



ISBN : 978-979-028-799-0

Trends and Challenges toward Asian Economic Community

PROCEEDING

December 5th, 2015

Auditorium

Prof. Slamet Djajono

Gedung D1 U.S FMIPA

Kampus Unesa Ketintang

Jl. Ketintang, Surabaya

Jawa Timur 60231

<http://icerd.unesa.ac.id>

DEVELOPING INSTRUCTIONAL PROGRAM OF PUBLIC ECONOMIC SUBJECT USING EXELSA MOODLE

Kurnia Martikasari
Economic Education, Sanata Dharma University
Yogyakarta, Indonesia
nia.martika@gmail.com

Abstract

Advances in science and technology in education is a challenge in improving quality, relevance and effectiveness of education (Azrai and Refriman, 2013). Development of information and communication technologies allow for using electronic media. Forms of development of information and communication technology is e-learning. E-learning will support the learning happens in the classroom.

One of information and technology facilities in Sanata Dharma University is exelsa moodle. By using exelsa moodle, lecturer can interact with students without face to face. Lecturer give materials subject, tasks, and online assessment.

Based on this problems, the authors interest to develop the instructional program of public economic subject using exelsa moodle. The development of digital learning resources in the form of online materials, online tasks, online quizzes, online instructional videos and online discussion forum that can be accessed by students. Exelsa moodle can help students learn independently.

Keywords : e-learning, exelsa moodle, instructional program, public economic

1. Introduction

Improving the quality of education is a central issue in developing countries, especially Indonesia. Advances in science and technology in education is a challenge in improving the quality, relevance and effectiveness of education as a national demands in line with the development and progress of society [1]. The development of information and communication technologies allow for using electronic media in spreading information about learning. On of forms in development of information technology is e-learning. E-learning is an innovation that has contributed greatly to change the lecture , where the learning process is no longer just listen to the description of the material from lecturer but students also perform other activities such as observing, performing, demonstrating and others [2]. In a lecture, e-learning support the learning happens in the classroom.

One of information technology in Sanata Dharma University is exelsa moodle. By using exelsa moodle, lecturer can interact with students without face to face . Exelsa moodle allows lecturer give online material, online forum, online assignments , and online assessments. Exelsa moodle can help students to learn independently.

Public economic subject is one of important subject in Economic Study Program of Sanata Dharma University, Yogyakarta, Indonesia. This subject have a lot of materials characteristics. Based on the experience of lecturing public economic in previous periode, this subject is not easily for students. There are so many materials in this subject but only twelve meeting. It is requiring them to able to learn independently outside meeting. In order to be effective self-learning, lecturer need to prepare the learning resources that can lead students to learn independently.

Based on these problems, the author interest to develop instructional program of public economic subject using exelsa moodle. Exelsa moodle consider as one effective instructional program to help students to learn independently. Developing instructional program of economic public are online materials, online videos, online assignments, onlie quizzes, and online discussion

forum. Students can access this programs using exelsa moodle. Thus, developing instructional program of public economic subject using exelsa moodle can help students learn independently.

2. Literature Review

There are many studies of implementation information and communication technology (ICT) in learning. In 2011, Munawaroh [3] research how to use of ICT to foster creativity and independent learning. The result is using ICT in learning process and independent learning menumbuhkn kreatifitas learners. Use of can provide a greater opportunity for participants to learn to collaborate among the participants learn, because learning pattern that is formed is no longer patterned on the individual but the pattern of cooperation that it contains personal responsibility.

A similar study have done by Nurjayanti [4]. It is about developing online learning method of programming languages subject. From questionnaires, the result show that online learning methods can build a mindset of a comprehensive and interactive communication between students and lecturer and students with peer.

Dewi [5] also research how effect of Web learning for math anxiety, the sense of mastery, dan self-esteem. The result show that Web learning influence *Math Anxiety, The Sense of Mastery and Sense-Esteem*.

In 2015, Martikasari [2] doing the research about an effectiveness of using digital learning resources in Statistics I subject in terms of the level of participation and outcome learning students. Result show that participation indicators are 100% and 82,35% for outcomes learning indicators. Thus, using digital learning resources in Statistics I subject is very effective in terms of the level of participation and outcome learning students.

3. Instructional Program of Public Economic Subject

Education has change a paradigm. The process of learning in classroom is no longer using the principle of the transfer of knowledge from lecturer to students, but using the principles of constructivism. In constructivism principle, lecturer construct their own knowledge or basic concepts based on knowledge and experience [15]. In this principle, students can be active in learning progress, while lecturer as only a facilitator. Thus, an independent interactive learning is the key to the success of the learning process.

Interactive learning is a learning process in which a student can directly interact actively in the learning process. In this interactive learning, lecturer is not the one of learning resource. A lecturer must be able to learn independently, not just relying on the learning process in the classroom but also to develop otehr knowledge.

