EVALUATION OF STYLE-TEACHING LECTURERS INFORMATICS ENGINEERING STUDY PROGRAM UNIPMA IN TREND EDUCATION BASED ON TECHNOLOGY

by Dimas Setiawan

Submission date: 28-Jan-2019 05:55PM (UTC-0800)
Submission ID: 1069852381
File name: 1._ICONS_2017_Evaluated_Style_Teaching.pdf (324.43K)
Word count: 2587
Character count: 15358

EVALUATION OF STYLE-TEACHING LECTURERS INFORMATICS ENGINEERING STUDY PROGRAM UNIPMA IN TREND EDUCATION BASED ON TECHNOLOGY

Dimas Setiawan [1], Noordin Asnawi [2], Hani Atun Mumtahana [3]
Lecturer of Information Systems Program
Universitas PGRI Madiun
Dimas.setiawan@unipma.ac.id[1]

Key Words:
Evaluation.
Technology-based Education.

ABSTRACT

Technology-based education is not something new among college academics, not least for lecturers in the informatics engineering program at Universitas PGRI Madiun (UNIPMA). Lecturer plays an important role in teaching and learning process. The successful of application educational technology can be measured by conducting an evaluation. One of them by measuring the level of understanding from lecturers about technology-based education trends, also lecturers teaching styles in the classroom. Hope with this evaluation, the advantages and disadvantages of lecturers teaching styles that have been implemented related to the trend of technology-based education can be known.

INTRODUCTION

University of PGRI Madiun (UNIPMA) is one of the private universities in the territory of Kopertis VII East Java which was inaugurated on 3 January 2017. UNIPMA is a merger of IKIP PGRI Madiun, STT & STIE Dharma Iswara Madiun. Faculty of engineering UNIPMA has a superior course that is informatics engineering. *"Universities as an institution that provides services in the field of education should always be able to improve the quality as well as to meet the needs and desires of consumers who use education services"* (Novitasari et al., 2015, p.43). One of them by applying technology-based education.

Discussion about technology-based education is not something new among college academicians, not least in Informatics Engineering University of PGRI Madiun (UNIPMA). There are two basic things that need to be discussed related to technology-based education such as technology and education.

Technology is essentially a tool used to help simplify human work in various fields. And education according to Law No.20 / 2003 is a conscious effort to prepare learners through guidance, teaching or training for their role in the future. And Learning as a sub system of education is a process of interaction of learners with educators and learning resources in a learning environment, from the combination of the above definition can be understood that technology-based education is an activity in which there are learners and educators who are in a learning environment Learning activities where technology is used as a tool to assist the process of learning activities.

Educational technology itself is defined as *"the study and ethical practice to facilitate learning and improve performance by creating, using, and managing processes and sources of technology appropriately"*. (Januszewski et al., 2008, p.1). Talking about educational technology certainly can not

be separated from the discussion of learning technology, because in education there are learning activities and this is reinforced by the statement that *"Learning Technology as a subset of Educational Technology"* (Mukminan,2012,p.6).

According to PER / 2 / M.PAN / 3/2009 Permenegpan instructional technology is a field that systematically integrates components of learning resources that include: people, teaching content, media or teaching materials, tools, techniques, and environments, used for Educate learners on all paths, levels and types of education. More specifically about learning technology. Learning technology "Focuses on the process of how software technology and hardware are used to communicate knowledge, skills, or attitudes to learners so that learners experience behavior changes as expected." (Mukminan, 2012, p.7)

Learning technologies related to software (software) and hardware (hardware) in the campus environment, especially informatics engineering courses, computers and similar devices are still seen as a technology that serves as a medium that is quite influential in a learning process. *"Some forms of computer use as a medium that can be used in learning include the use of Multimedia Presentation, Interactive Multimedia & Internet utilization."* (Sanjaya, 2011)

To know the trend of technology-based education one way that can be used following the development of research in the field of educational technology. The development of e-learning can serve as one example of the latest technology-based education trend, reinforced by the statement that *"E-learning is increasingly recognized as one way to solve educational problems, both in developed and developing countries. E-learning is a relatively new learning technology in Indonesia."* (Indrawan, 2014,p.71) More specifically *"E-learning adalah bentuk pembelajaran konvensional yang dituangkan dalam format digital melalui teknologi internet ."*(Silahudin, 2015, p.48)

