

## ECAMPUS'S ROLE IN SUPPORTING LEARNING IN HIGHER EDUCATION

Zulfadli & Annisaul Khairat

UIN Mahmud Yunus Batusangkar, Indonesia

zulfadli010100@gmail.com ; annisaulkhairat@uinmybatusangkar.ac.id

### Abstract

Technology plays an important role in supporting an education that can develop students' understanding. One platform that can be used as a learning medium is the E-Campus. This web application is often used by students and lecturers. In line with that the research is intended to find out the use of E-Campus as a learning medium for universities in the current era. This research was conducted using a quantitative method by conducting online surveys and in-depth interviews with students at various universities. The results of this study are the use of the ecampus web application in the learning process at various universities today, which is beneficial for a number of students and lecturers at tertiary institutions. To evaluate and understand ecampus in the learning process requires a deep understanding for students so they can use it properly. Therefore the limitation of this research is that the researcher did not make a design for using the e-campus in the study. The researcher hopes that further researchers can conduct research to build and develop this ecampus web application.

**Keywords** : E-Campus ; Learning ; College

### INTRODUCTION

The rapid development of technology at this time has made humans able to access various things related to progress in parts of the world without knowing borders (Backes et al., 2020; Higgins et al., 2019; Nahum-Shani et al., 2018). The very rapid development of technology supports human life for the better in the world, especially in Indonesia today (Lakitan et al., 2019; McDonald et al., 2019). Technology is very important and cannot be

avoided by humans in this all-digital era (Marbin et al., 2021; Zhang et al., 2020). Technology that is developing in the current era is a challenge for a number of educators (Idrees et al., 2020; Sushama et al., 2019). Even with today's technological advances everyone is able to create various opportunities in using existing technology (Castro et al., 2021; Ray et al., 2021). Where the human role can be replaced by technology so that educators must keep up with the times and understand the digital world optimally (Mehta & Zhang, 2021; Yu et al., 2018). Self-development by creating a variety of innovations and updates is a separate job for educators and students during the learning process. Technology plays an important role in education (Gao et al., 2019; Kellogg et al., 2020). Technology makes learning more effective and in an effort to increase students' understanding in learning (Ma et al., 2018; Shevchik et al., 2018). However, without realizing it, today's technology can also become a threat if it is not managed properly.

The internet, computers and cellphones are evidence of rapid technological progress and development (Arranz et al., 2020; Calixto, 2019). The internet or social media has become an inseparable part of life in this advanced era (Gariazzo et al., 2018; Tan et al., 2022). In a very short time, technological developments have exploded on the market and their use has increased dramatically (Aloqaily et al., 2019; S. Chen et al., 2018). Internet progress is needed in life, including in the world of education (Badrinathan, 2021; Makki & Bali, 2021). The development of e-campus learning media has been supported by technological sophistication. At this time, it can be seen that human life is inseparable from technology, from children to adults who understand the digital world. The digital world affects all aspects of human life, both economic (Elsalem et al., 2020; Lindner et al., 2019; Wainman et al., 2020) social and cultural aspects. human population development is a factor that influences technological development (Khalid Khan et al., 2022; Lin et al., 2018). Human needs from various eras are increasing and increasing and demand that they be fulfilled (Du et al., 2020). Therefore, technological support is needed so that each of these needs can be fulfilled. Progress that is present can help humans in accessing and reaching various information that can increase knowledge of a matter.

Education is an important aspect as well as a general thing for the development of human resources. The term educate comes from the word educate, which has the meaning of sharing or providing understanding related to intellectual intelligence and understanding of nature and behavior (Nikiphorou et al., 2021; Roberts, 2019). Education requires technology as a learning medium so students can make more mature career plans according

to their will and what they want (Junker et al., 2018; Rahman & Abdel-Aty, 2018). Technology, information and communication has various types and sophisticated innovations are widespread in all circles. Types of technological equipment that are usually known by the general public such as PCs (computers), printers, laptops, LCD projectors and mobile phones. One can learn that e-campus is the right choice for use in today's technological age (Hopkinson et al., 2018; Roy et al., 2018). Many types of online learning media can be chosen by educators to provide convenience in the teaching and learning process (Ilyas et al., 2023; Zhao et al., 2023). In this all-digital era, students should be given learning that can increase their interest and motivation to learn (Lee et al., 2021; Posever et al., 2021). This is done by paying attention to the class atmosphere, so that it is more fun and not rigid by taking advantage of technological advances and developments that exist in the era of globalization.

