Online Learning is an Effective Medium To Knowledge Sharing

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Abstract

The Internet has removed the geographical boundaries. The Internet has changed the way people learn. Learning does not have to be in the classroom. Learning can be done anywhere by using internet help. Effective learning means learning by prioritizing knowledge sharing. In order for knowledge sharing to take place effectively online learning needs to be designed so that students are motivated to continue to participate actively, easily download, process and transfer learning resources. There are 5 ways to facilitate knowledge sharing in online learning i.e.: build a centralized online resource library, create knowledge resources in your audience, create online learning communities, host webinars that rely on peer-based interaction, and stress the benefits of knowledge sharing (Pappas, 2016). This paper aims to explore the ability of learning process through e learning in improving knowledge sharing ability at Open University. The findings of this research are online tutorial designed to: (1) there is knowledge sharing process between student and student, student with tutor and tutor at low level; (2) students are able to independently and actively seek materials through open educational resources; (3) the dashboard of e learning arranged the menus required by students and user friendly; (4) faculty creating groups of discussion in the form of tutorial classroom tutors; (5) online tutorial provide initiation, task, discussion material, and material downloaded from open educational resources.

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1. Introduction

Classical learning conducted face-to-face education has found its limits. The rise of internet technology has revolutionized the educational process into individualized education. The relationship between teachers and students is no longer just as a bipolar relationship but has become a relationship between students, and between students and teachers but also between students, teachers, and outside sources (open educational resources/OER).

The Internet has removed the physical boundaries, class becomes borderless. Through the internet students can learn with anyone and learn anything. Students can download material in the form of text, images, graphics, or video, while teachers can use external sources (OER) as the main learning materials. Teachers can combine printed materials and digital teaching materials both online and offline. With such a pattern of relationships, the pattern of communication networks becomes random. Anyone can be a source of information and there is no communication center as well as a classroom learning process. Networks between students can extend to other classes, other schools, and even from other countries. But, student sometimes feel lonely and less bonding to others. The presence of video conferencing has been able to fill the shortage of online learning that is social relations. Video conference can increase the bonding among students in learning. Knowledge sharing becomes easier and faster.

The Internet has been able to revolutionize the way people learn. The Internet has been able to eliminate the physical boundaries, shorten the time, and connect the people involved in the learning process. The easier the people to form the network then the knowledge-sharing process will also be easier to do. Studied at Universitas Terbuka found that flexible organizational structures, the use of organizational technology, cultures that reflect on freedom to experiment, learning to mistakes and tolerance to fault encouraging employees to develop the way of working effectively (Purwanto and Marisa: 2014, Purwanto: 2015, Purwanto, 2016). The essence of learning organization is the effective sharing of knowledge. Sharing knowledge can take place face to face, through the media, or blended between the two. The media will help speed up the data mining, processing, transmit, presentation, and storage of data and information. The effectiveness of knowledge sharing is determined by how the knowledge process is managed. One way to manage the knowledge sharing process is through e-learning.

From the experience of the Universitas Terbuka in organizing online learning, it is need a long way to achieve the stage of knowledge sharing is going well. Planning of instructional design, material design, technical design and training for lecturers and students are required. However, the knowledge sharing process has not always been effective. Often the sharing process is still one direction or only lasts for a short time. This paper aims to explore the ability of learning process through online learning to improve knowledge sharing ability in online learning at Universitas Terbuka.

2. Literature Review

Argyris (1983) and Senge (1990) published his work on learning organization (LO) which became the main theme in every organizational change. The organization will be considered effective if the organization is able to create knowledge to manage growth. There are many term to mention of an organizations that learn such as learning organization, organizational learning, knowledge creating company, the learning company, knowledge management, and the knowing organization.

Although the terms seem different but it have some similarities that are "knowledge acquisition, and collective learning in organizations, how to learn together, shared among organization members. (Garvin, 2000; Clegg, Kornberger, and Rhodes 2005; and Senge, 1990). The whole meaning implicitly explains that the process of knowledge creation in the LO is done through the process of knowledge sharing or shared vision (Senge,1990). According to Choo (1998) in order to develop learning, the knowledge and information must be shared to all members of the organization.

George (1997) explains that the knowledge sharing process will not occur if the learning climate is not supportive. Furthermore, George, Peters and Waterman (2004) emphasize that sharing will not be created if people do not want to learn, challenges, untrusted, and afraid (Choo; 1998, Peter and Waterman; 2004). The effectiveness of knowledge sharing is influenced by trust, knowledge, communication, organizational structure, and information technology (Chong and Besharati, 2014). Khoza and Pretorius (2017) find that personal factors such as job security, motivation, physiological factors, communication, resistance to change and organizational factors influencing knowledge sharing. Pai and Chang (2013) found that knowledge sharing positively affects innovation confirmed a positive effect of two personality traits, openness and conscientiousness.

