PROCEEDING

"Revisiting the Teaching and Learning in Higher Education"

Friday, September 18, 2020 & Friday, October 9, 2020

Department of Management of Education
Study Program Graduate Program
Universitas Kristen Indonesia

PROCEEDINGS

"Revisiting the Teaching and Learning in Higher Education"

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Greetings from The Chair!

First of all, let us thank to our God, the Almighty, for His blessing for us, and we believe because of His grace, we had the opportunity to organize International Webinar, which theme "Revisiting the Teaching and Learning in Higher Education", which was held on September 18, 2020 and October 9, 2020.

Highly appreciation to all the speakers in this webinar, from Universitas Kristen Indonesia and specially to Dr. Ethel Agnes P. Valenzuela (Director of SEAMEO Secretariat, Thailand), Prof. Dr. Zenaida Quesada Reyes (Philippine Normal University, The Philippines), Dr. Chih-Hung Yang (Cheng Shui University, Taiwan) and Dr. Norfishah Binti Mat Rabi (Universitas Pendidikan Sultan Idris, Malaysia).

We believe all the topics that already presented in that webinar will give beneficial and contribute to the development of education specially in higher education.

We also give appreciation and thank to Dr. Bintang Simbolon, Director of Graduate Program and Dr. Lisa Kailola, Director of International Office Universitas Kristen Indonesia, which have given all supports to make this webinar runs successfully.

May God bless us all!

Best Regard,

October, 2020
Chairman of the committee

Dr. Dra. Mesta Limbong. M.Psi

DAFTAR ISI

SINOPSIS

International Webinar
Graduate Program Universitas Kristen Indonesia
Educational Administration Study Program

A. Overview Background

Educational Administration Study Program has a vision, namely "To become a superior study program in promoting education, research and community service in educational administration at the national and international levels with Christian values and national culture based on Pancasila." In its implementation, this vision is then elaborated in several indicators, one of which is improving the quality of graduates with integrity and competence of education and able to compete at the national and international levels. The development of international cooperation is carried out in the framework of increasing the quality and capacity of sustainable human resources.

In the current New Normal era due to the outbreak of the corona-19 virus, several international cooperation activities in the form of seminars were carried out online. The Educational Administration Study Program coordinates with the International Office Universitas Kristen Indonesia to organize an international webinar with the theme: Revisiting the Teaching and Learning in Higher Education

Highlights :
1. Effective Online Learning by Integrating Technology and Social Media
2. Maximizing Student Engagement for Online Learning
3. Mental Health Preparation and Textual Analysis for Character Education
4. Blended Learning and Pedagogy
5. Evaluation Techniques for Online Test
6. Developing Curricula Based on Online Learning
7. Leadership

Guest Lecturer :
1. Dr. Chih-Hung Yang (Dept. of Early Childhood Care & Education, Cheng Shiu University, Taiwan)
2. Prof. Dr. Zenaida Quesada Reyes - Philippine Normal University
3. Dr. Norfishah Binti Mat Rabi (Universitas Pendidikan Sultan Idris, Malaysia)
4. Dr Ethel Agnes P. Valenzuela - SEAMEO Secretariat Director

Lecturers from Universitas Kristen Indonesia :
1. Dr. Dra. Mesta Limbong, M.Psi.
2. Dr. Erni Murniarti. M.Pd.
3. Dr. Lisa G. Kailola, S.Sos., M.Pd.

4. Dr. Hotner Tampubolon, MM.
5. Dr. Drs. Witarsa Tambunan, M.Si.
6. Dr. Bintang Simbolon, M.Si.
7. Dr. dr. Dameria Sinaga, M.Pd.
8. Dr. dr. Bernadetha Nadeak, M.Pd.
9. Dr. Hotmaulina Sihotang, M.Pd.

Learning through the Virtual Network at Indonesia Christian University Postgraduate Program Faculty

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Abstract

The world of education is now experiencing a period of globalization that is growing rapidly. 21st century education has the objective to build a knowledge society. Society is characterized according to the UN of the 21st century is to have (1) technology and media literacy skills, (2) thinking skills, (3) problem-solving skills (4) effective communication skills, (5) collaborative work skills. One example that easily found is the use of Internet technology in education. This paper focuses on learning through a virtual network which includes the notion of learning through the internet and the potential and challenges.