The development of ICT in learning can be optimizing. Lecturer can develop digital learning resources that can help students learn independently. Sanata Dharma University has a facility, that is exelsa moodle. By using exelsa moodle, lecturer can uploading online materials, online videos, online assignments, onlie quizzes, and online discussion forums as a source of independent learning for students.

3.1 Online materials

Uploading online materials by exelsa moodle is doing by lecturer every week a few days before meeting in the classroom. By uploading this material, students can expected to learn before meeting, helping students to understanding the materials and situation in meeting can be more conducive.

3.2 Online videos

Besides the online material, the lecturer also uploading online instructional videos. Instructional video is one of the digital learning resources that can help students understand the material. Videos can be uploaded in exelsa moodle. Instructional videos were conceived and created by lecturer with the group of students. Before making instructional videos, a lecturer with the group of students designed the design, concepts and instructional video content. Content of videos can materials learning, materials application or case study.

3.3 Online Assignments and online quizzes

Lecturer is also developing online quizzes and online assignments. Online quizzes and online assignments useful to help students for understanding materials subject of public economic. Online quizzes and assignments are given after the meeting. Deadline quizzes and assignment is 6 days. Students who are not present at the meeting, still can take an online quiz and assignment. Online quizzes and assignments is helping students learn independently.

3.4 Online discussion forum

In the development of digital learning resources as a source of independent learning for students, lecturers will also open an online discussion forums via Moodle exelsa facilities. Online discussion in this forum, the lecturer will raise a case which relevant materials, then each student will give their opinions regarding the case. Students are required to provide their opinion and should not be only "similar" to the opinion of their friends.

Through of development of online materials, online videos, online assignments, online quizzes, and an online discussion forum is expected to be independent resource for students. Students can have learning independently to achieve their goals.

Result

Developing instructional program of public economic subject using exelsa moodle are products of online materials, online videos, online assignments, onlie quizzes, and online discussion forum.

1. Online materials

Developing of online materials produce materials of learning which create by using Microsoft Power Point program. There are nine products power point of learning material that has been made based on topics in the Public Economics subject, which are the chapter of role of government in the economy, country's and local budgets, revenues, government spending, taxation, analysis of costs and benefits, pricing of public goods, the country's debt and redistribution of income. The results of online materials products is as follows.



Fig 1. Online Material Products (Source: Exelsa Moodle, 2015)

2. Online videos

Online video is successfully developed. That are eight videos for chapter of country's and local budgets, revenues, government spending, taxation, analysis of costs and benefits, pricing of public goods, the country's debt, and redistribution of income.

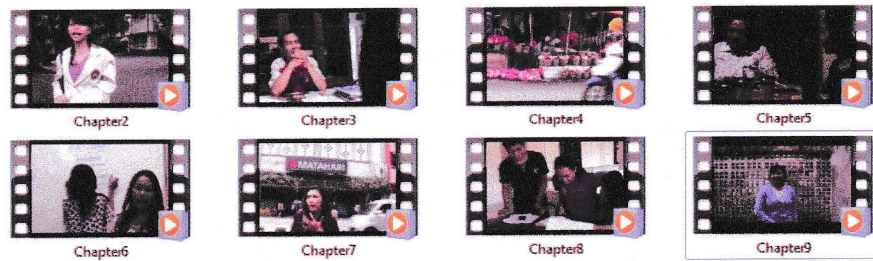


Fig 2. Online Video Products (Source: Exelsa Moodle, 2015)

3. Online Assignments

Developing of online assignments help students improve understanding of the material and participation in lectures. It also can help students learn independently. Lecturers usually provide online tasks that must be done by the students each completed a meeting with a deadline of six days. The collection of tasks performed by students online as well, and students uploading their answer using exelsa moodle. Students can not uploading their answer after deadline.