Learning media that use the internet require sophisticated facilities to support optimizing technology-based learning. Improvements to the mobile phone system are also urgently needed because basically almost all students already have cell phones and use cell phones more often than computers (Hassell et al., 2021). The closer the relationship that exists between humans and internet use, the by itself will change a person's lifestyle and mindset and can increase anxiety for all users due to high security threats (Junker et al., 2018). Even so, life cannot be separated from technology and the internet, especially in the world of education. As a result of technological advances, teachers are required to change methods or strategies in the teaching and learning process which require cooperation between lecturers and students in order to make the atmosphere more effective and efficient (Hu et al., 2020). E-campus media is interactive media in an internet-based learning which is a medium and can be used as an element in learning (Forrest et al., 2020). In utilizing various learning media such as e-campus. These media have their respective functions and objectives to assist in the learning process in higher education (Lauer et al., 2020). But basically if you are good at utilizing various existing media. Applications that are not intended for education can also be useful as learning media.

Learning media is a tool that can help in the learning process to be more effective. To realize an efficient learning media, an educator must be able to choose the media that his students like. So that when a media is in accordance with what students are interested in, learning can run smoothly and the desired educational goals can be achieved (Bottazzi & Lusardi, 2021). E-campus can be used as an online-based learning medium nowadays

which can be utilized to provide convenience in the teaching and learning process via mobile phones and computers (Kraiem et al., 2020). E-campus is a development in the field of technology to make it easier in the world of education (Rajeh et al., 2020). Learning can be accessed using mobile phones and computers which are able to facilitate users in application both from lecturers and students.

technological development and its application have many aspects that are structured to be used as references for reasons to support education and quality improvement in institutions (Awad et al., 2018; Sun et al., 2020; Tong et al., 2018). Digital-based media is very capable of being championed as the main facilitator in leveling education in Indonesia (Liu et al., 2021). Technology has also become a reference in determining the ability of learning to be carried out remotely.

In this era, education has been turned into learning media that can be accessed anywhere using an application. E-campus is one of the internet media used by educators in online and offline learning (S.-H. Chen et al., 2018). E-campus has advantages and disadvantages in learning (Corroon & Phillips, 2018). where the advantages are that it does not take up a large area and can be done anywhere and an educator can facilitate the learning process, the disadvantages can be felt that effective learning does not work because the use of this media requires strong internet and a large quota (Marimuthu et al., 2022). Research data also shows the obstacles and impact of success in learning that is less effective due to the lack of interaction in using the e-campus.

Previous research is very relevant to research conducted by current researchers. It can be seen that the use of e-campus is effective at this time because the use of this system can be seen by entering, processing, and producing the information needed, in other words, it makes it easier for users (Deldjoo et al., 2021). The use of e-campus as a learning medium for universities. The results of this study researchers can find out that the internet-based e-campus application has benefits for the learning process, assessment, and teaching students (Ardabili et al., 2020). It can be seen that basically students who can use this media during learning can develop knowledge and facilitate learning, are literate with technology and know their own quality.

The research conducted has the aim of being able to find out how effective internet e-campus media is at a tertiary institution (Li et al., 2021; Vidanaralage et al., 2022). As well as having a goal of how far a student can master e-campus media. and can see that students

are able to learn current technology (Panis et al., 2020). So that someone who initially stutters with a technology can carry out and operate the technology as much as possible. The findings of this study are followed up and it is hoped that further researchers can conduct research to continue and be able to carry out developments of the e-campus web application.

## **METHODS**

This research was conducted using quantitative methods by carrying out several activities by surveying students and lecturers at different universities. The interview model was carried out because it was in line with the objectives to be achieved in the research, namely being able to find out the use of the e-campus as a learning medium for tertiary institutions, and being able to find out the benefits of using the e-campus in learning conducted by educators (Jabreel & Moreno, 2019; Mayer, 2019). Whereas the process of conducting in-depth interviews has the goal that a researcher can process complete data and there is no misinformation or lack of resources when processing references and can find out how far the use of e-campus is running at various universities in the learning process. Now the places where this research is carried out are in various universities both online and by filling out a Google form questionnaire made by the researcher.

The results obtained from this study came from students and lecturers at various universities who filled out the Google form questionnaire. The technique is carried out to make it easier for students and lecturers who are research subjects (Chakraborty et al., 2020). The results obtained in this study were several students and lecturers who filled out the Google form questionnaire distributed by researchers. Judging from the results of the questionnaire, it can be seen that the questionnaire has been filled out by students and lecturers in various tertiary institutions. More in-depth interviews were conducted with some students to obtain more robust data.

Data collection was carried out by researchers using the survey method, namely by making a questionnaire on the Google form first about the use of e-campus as a learning medium in tertiary institutions. Then the researcher shared the link in the questionnaire (Radianti et al., 2020). The contents of the questions in the questionnaire relate to the use of e-campus media as learning media in tertiary institutions. After getting the results from

the survey, the researcher conducted in-depth interviews with some students regarding the e-campus as a learning medium in tertiary institutions to obtain solid data.