Keywords: Learning, virtual network

INTRODUCTION

Continuous technological developments in the world of work not only requires a college graduate that has a broad knowledge but also have a professional skills ready for use in the field of work. This fact brings the consequence that universities constantly need to improve the quality of graduates that have competencies as desires. UNESCO in this context suggests the necessary competence possessed by graduates college, namely: (1) an adequate knowledge (to know), (2) skills in carrying out duties in a professional manner (to do), (3) ability to perform in science / profession (to be), and (4) their ability to use science for the common ethical (to live together). To be able to produce graduates with the competencies, Universities, in this case, Indonesian Christian University (UKI), especially the Postgraduate Program Faculty need to make continuous improvements to the learning facilities that they owned. One form of learning facilities which can contribute to the quality of the abilities and skills of students is the availability and use of media and learning technologies.

The availability and use of media and learning technologies in UKI Jakarta is very important in order to improve the quality of student abilities and skills.

This in turn can contribute positively to improving the quality of competence lulusansehingga able to play a significant role, both in academics and in the world of work in the future. In learning activities, the media can be defined as something that can bring information and knowledge in the interaction that takes place between lecturers and students (Heinich, et al, 1996). In other words, learning media act as intermediaries in the study conducted by the lecturers and students. Heinich, Molenda, & Russel proposed classification of media that can be used in learning activities one of which is a computer-based multimedia.

Internet is a virtual world of communication is one of the multimedia-based computer. Internet network system improvement is one of the effects of the progress of development in the telecommunications world of information and communication technologies (ICTs). Nowadays the existence of ICTs has been entered into the world of education. IT no longer be viewed as a complement, but more than the advancement of ICTs provides enormous impacts and benefits in learning activities. One use of ICT in education is the use of the Internet that allows for learning through a virtual network. The concept of learning nowadays referred to *online learning*.

1. Advantage and Disadvantage of Virtual Network Learning

The wealth of information that now available on the Internet has already surpassed expectations and even the imagination of the inventor of the first system. The Internet was originally created for the needs of military defense systems that can be decentralized so as to reduce the risk of total failure, just maybe this could happen if a centralized system main computer was destroyed.

Internet can also be decentralized and empowered. By using the Internet we can access information sources without limit and is expanding rapidly. We can communicate individual or mass to practically anywhere in the world within a few seconds. We can deploy (publish) information that can be accessed from anywhere around the world in no time at all. We can communicate directly (in real time) by telephone and video processing units. We can "chat" through a network of free "chat" is very broad, namely mIRC. Here are some of the advantages and

of the Internet as a media and learning resources are: 1) For Teachers: (a) improving the knowledge (b) to share resources among Collegial / peers (c) working with teachers from abroad (d) the opportunity to publish / directly (e) arrange regular communication (f) participate in forums with colleagues both locally and internationally. 2) For Students: (a) improving the knowledge; (b) to learn interactively; (c) Develop skills in the field of research; (d) improve communication with other students; and (e) Increase sensitivity to problems that exist throughout the world.

In addition to the above advantages, drawbacks of using the Internet as a media and learning resources are is a lack of availability of human resources, the transformation process technology, telecommunications infrastructure and the laws that govern them. Operational infrastructure underlying legal education in Indonesia is quite adequate to accommodate the new developments of the application of IT to education. However, please note that the Cyber Law has not been applied to the world of law in Indonesia.

In addition there are shortcomings in terms of infrastructure provision of telecommunications technology, multimedia and information is a prerequisite for the implementation of IT education while the penetration of computers (PC) in Indonesia is still low. Fee for the use of telecommunication services are still expensive even telephone network is still not available in many places in Indonesia.Untuk it needs to consider access to the Internet without going through a personal computer at home. Meanwhile where Internet access could be extended reach through the facilities on campus, schools, and even through the stalls is certainly confronted Internet. Hal back to the government and the private sector; although eventually return also to the government. Therefore, it is the government that can create a policy and regulatory climate conducive to private investment in education.

2. General Planning of Research On Learning Through The Virtual World

The study design learning through virtual network can be formulated in the title "Development of Internet-Based Learning Strategy Model". The background of this development research is their high tendency in utilizing the Internet as a media and learning resources at the college. However, the opportunity can not be fully utilized by Higher Education institutions. Utilization of the Internet network system for learning in universities is also in search of the latest learning resources, qualified and accountable in science.

Encountered education problems in Indonesia in the utilization of the Internet for online learning are:

1. What is the effective utilization of the virtual world of learning to improve learning outcomes students of the Indonesia Christian University Postgraduate Program Faculty?

2. Is the world implementation of virtual learning contribute to improve the quality of teaching in Indonesia Christian University Postgraduate Program Faculty?

Meanwhile the research objectives to be Achieved, is to Obtain an overview of:

a. How big is the role of the virtual world learning to learning outcome students of the Post Graduate Program Faculty UKI Jakarta.

b. How big is the role of the world virtual learning towards improving the quality of teaching in the Postgraduate Program Faculty UKI Jakarta.