But the trend of technology-based education is not only formed on the development of E-learning this is reinforced by the statement that *"The future research direction of educational technology is mobile learning, ubiquitous learning, and game-based learning"* (Kinshuk et al. ,2013 ,p.15)

The successful implementation of technology-based education, especially in this learning process needs to be measured, given the study program of informatics engineering has a tendency to learn the latest technological developments. One of them by evaluating the teaching style of lecturers associated with the characteristics of current technology education trend. *"The teaching style can be summed up as an inherent trait of a teacher or lecturer who is influenced by views of himself in terms of appearance and behavior in conveying a material to students or students."* (Diabnita, 2014, p.13) .If successful implementation of technology-based education is not measured will certainly have an impact on the backwardness that will affect the quality of informatics engineering courses in the future.

Lecturers play an important role in the teaching and learning process, by knowing the extent of lecturer understanding, related to technology-based education trends, and practice of teaching style that has been done in the classroom. It is expected that with the results of this evaluation, the advantages and disadvantages of teaching styles that have been implemented by each lecturer in the study program of informatics engineering UNIPMA can be known.

RESEARCH METHODS

Types of research

This research includes the type of descriptive research, using the approach by collecting data on teaching styles of lecturers associated with the opinion of each lecturer about the current trend of technology-based education. The research was conducted in the engineering faculty

of University of PGRI Madiun (UNIPMA) Informatics study program, an even semester of academic year 2016/2017.

Object of Research

The object of research is the lecturer of Informatics Engineering Study Program which is active in teaching with 10 lecturers sample.

Research procedure

The result of this research is expected to be able to produce description about teaching style of lecture which has been done for one-semester relation in trend of education based on technology, and here is the research procedure conducted to evaluate lecturer's teaching style :

1. Analyze the characteristics of current technology-based education trends, using the results of previous relevant research.
2. Conducting lecturer-style teaching data containing lecturers' opinions on technology-based education trends, and implementation that has been done in the classroom.
3. Describe the data collection of teaching style of lecturers and the trend of technology-based education today.
4. Make conclusions and suggestions.

Data collection technique

The data collection techniques conducted by conducting the dissemination of research instruments using questionnaires to 10 lecturers of informatics engineering program UNIPMA active status of teaching.

Data Analysis Technique

In this study using descriptive data analysis techniques, namely by describing the overall results of data collected.

FINDINGS AND DISCUSSION

To get data about characteristics of the latest technology-based education trends one of them to approach by outlining the concepts and workings, as well as the characteristics of the latest learning technology based on the results of previous research, in this case E-learning technology, M-learning, U-learning, And Game-based learning serve as a sample of the latest educational technological trends.

According to "William Horton E-learning uses information and computer technology to create a learning experience (Chaeruman, 2013). *E-Learning is a distance learning process using multimedia resources, which allows one or more persons to from their computer."* (Zouhair et al., 2016, p.1) From the concept is simply understood that E-learning has a description where in the learning process there is the use of computer technology as a medium of teaching, internet and multimedia as a source of learning.

M-learning or Mobile learning is part of E-learning, which distinguishes here is the use of media teaching, which in M-learning more us of media that is a mobility device." *Mobile learning is the learning process with mobile devices. The concept of mlearning incorporates the characteristic of student not needing to be fixed in one place or position andbeing able to use mobile technologies such as laptops, smartphones and netbooks "* (Mesquita.et al, 2016, p.4). This is supported by the statement that "*Mobile learning combines E-learning and mobile computing ... but quality M-learning can only be delivered with an awareness of the special limitations and benefits of mobile devices".* (Behera,2013, p.65)

U-learning or Ubiquitous Learning has principle where users can learn th right place, the right time, and the right device. E-learning is a combination of E-learning & M-learning tailored to the context of learning. "*The U-Learning or the ubiquitous learning is an innovative concept that incorporates the best characteristics of both e-learning and m-learning, as well as other advances in technology."* (Mesquita.dkk, 2016, p.6)