The most important infrastructure to facilitate process of sharing knowledge is the information system. Jones and George (2008) define information systems as the set of methods or techniques, to perform knowledge sharing. The information system is a combination of system, procedure, equipment and machine used to gather, store, analyze, and disseminate information for translating it into knowledge (Schermerhorn, Jr.et.al; 2011). Information systems will accelerate the process of acquisition, processing, and sharing information (Cummings and Worley, 2005). Mejia, et.al; citing Alter's opinion that Information systems has six functions i.e: capturing, transmitting, storing, retrieving, manipulating, and displaying information (Mejia et al. 2005).

The core of learning organization is the existence of knowledge sharing among members of the organization. Knowledge sharing will be effective if people have interests and technical skills. Support of information systems will make knowledge sharing faster and more accurate. The information system is an important component in distance education. Information systems become part of knowledge management. In the context of distance education, knowledge management is better known as

learning management system (LMS). Distance education continues to evolve following the development of technology.

The rise of information technology and computer has brought distance education to online learning. Online learning is the use of internet and personal computer in the learning process. With online learning then students, teachers, college, and learning resources become connected. Students become easier in learning. Online learning penetrates time and geographic boundaries. Students have the freedom to access course materials and learning resources outside the campus environment. According to Bates (2016), online learning is any form of learning conducted partly or wholly over the Internet. The initial period of online learning is simply using unplanned online material, the next phase is hybrid learning where the class is focused on the use of online media and face-to-face in a balanced way. Teacher determines which one online is face to face and the rest is online. The latest phase of online learning is fully online that mean students do not need to come to campus for learning. All lecture related activities can be completed online. Bates further states that online learning is a mode of delivery rather than a particular method of teaching.

The method of implementing online at the eLearningNC.gov site is related to online, delivery and interaction over the Internet, using classroom management systems (CMS). Students can log in from anywhere in the world to access their classes materials and interact with one another (eLearningNC, 2018). The major goals of e-learning such as improving student choice over when, where, and how to engage in the learning process; and improving efficiency and effectiveness by using e-learning media more effective for students. (Online Consortium; 2015)

Knowledge sharing in e-learning must be designed and managed effectively. Pappas (2016) put forward five ways to facilitate knowledge sharing in e-learning:
1. Build a centralized online resource library
2. Identify knowledge sources in your audience
3. Create online learning communities
4. Webinars host that rely on peer-based interaction
5. Stress the benefits of knowledge sharing.

Knowledge sharing requires learners involvement. Thus the main requirement of knowledge sharing is participation. The form of participation is the willingness to actively engage in online learning process and willingness to share experiences with other students.

3. Methodology

This research is qualitative research. Observation unit in this research is online tutorial with course of Innovation and Organizational Change Semester 2018.1. Data and information obtained by observing the implementation of online tutorials. The observed components are tutorial dashboards, electronic notes of tutorial activities especially on discussion activities, student behavior in discussion and then analyzed and categorized by using the category put forward by Pappas (2016)

4. Results and Discussion

Universitas Terbuka is very intensive in developing online learning. By the year of 2017.2 the number of student tutorial for basic education and postgraduate education reached 83,901 students. Basic education students generally do not follow online tutorials but face to face. The number of courses offered online tutorials as much as 1,083 courses. The number of online tutorial participants increases from year to year. The number of internal tutors are 624 lecturers and outside tutors are 1700 tutors. The number of online tutor participants is as much as between 50-70 people per class. Depending on the level of student participation.

UT online tutorial using Moodle as its platform. On face to face university students have 16 session per semester but at online tutorial at UT students has 8 session for online and 8 times the remaining are independent learning. UT online tutorial is designed for students to learn independently in groups through knowledge sharing process. Here is the online tutorial dashboard of magister students of fully online for Innovation courses and organizational change.
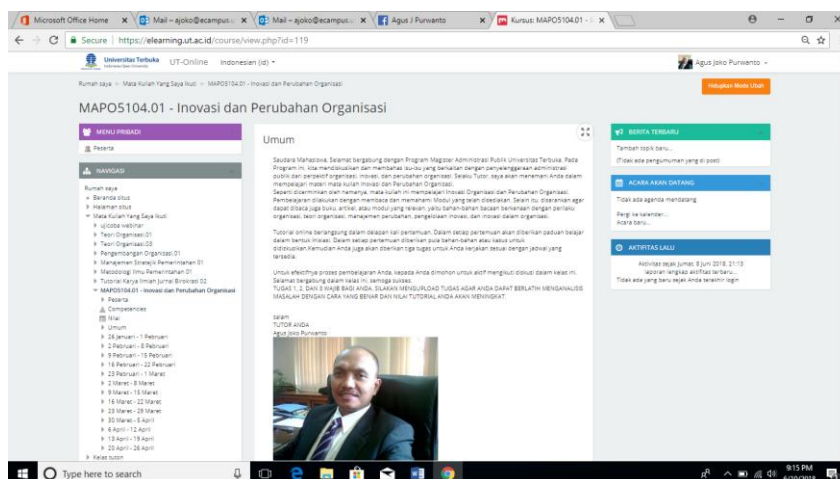

Figure 1 Dashboard Tutorial Online magister students are fully online courses of Innovation and Organizational Change.