Review of the literature used in the study design are theories related to communication and telecommunication network systems expressed by experts based on research results. Experts such as Clark Quin with his theory of learning moble, Heinich and Molenda with Multimedia theory, Richard Mayer in the form of multimedia research results, and Dabbagh with online learning theory. The research methodology used in this design is research and development. From this development research is expected to produce a web-based learning product. While the development model used is the model used by Trollip and Allesi (2001). This

model consists of 3 stages, namely: 1) planning, 2) designing, and 3) development. The three major stages contain operational stages starting from program development planning to field evaluation.

According to the model Trollip and Allesi, evaluation of product development is divided into two, namely: 1) on-going evaluation, and 2) evaluation of product development. On going evaluations conducted throughout the development process is done. That is, at the time of product development was done and found components that need to be improved based on feedback from various parties, then at that time must be revised.

Meanwhile, evaluation of product development done in 2 ways, namely: 1) alpha test and 2) beta test. Alfa tests in the research design development of learning through cyberspace in the Faculty of Postgraduate Program UKI conducted by experts in this matter. The experts who will undertake the development of this product is an expert in Education Technology, Media Expert, Expert Content and Expert Evaluation. Fourth These experts will provide an assessment of the product development. Suggestions, comments and input from experts will be used as the basis for product revision. Meanwhile, the beta test is an evaluation conducted in the field by the user. Beta tests include tests of the one consisting of 3 students representing three groups of different abilities. After testing the test a small group, consisting of 8-15 students representing different levels of ability and reflects the characteristics of the user. While the last beta test is a test of major groups, which was conducted on more than 15 students. The number of large groups should reflect the end-use products. If within one single test, test a small group, and large group trials have encountered many comments are not satisfactory about product development, it needs to be revised. The revised draft further tested back on a different subject to the same scheme. The aim is to avoid the invalidity of the data obtained. In addition, the process of field trials should be performed by different lecturers, not by the developer. This is also done to avoid a subjective element in the acquisition of research data.

3. **Applications of Educational Technology Trends Prediction**

Along with the development, computer technology today is no longer only used as a means of computing and word processing (word processor), but also as a multimedia learning tool that allows students to make a concept design and engineering and science. Computer-based multimedia presentation can be defined as technology that optimizes the role of the computer as a means to display and manipulate text, graphics, and sound in an integrated view. With a view that can combine various elements of information and delivery, the computer can be designed and used as a medium for effective technologies to study and teach relevant lecture material graphic design machines and also animation. According Panen, et al (2003), the use of media and learning technologies at universities in addition to contributing to the knowledge and skills students can also help a lecturer at the College to facilitate the learning process, clarify learning materials with a variety of concrete example, facilitates interaction with students, giving students the opportunity to practice, and allow evaluation of various forms of media and learning technologies. In order for the use of media and learning technologies can contribute positively to student learning outcomes, then professor of media users should consider several factors media selection.
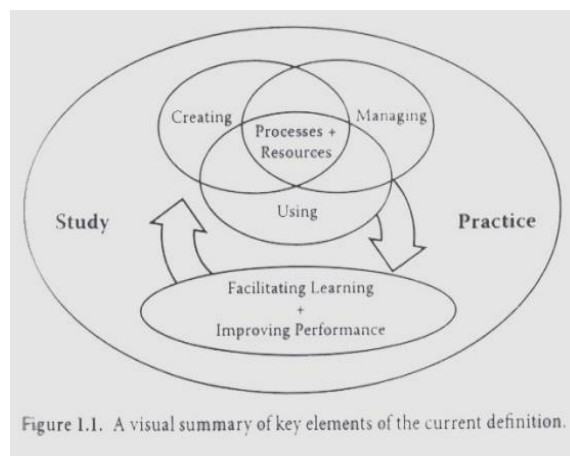
The use of computer networks for the acquisition of information is also increasingly being carried out by the students. The growth of Internet cafes services (computer cafe) on campus has also added the student access to information through the network. The high intensity of the changes in the world of telecommunications, information and communication requires a fundamental change in the implementation of learning in PT. The learning process at this time, not only in the strategy and the conventional model, but it leads to a blended learning system, which combines conventional learning pattern with a learning system that utilizes virtual world.

4. **Relationship between Learning Method Changes and Virtual Network Learning**

Changes that occur in the world of learning in universities, particularly in the Christian University of Indonesia who seek leveraged the Internet as a media and learning resources has put the technology education as an essential element as a discipline that aims to design learning systems. This is in line with the definition of Educational Technology, as issued by the AECT 2004 saying that "Educational technology is the study and ethical practice of facilitating learning and improving performance by creating, using, and managing Appropriate technological processes and resources".