Game-based learning is an interactive multimedia-based learning model where users experience a fun learning experience. *"By definition, digital gaming can be simply expressed by being an interactive multimedia with dynamic elements that are under the control of the learner or*

teacher.... the teacher can use games to help the learner gain a variety of literacy experiences in an engaging manner in a number of subjects or disciplines across the curriculum" (Hilliard et al, 2017, p.46)

From the results of the description above concepts can be concluded, as for the characteristics of current educational technology trends generally use online learning **technology, Mobile, and multimedia**.

According to Once (2008), There are four Teaching Style Lecturers appear in teaching (Suwani,2014, p.249), that is :

1. Elementary lecturer, giving more understanding, comprehension and memorizing to the students. Characteristics are many uses of "what, when, where, delivering information, explaining tasks, homework,
2. Intermediate lecturer, emphasizing on critical thinking and doing. Characteristic in the learning process is to emphasize on how, why and application, explanation, dialogue, discussion, case, presentation.
3. Advanced lecturer, with the character of emphasizing problem-solving, why, analysis, synthesis, and idea. Many discuss cases, projects, surveys, field studies presentations, and seminars.
4. A creative-evaluative lecturer invites students to "think out of the box. Evaluate, innovation, case, discussion, research, project, scientific work, journal, and seminar.

From the result of questionnaire distribution, in the percentage of intermediate lecturer teaching style by 60%, 30% advanced lecturer teaching style, and 10% creative-evaluative lecturer teaching style. This indicates that the teaching style of lecturer of informatics engineering program of UNIPMA is dominated in the teaching style of critical thinking and doing where the characteristic in the learning process emphasizes on how, why and application, explanation, dialogue, discussion, case, presentation.

Related to the trend of technology-based education, the percentage of lecturers who have used mobile-based learning technology only reaches 10%, the application is still limited to the use of social media such as Whatsapp to create learning groups where lecturers can transfer data in the form of materials or conduct answering session related to the eyes Lectures are taught. While the percentage of lecturers who have been using online and multimedia based learning technology reached a figure of 60%, examples of the application of online-based learning technology such as the use of blogs, e-learning, Cloud computing in the transfer of teaching materials and quiz work online. Implementation of multimedia-based learning technology that has been applied is still limited to the use of simple applications such as powerpoint, flash animation, and video learning

From the above percentage of the utilization of online-based learning technology, mobile & multimedia in the study program of informatics engineering is considered not optimal, due to the lack of knowledge possessed by lecturers related to the latest education technology. The lack of facilities provided by the campus also makes the application of existing learning technology has not run maximally, therefore it is necessary to improve to follow up this one example by holding workshops on the latest technology trends toward all lecturers of Informatics Engineering Program, or conduct study activities Appeals to campus that already has the application of good learning technology.

CONCLUSION AND SUGGESTION

Conclusion

1. Based on the approach of development of previous educational technology research obtained characteristics of the current educational technology trends

that is the use of online learning technology, Mobile, and multimedia.

2. The percentage of teaching style of lecturers of study program of Informatics Engineering UNIPMA, 60% for intermediate lecturers teaching style, 30% for advanced teaching style lecturers, and 10% for teaching-style lecturers creative-evaluative.
3. The related trend of technology-based education that has been done by a lecturer of UNIPMA informatics engineering course, for the use of mobile-based learning technology reaches 10% percentage, the use of online and multimedia-based learning technology reaches 60% percentage.
4. There is a need for activities such as workshops to increase understanding of the latest learning technology so that the implementation of technology-based education in informatics engineering courses can be improved.

Suggestion

This research still needs to be followed up with a research on how important the needs of technology-based education technology in Madiun informatics engineering study program.

REFERENCES

Ann Hilliard, Harriett F.Kargbo. (2017). *Educationally Game-basedd Learning Encourages Learners to be actively Engaged in their own learning*. International Journal of education and Practice, 5(4), 45-60.