The dashboard is viewed from the tutor's side. The dashboard presented subjects of course material, schedule of eight tutorials, three assignments, discussion materials, menus of tutorial, menu of material revisions, introductory courses by tutors, and menus of class administration.

At each session tutor provides the initiation material, then assigns the assignment, provides the material for the discussion. Here is an example of a second session on Leadership. At the 2nd Meeting of February 9-15_2017.1 the tutor provided the Initiation material, asking the students to hold two discussions with the material Being a Good Manager and Digital Leadership. Tutors download materials from the internet sources and students are given direction to discuss with their fellow. Tutor read and if

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necessary enter into discussion (knowledge sharing). At this second meeting the tutor also gave assignment I.
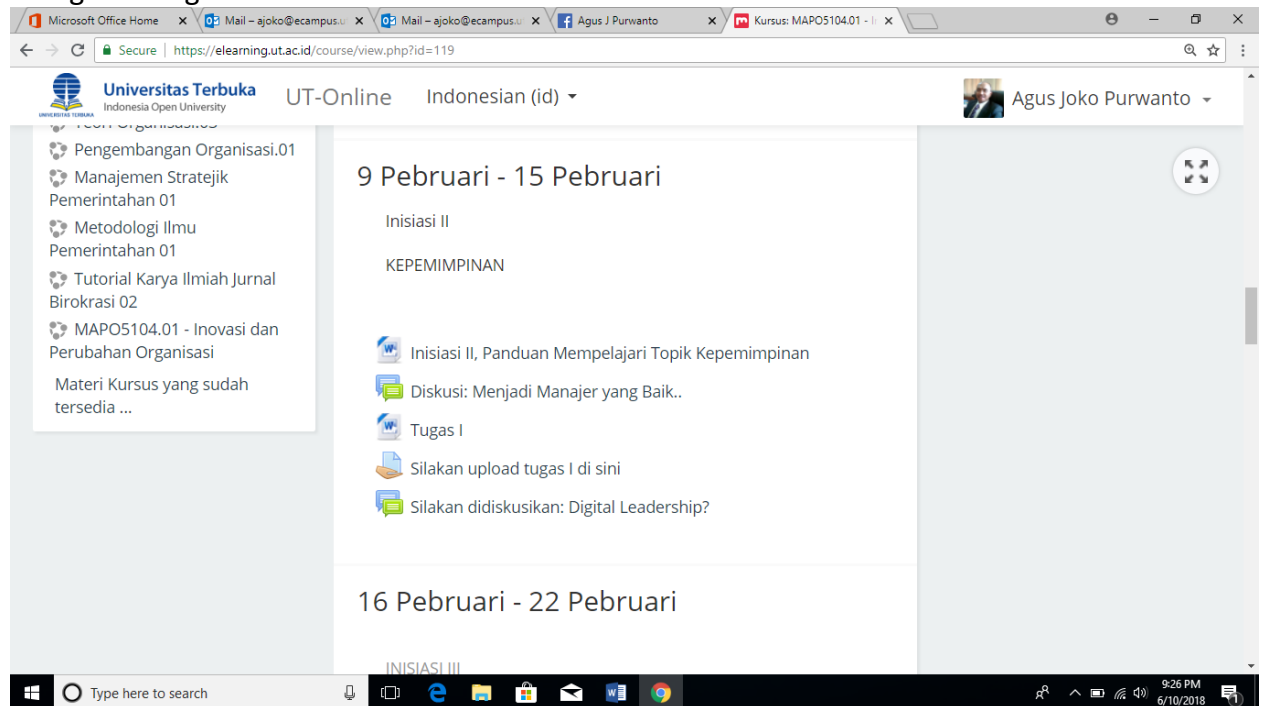