The data collected from the research results were then presented using a quantitative method by presenting in a table the information obtained by calculating the percentage of each question given by the researcher in a google form filled in by several students and lecturers. The presentations that have been obtained are presented with the researchers' thoughts in tabular form and then discussed using some of the opinions of previous researchers as well as the opinions of previous experts whose thoughts are very relevant (Ghani et al., 2019; Zawacki-Richter & Latchem, 2018). In the discussion the researcher narrates his opinion and is developed through the conclusions obtained by the previous researcher.

## RESULTS

After a survey conducted by researchers by filling out a Google form questionnaire, students had filled it out at various universities in West Sumatra. All the questions needed were made by the researcher in the questionnaire. In general, all students knew and knew what the e-campus web application was and understood how to use it in the learning process. Most students are capable of operating this e-campus web application as a learning medium in tertiary institutions. The e-campus is considered very suitable for use by students in the current era in the context of the learning process. The ecampus web application has the benefit of motivating students in learning and facilitating lecturers in the learning process, for example taking absences and collecting assignments online so that they can make learning more colorful during learning. This application has advantages and disadvantages, the advantages of which are that it does not take up a lot of space and can be opened anywhere and anytime, while the disadvantages are that it requires a good network, a lot of quota so that the ecampus web application can run effectively and efficiently in learning and This application can be considered to increase students' active learning in a learning process.

**Results of table 1** The study was conducted on students who were at different tertiary institutions, UIN Mahmud Yunus Batusangkar, UIN Imam Bonjol Padang, UIN Sjech M. Djamil Djambek Bukittinggi and UNP

No	Questions given	The answers you get (percentage)	Information
1.	Do you and your colleagues know what the e-campus web application is?	72.7% know 27.3% know very well	All lecturers and students are very familiar with this e-campus web application.
2.	Do you and your colleagues understand how to use the e-campus web application?	81.8% understand 18.2% really understand	Many lecturers and students understand how to operate this e-campus.
3.	Is e-campus useful for the learning process in the current era of globalization?	54.5% useful 45.5% is very useful	Some students who use the e-campus say this application is very useful in the learning process.
4.	Do you and your colleagues agree that e-campus has its drawbacks?	72.7% agreed 27.3% strongly agree	Students and lecturers agree that this application has drawbacks, namely having to have a large quota and a stable network.
5.	Do you and your colleagues agree that e-campus has advantages?	81.8% agreed 18.2% strongly agree	But behind the shortcomings there must be advantages, here educators and students where the advantages are that they don't take up space and space when using them.
6.	By using the e-campus web application, can it encourage student enthusiasm in carrying out the learning process?	81.8% agreed 18.2% strongly agree	Using this e-campus really encourages students' enthusiasm in the learning process, so that students can interact with their teaching staff as if they were learning offline.
7.	Does the use of this e-campus help during learning?	90.9% helps 9.1% is very helpful	Nearly 100% of people say that the use of e-campus is useful for students in helping during learning.
8.	Do students focus on using the e-campus web application?	36.4% lack of focus 45.5% focus 18.2% not focused	Here the researchers saw that the use of e-campus in learning media 18.2% of students did not focus on taking absences, while 45.5% of students focused on using this learning media, while only 36.4% of students focused less on using learning media This.

9.	Does learning using the e-campus have obstacles that are felt during learning?	54.5% agreed 45.5% strongly agree	The percentage of obstacles here shows that the perceived barriers to learning have many obstacles such as: <ol style="list-style-type: none"> <li>1. It is difficult to collect absences and assignments due to network constraints.</li> <li>2. Less monitored by lecturers because when taking absences through the e-campus, some students open other applications.</li> </ol>
10.	Is e-campus useful for learning in the current era?	81.8% useful 9.1% is very useful 9.1% less useful	Most students say that the use of the e-campus web application as an online learning medium in higher education is very helpful.

## DISCUSSION

E-campus is a web application that is available on cellphones and computers to make it easier for lecturers and students in the learning process, especially in the current era. This application is a medium that makes it easier for educators to evaluate ongoing learning and this application can provide various facilities in the learning process. By using this web application learning can be organized and can run smoothly without any obstacles. Even though this web application is easy to use, this media requires good facilities, lots of quota and a strong network to support it so that it runs effectively and more efficiently in learning.