Anabela Mesquita, Fernando Moreira, & Paula Peres. (2016). *Customized x Learning Environment*. Proceedings of the ICERI 2016 Transforming Education, Transforming Lives. On 14-16 November, Seville, Spain.

Destu Diabnita. (2014). *Pengaruh Perilaku Belajar, Gaya Mengajar Dosen, Dan Kecerdasan Emosional Terhadap Pemahaman Mahasiswa Pada Mata Kuliah Pengantar Akutansi*. Uiversitas Bengkulu.

Eny Suwarni. (2012). *Hubungan Gaya Mengajar Dosen Dalam Proses Pembelajaran Dengan Motivasi Belajar Mahasiswa Fakultas Psikologi Dan Pendidikan Universitas Al-Azhar Indonesia*. Jurnal Al-Azhar, 1(4), 246-255.

Irjus Indrawan. (2014). *Meningkatkan Mutu Pendidikan Melalui Metode E-learning*.Jurnal Al-Akfar,3(2), 69-83.

Januszewski, A., & Molenda, M. (2008). *Educational technology: A definition with commentary*. New York, NY: Lawrence Erlbaum Associates.

Kinshuk, Huang, H.-W., Sampson, D., & Chen, N.-S. (2013). *Trends in Educational Technology through the Lens of the Highly Cited Articles Published in the Journal of Educational Technology and Society*. Journal Educational Technology & Society, *16* (2), 3–20.

Mukminan. (2012). *Teknologi Pendidikan untuk Peningkatan Kualitas Pembelajaran*. Proceedings, Semnas Teknologi pendidikan, diselenggarakan oleh Prodi S2 Teknologi Pendidikan fakultas keguruan dan ilmu pendidikan Pada 9 November 2012. Universitas Tanjungpura.

Ni Luh gde Novitasari, Luh Komang Merawati. (2015). *Penilaian Dosen Dan Fakultas Dalam Presepsi Mahasiswa Fakutas Ekonomi UNMAS Denpasar*. Juima, 5(1), 43-51.

Rimale Zouhair, Ben Lahmar el Habib, & Tragha Abderrahim. (2016). *A brief Survey and Comparison of m-learning and e-learning*. International journal of Computer networks and Communications security, 4(4), 90-95.

Santosh Kumar Behera. (2013), *E- and M-learning : A comparative Study*. International journal on New

Trends in Education and Their Implications, 4(8), 65-78.

Uwes A.Chaeruman. (2013). *Mengenal lebih dekat kebijakan PJJ & e-Learning dan penerapannya di Perguruan tinggi*. Ristekdikti. Diakses pada tanggal 5 juli 2017 dari

Wina Sanjaya. 2011. *Perencanaan dan desain sistem pembelajaran*. Jakarta : Kencana Prenada Media Group

Silahuddin. (2015). *Penerapan E-learning dalam inovasi pendidikan*. Jurnal ilmiah Circuit, 1(1), 48-59.

EVALUATION OF STYLE-TEACHING LECTURERS INFORMATICS ENGINEERING STUDY PROGRAM UNIPMA IN TREND EDUCATION BASED ON TECHNOLOGY

ORIGINALITY REPORT

9%	8%	6%	1%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	ojs.unpkediri.ac.id Internet Source	3%
2	www.ijonte.org Internet Source	1%
3	unsri.portalgaruda.org Internet Source	1%
4	Submitted to Padjadjaran University Student Paper	1%
5	link.springer.com Internet Source	1%
6	mms.ecs.soton.ac.uk Internet Source	<1%
7	Kritika Verma, Sonal Dubey, M. A. Rizvi. "chapter 15 Support for Cloud-Based Mobile Learning", IGI Global, 2016 Publication	<1%
	scholar.sun.ac.za	

8	Internet Source	<1%
9	www.id-ec.net Internet Source	<1%
10	propertibazar.com Internet Source	<1%
11	"Recent Advances in Information Systems and Technologies", Springer Nature, 2017 Publication	<1%
12	www.je-lks.org Internet Source	<1%
13	theses.ucalgary.ca Internet Source	<1%

Exclude quotes	On	Exclude matches	Off
Exclude bibliography	On		