This definition indicates that the Educational Technology as a system has four interrelated components and integrated. The four components are: 1) the study and practice of ethics; 2) facilitate learning and improve performance; 3) creating, using, and managing; and 4) the processes and resources.
The integration of all the components that show the system can be visualized as follows:

Figure 1.1. A visual summary of key elements of the current definition.

The above definition suggests, that the Education Technology concerns in studies of theoretical level conceptual through a variety of research and practice on how to facilitate learning and improve learning performance by creating, using, and managing various processes and sources of the most suitable technology for teaching and learning activities. The definition of the concept of Educational Technology as described, clearly illustrated that the Educational Technology is a

discipline that seeks to create a design that aims to facilitate the learning that will ultimately improve performance. Facilitate learning in this context is not only addressed to students, but also professors as manager in the classroom. The changes were rapid and fundamental advancement of ICT requires a learning design that can be easily accessed by students and professors to finding the source of learning. A close relationship between progress and the changes to the role of ICT in Education Technology described as two sides of a coin that can not be separated. Utilization of the Internet and the virtual world of learning at the Indonesian Christian University Faculty of Postgraduate Program can only take place smoothly and make a positive contribution if it is designed using the principles of Educational Technology.

Internet use in the virtual world of learning at the Postgraduate Program Faculty of the Indonesian Christian University will be able to facilitate the Distance Learning Process between students and lecturers. This application can at least bridge the learning needs of students who cannot come to class. In addition, students can also take advantage of this facility for the improvement of knowledge without having to attend a class, or go out of town, the participants could be in place each, while the lecturers are in a different place. The interaction can be run on-line and real-time or off-line or archieved.

Use of a computer device, equipped multimedia device, with a CD drive and an Internet connection or a local internet, widespread and widely used in educational institutions today. So the number of students who can participate and take advantage of this medium as a source of learning is not limited by the capacity of the class. Lecture materials can be designed and the same standards for each level. In addition, the learning material is easily accessible because it is available on the web. Students just choose the desired material. In addition, learning materials can also be updated at any time, as well as the evaluation system can be designed with diverse and cannot be the same for every student.

Fully realized, studying with the use of Internet in a virtual world on a new Indonesian Christian University Faculty of Postgraduate Program can meet the needs of an understanding of the theory. For the realm of practice, students are

still required to be present in a regular classroom. But at least, understanding the theory as the basis of the practice can be studied with the Internet-assisted learning system. The combination of conventional learning and use of the Internet as a media and learning resources at the Indonesian Christian University Faculty of Postgraduate Program have wanted a fundamental change in the system of learning to do. The changes are not only required of students and faculty, but also from existing learning environment. With the onset of change and transformation, hence Indonesian Christian University Faculty of Postgradute Program institution as a learning organization is expected to mengadapasi and to collaborate with any changes in the global environment.

5. **Supporting and inhibiting factors and how to overcome it**

By maximizing the use of computers and the Internet as a learning facility in the virtual world, the Indonesian Christian University School of Postgraduate Program Jakarta, make the Internet as an education infrastructure which has a carrying capacity in the learning process. Things that make the Internet as a factor that has supporters learning process, are:

a. Can be used as access to the library;

b. Can be used as access to experts;

c. Can undertake an online course;

d. Academic information services can provide an educational institution;

e. Search engine may provide the data;

f. Can be providing discussion facilities;

g. Can provide facilities and school alumni directory;

h. May provide cooperation; and others.

Lecturers need to take advantage of the use of computers and the Internet as a media and learning technologies to improve the quality of mastery of competencies that need to be owned by the students. Make your computer use can contribute optimally to the quality of student learning outcomes, the use of computers as media and technologies must be integrated with learning activities of students.

1. The main obstacles that hinder the learning process by using the Internet is the lack of human resources (HR) managers operationalize and maintain the facilities or infrastructure network.
2. There is still a lack of ability of the dosenmenggunakan Internet as a learning resource.
3. Required considerable cost and expensive to procure the means and infrastructure with access to fast internet (bandwicth) were great. Mainly to do lectures teleconference.

6. **How to overcome it**

a. Provide and train professionals to serve as operator assisted learning program internet.
b. Provide special maintenance personnel to maintain the computer multimedia devices that serve as a means of learning.
c. Please provide specific special study room to perform live distance learning.
d. Provide special training and continuing to the faculty to use the internet as a multimedia learning.
e. Provide special training to the faculty to be able to design internet-assisted learning.

CONCLUSION

IT is very useful performance help the development of education. Utilization of IT should really be done for positive activities appropriate and well-being. Principles learned about along hanyat ranging from the content hinga keliang hendanya grave can motivate us to always learn anytime and anywhere. For the development of IT has enabled us to access all learning resources globally.

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