Figure 2 Sample dashboard on Initiation II

In the second session tutors provide an introductory meetings II, directing knowledge sharing, and assigning tasks.
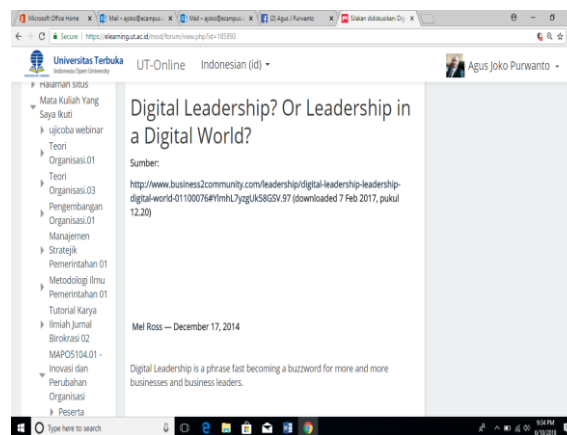

Figure 3 Topic of discussion

Figure 3 showed a discussion material that downloaded from the internet. Students should read, and made discussion to their group while tutor read the student opinion and gave a comment if needed.
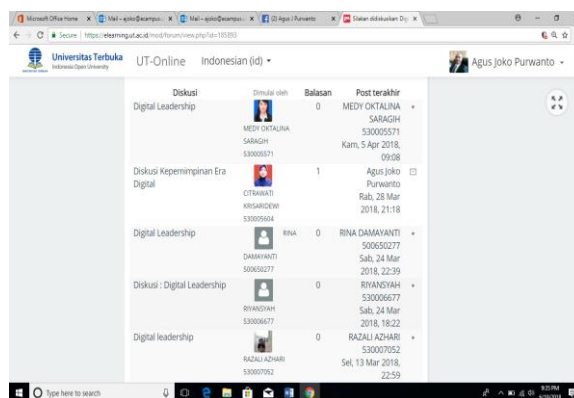
Figure 4 Dashboard Knowledge Sharing Initiation II.

As noted on the dashboard Discussion on Digital Leadership, it appears that knowledge sharing is rarely between them. They only respond to the tutor, and there is no sharing between them. So only one way communication between students and tutor. There are no sharing record between students.

Here are the findings described with categorization to facilitate knowledge sharing in e-Learning as proposed by Pappas (2016), namely:

a. Build a centralized online resource library

Students are grouped into classes of between 50 and 70 people per class. On the dashboard every session has been listed of tutorials menu that students just choose to be studied. Students are also easy to access the source of learning from the outside (open educational resources). Discussion facilities are provided. However, the facilities provided have not been utilized optimally for knowledge sharing.

b. Identify knowledge sources in your audience

Tutors provide guidance on what to learn in each tutorial session. What material should be studied and what material should be discussed. The large number of participants, causing the tutor do not have enough time to mine data what the students need specifically. The role of tutor to become an effective mentor is also less workable because of the large workload.

c. Create Online Learning Communities

Online communities are classroom-based. The main medium used is email and whattapps. However, the knowledge sharing process is also less effective. Alleged researchers are students lacking prior knowledge about the topic and secondly, the material on the internet generally in English. Some students have constraints in language.

d. Webinars Host That Rely On Peer-Based Interaction

Currently in UT, the webinar is in testing. Webinar done synchronously means students and tutors face to face with teleconference facility. There is no evaluation of the implementation of the webinar in UT.

e. Stress The Benefits Of Knowledge Sharing

Since the semester of 2018.1, UT has been training students to follow online tutorials effectively. Students are introduced about the advantages and benefits of online tutorials. The online tutorial at UT has a weight of 20% of the student's final grade. Students are trained to operate the available menus and practice them. The previous year students have not been systematically and programmatically given training on this online learning. The results of the new training can be seen in the semester 2019.1 after the students follow the tutorial and exam. The effectiveness of the implementation of online learning can be monitored through the achievement of their learning outcomes.

5. Conclusions and Recommendations

Research findings categorized into five categories revealed that the Universitas Terbuka has developed an online tutorial design that: (1) there is a process of knowledge sharing between students with students, students with tutors and tutors with tutors; (2) students are able to independently and actively seek materials through open educational resources; (3) arrange the menus required by students and user friendly; (4) creating groups of discussion groups in the form of tutorial classroom tutors; (5) provide initiation, task, discussion material, and material downloaded from open educational resources.

Although UT has designed an online tutorial well and trained tutors and students about online tutorials but knowledge sharing process has not been effective yet, based on field findings, the lack of effective knowledge sharing is caused by:
1. The number of classes that are too large causes the tutor less time to manage the Class effectively.
2. Students lack enough skill and prior knowledge to follow the discussion.
3. Low to medium level of student participation on discussion in online classes.
4. UT students are generally already working, so they do not have enough time to actively participate in the entire process of online tutorials.

Based on the findings, recommendations that can be given are in designing online learning needs to consider: prior knowledge of students, infrastructure, ideal comparison of tutors and students per class, motivational and psychological factors of students, and language.

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