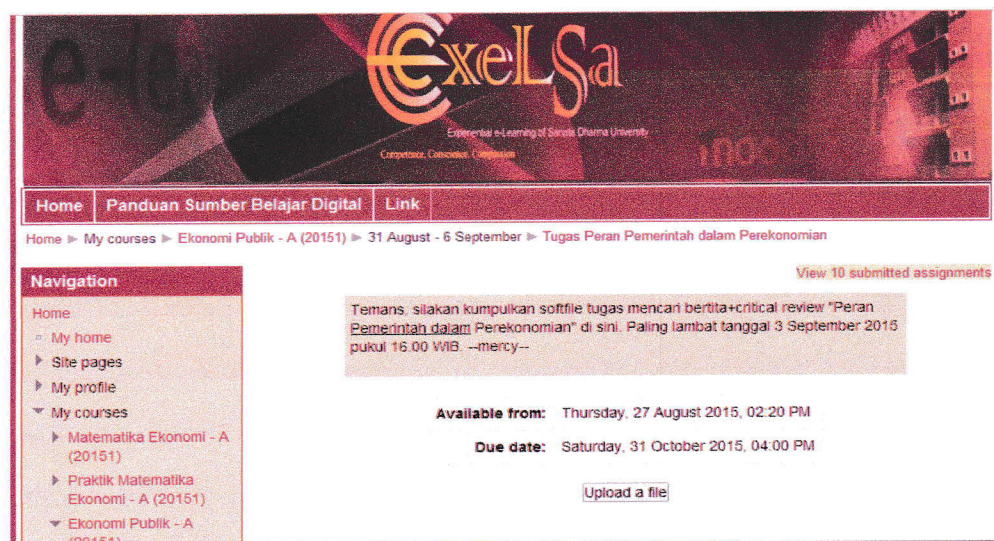


Fig 3. Online Assignment Products (Source: Exelsa Moodle, 2015)

4. Online quizzes

Lecturers also developed online quizes. Online quizzes can helping students improve the understanding of the materials that has been discussed at the meeting in question. Online quizzes are given after the meeting. Deadline is 6 days. Students are given the opportunity twice on each quiz. Students who are not present at the meeting in question, still can take online quiz. Online quizzes is helping students learn independently outside the meeting in the classroom.

Online quizzes prepared using hot potatoes program. Here is one of the products of online quizzes.

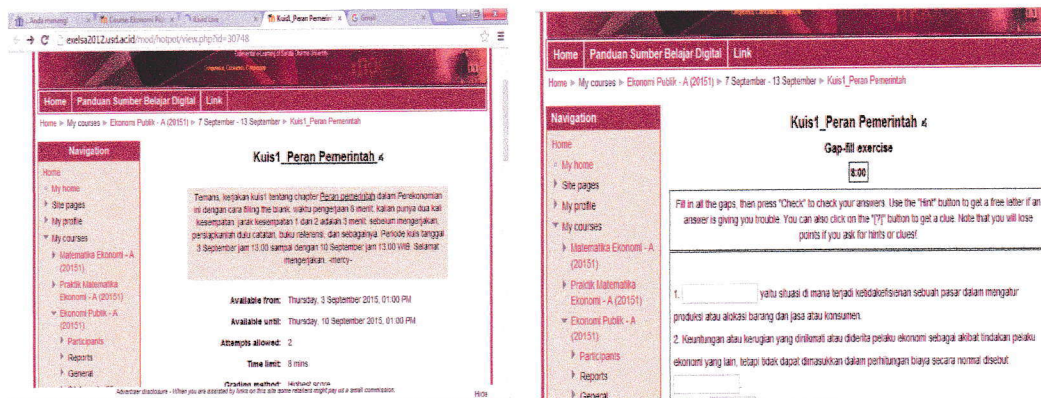


Fig 4. Online Quiz Products (Source: Exelsa Moodle, 2015)

5. Online discussion forum

Dalam pengembangan sumber belajar digital sebagai sumber belajar mandiri bagi mahasiswa ini, dosen juga akan membuka online discussion forum melalui fasilitas *exelsa moodle*. Dalam *online discussion forum* ini, dosen akan mengangkat sebuah kasus materi bersangkutan, lalu setiap mahasiswa akan memberikan pendapatnya terkait kasus tersebut. Mahasiswa wajib memberikan pendapat mereka dan tidak boleh hanya “sama” dengan pendapat temannya. Berikut adalah salah satu tampilan dari online discussion forum.

In the developing of instructional program of digital learning resources as a source of independent learning for students, lecturers will also open online discussion forums using *exelsa moodle*. In this forum, the lecturer will raise a relevant case, then each student will give their opinions regarding the case. Students are required to provide their opinion and should not be only “similar” to the opinion of their friend. Here is one of discussion forums view.

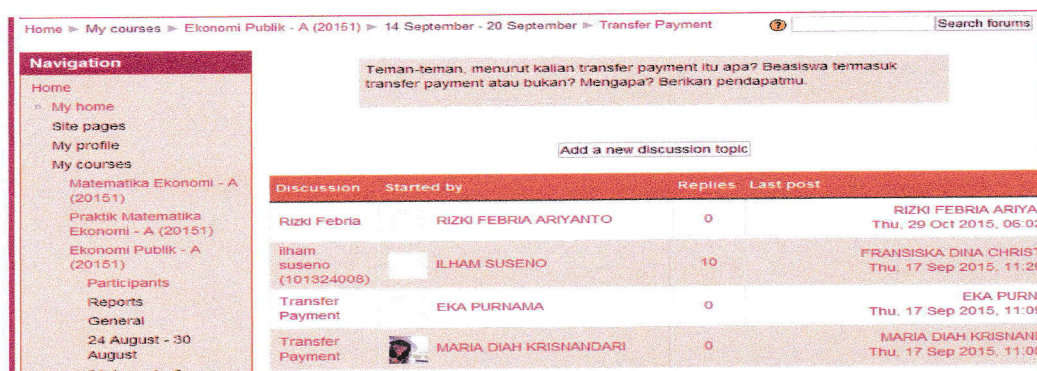


Fig 5. Online Discussion Forum Products (Source: Exelsa Moodle, 2015)

