi, 2022). Users of the Massive Open Online Courses (MOOCS)-Based E-learning System based on Recent Education Based on the analysis of the profiles of users registered in the massive open online courses-based e-learning system, data shows that 52% of users are Vocational High School graduates/equivalent, 38 % of users are high school graduates, 8% of users are bachelor's degree graduates, and 2% of users are diploma 3 graduates. The following is a visualization of the latest educational data of users of the massive open online courses-based e-learning system that has been developed.

Conclusion

In the life of a nation, the concept of the birth of science cannot be separated from the times, one of which is the influence of technology that cannot be eliminated in the joints of learning in every line of educational institutions, when trapped in the COVID-19 pandemic situation, one of the most effective things is, an educator is able to evaluate teaching methods and is able to generate new ideas and ideas in carrying out the implementation of learning in classrooms. On-line courses are one way out of the trap that has been continuing to have an impact on the learning process as a substitute for direct meetings in the classroom. Therefore properly and have a way out evenly by using online learning,

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