E-campus is an application that can be used via mobile phone which is a type of application that provides facilities and can be used in the learning process so that students and lecturers can experience effective and efficient learning such as taking absences and collecting assignments even though this is only done online. However, learning can be done effectively, such as giving assignments, discussions in learning, to conducting online assessments. Based on the existing data, it can be concluded that the e-campus is part of a web application that is easily accessible to students and lecturers who have features to make it easier for lecturers to assess



Basically, this application has long been known by lecturers, both its application and how to use it, but not all lecturers are good at using it. Because of this, in improving the ability of lecturers to use the e-campus web application, students and lecturers must conduct training on how to use it in order to prevent ignorance of the e-campus web application during ongoing learning. It seems that training alone is not enough, apart from training conducted by students and lecturers, educators are also required to train themselves independently in order to increase understanding. In order to teach students and want to understand technology at this time, an educator must master the technology that will be given to his students. The e-campus itself is a series of existing technologies, so it is expected that educators must master digital-based learning media.

Learning about this technology is not only for students who are completing their studies. However, it is recommended that every community be literate with the name technology because society is already in the digital era and the world is technology. An educator is required to be proficient in technology and attend training, and this training must be trained by trainers who are highly proficient in the field of information and communication technology so that the insight that will be obtained by someone who studies the technology gains in-depth knowledge of technology. Training activities are carried out in stages so that students and lecturers can understand them thoroughly and can improve skills, creativity in using current technology.

Not only lecturers are required to master the technology that is developing at this time. but students who are objects for teaching are also required to be literate in technology so that the learning process can run optimally in the current era. So that after the learning takes place no students complain and say they don't understand what the lecturer has taught, but not only students and lecturers, parents must also play a role and be literate in technology in today's digital era so that when an educator says he doesn't understand technology, parents can teach it right away, not waiting for the lecturer to explain and teach it so that students will understand and be able to use technology.

Technology that is currently developing is a driving factor for the use of e-campus, which is useful for online-based learning in higher education today, considering that technology is developing very rapidly and is very useful for online learning. Which ecampus has benefits when learning various kinds of benefits such as making it easier for a student to interact with lecturers and collect absences and assignments online like offline learning.

And makes it easier for a lecturer to provide material that will be taught as well as assignments related to this material and can make an assessment both in the discussion process and in the end of the semester assessment. And is a forum for taking absences and collecting assignments and getting information on matters relating to learning and outside of learning.

This e-campus web application has benefits as a learning medium in higher education. That is, it can be used in the ongoing learning process, the benefits of using media in the technological era, especially in the current era, are numerous. It can make it easier for educators to have dialogue with their students directly even though it's online and make it easier for lecturers and students to work. As well as being able to increase students' enthusiasm for the world of education, where at first students were so lazy in taking absences, the existence of e-campus media can increase the enthusiasm of students in gaining knowledge.

Behind the advantages, there must be drawbacks, including this application. It has disadvantages that are easy to see from different perspectives and directions. Those who have problems using this application must use a mobile phone and quota, because this web application requires an internet package. If someone uses it, internet access is not there, the e-campus web application cannot work optimally and can cause lag on Android devices and mobile phones to experience tension so that learning does not run effectively. And this web application requires students and lecturers to have quotas and have an effective network and good mastery of technology, and by providing online access this can cause students who are not really involved in learning, which can lead to laziness and unwillingness to education.

Many researchers found both the advantages and disadvantages of the e-campus web application as an online learning medium at this tertiary institution. After conducting a survey researchers can find many obstacles in using this application, both having to use an adequate smartphone, having a quota, and having to have a network to be able to access the e-campus properly. While there are drawbacks, there are definitely advantages, this e-campus is easy to access anywhere and anytime. During learning, students can interact directly with online and offline learning students. In learning students who are submitting assignments in the column that has been set by the lecturer on the e-campus web application. However, it can hamper the discussion and require a long time when taking

ongoing absences, for example for students who are late, the lecturer reopens the e-campus media.

Regardless of how many researchers see, both the advantages and disadvantages of this e-campus web application as an online learning media facility for tertiary institutions which has a very large role and benefits for students and a lecturer during online and offline learning. where ecampus is a media specially prepared to add facilities for educators and students in the context of effective learning to be carried out in the educational process. With the existence of online learning media, various types of learning can be carried out and increase student intentions in a search for knowledge that exists in the current era and this ecampus web application really needs several updates in order to improve the quality of an e-campus web application.

## CONCLUSION

The use of e-campus as an online learning medium in tertiary institutions is in accordance with what is expected by the community regarding the demands made by the community on the government in the context of overcoming the lack of literacy of students in understanding technology, e-campus is simply known by the general public of students and lecturers located at various universities. The e-campus has the benefit of making it easier for a student to interact with his lecturer in a lesson so that learning can run effectively and efficiently and the e-campus also has disadvantages that can be seen clearly when its use requires a smartphone and a strong internet network and does not escape the package. data, so that many students experience complaints because the network has problems when using the e-campus web application.

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