6. Result of Students Activities

Here are the results of observations of students activities in utilizing digital learning resources through *exelsa moodle*.

Table 1. Students Activities

| No | Activities | Percentage |
|----|--|------------|
| 1. | Downloading materials of lesson | 100% |
| 2. | Downloading and watching videos | 80% |
| 3. | Completing assignments | 90% |
| 4. | Completing quizzes | 100% |
| 5. | Participating in online discussing forum | 100% |

Source: Exelsa Moodle, 2015

Table 1 show that the activity of students in downloading materials learning, completing quizzes and participating in online discussion forum have a percentage of 100%. This means that all students participate in these activities. For downloading activity and watching videos have a percentage of 80% and the activity of completing assignments has a percentage of 80%. Both of these activities means that almost all the students participating in this activity.

In general, all activities have a percentage of 80% and above. This indicates that developing instructional programs of public economic subject using exelsa moodle make student learning independently.

Conclusion

Developing instructional program of public economic subject using exelsa moodle are online materials, online videos, online assignments, online quizzes, and online discussion forum.

Based on observations of students activities, the results indicate that developing instructional programs of public economic subject using exelsa moodle make student learning independently.

References

1. Azrai, Eka Putri and Refirman, Dj: Efektivitas Penerapan E-book sebagai Sumber Belajar Mandiri dalam Pembelajaran Biologi. Proceeding Semirata FMIPA Universitas Lampung. (2013)
2. Martikasari, Kurnia. Efektivitas Penggunaan Sumber Belajar Digital Ditinjau dari Tingkat Partisipasi dan Hasil Belajar Mahasiswa (Studi Kasus pada Matakuliah Statistika I). Laporan Penelitian: Universitas Sanata Dharma Yogyakarta. (2015)
3. Munawaroh, Isniatun: Pemanfaatan Teknologi Informasi dan Komunikasi untuk Menumbuhkan Kreativits dan Kemandirian Belajar. (2011). <http://staff.uny.ac.id/sites/default/files>, accessed on September 15, 2015
4. Nurjayanti, Brian: Pengembangan Metode Pembelajaran Online Berbasis E-Learning (Studi Kasus Matakuliah Bahasa Pemrograman). Jurnal Sains Terapan. Edisi II Vol-2(1). (2012) 103-113
5. Dewi, Nuriana Rachman: Pengaruh Pembelajaran Berbasis Web terhadap Math Anxiety, The Sense of Mastery, dan Self-Esteem. Proceeding Seminar Nasional Pendidikan Matematika Universitas Negeri Yogyakarta. (2012)
6. Suparno, Paul: Filsafat Konstruktivisme dalam Pendidikan. Yogyakarta: Kanisius. (1997)
7. Candrawati, Sri Rahayu: Pemanfaatan E-Learning dalam Pembelajaran. Jurnal Cakrawala Pendidikan. Vol.8, No.2. (2010) 101-203
8. Darmayanti, at all: E-learning pada pendidikan Jarak Jauh: Konsep yang Mengubah Metode Pembelajaran di Perguruan Tinggi di Indonesia. Jurnal Pendidikan Terbuka dan Jarak Jauh. Volume 8, Nomor 2. (2007) 99-113.
9. Elain B. Johnson: Contextual Teaching and Learning. California: Corwin Press. (2012)
10. Karwono: Pemanfaatan sumber belajar dalam Upaya Peningkatan Kualitas dan Hasil Pembelajaran . <http://www.scribd.com>. (2007)
11. Mark K. Smith: Self Directed. (2002). <http://www.infed.org/self-direction> accessed on September 10, 2015
12. Munir: Kurikulum Berbasis Teknologi Informasi dan Komunikasi. Bandung: Alfabeta. (2008)
13. Sanjaya, Wina: Perencanaan dan Desain Sistem Pembelajaran. Jakarta: Kencana. (2008)
14. Sanjaya, Wina: Strategi Pembelajaran Berorientasi Standar Proses Pendidikan. Jakarta: Kencana. (2010)
15. Sardiman: Interaksi dan Motivasi Belajar Mengajar. Jakarta: PT Raja Grafindo. (2007)