Students' Engagement in Utilizing Technology For Learning Support

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ABSTRACT

The research is aiming at exploring the utilization of technology at both Faculty of Teacher Training and Education, Sriwijaya University and Faculty of Arts and Education within Deakin Universit.The data was collected through the interview with the lecturers and also the field observation. On this faculty, the BI learning program is organized in two modes: on campus and off campus. Based on the observation and interview, it could be identified that 1) Learning activity: Mode off campus 2) Classroom Management is conducted individually or in group and a virtual meeting with the instructor and or via video conference 3) Devices utilized by the students were hardware and software with certain specification, 4) Application/software utilized was adopted package software, 5) Learning material was developed by the instructors, 6) Supported crew was the IT staff, and 7) Instructur in the learning activity was still required with different role as the learning material developer.

Keywords: engagement; technology; learning support

INTRODUCTION

The learning of the 21st century requires students to have the skills, knowledge, and skills in technology, media and information, learning skills, innovation and life skills (Sasmoko, 2017). To make it happen, teachers must first have all these competencies in order to assist students in developing all competencies in accordance with what is expected in the demands of the 21st century. In line with the Indonesian Curriculum 2013 which gives the emphasis on students-learning centred, teachers can integrate technology in the classroom to

support students' learning and to get the students actively involve in the teaching and learning process.

The Indonesian Ministry of National Education emphasizes the importance of integrating ICT in the teaching and learning process (Indonesian Ministry of National Education, 2007a; 2007b; 2009). This is because technology has evolved so rapidly and become part of people's lives, as well as in the lives of students. In the Education Transformation and 21st Century Learning Seminar organized by the Ministry of Education and Culture in collaboration with Intel Corporation and Analytical on Capacity Development Partnership (ACDP), in Jakarta on 20-21 January 2016, the Indonesian Ministry of Education stated that knowledge or information and technology becomes one of the ways to reach all parties in providing information, including in the world of education and student learning process. This shows the importanct role of technology as part of students' learning process nowadays.

The Ministry of National Education also states that teachers need to integrate Information and Communication Technology (ICT) in the process of learning and teaching technology mastery. According to Ciptaningrum (2017), ICT has the potential to contribute to improving the English language proficiency of Indonesian students. For example, the use of technology through social media has become an innovative alternative in improving students' English writing skills (Inderawati, 2017). The availability of smatphones, for example, has helped people, including students, to not only to get connected with others, but also to retrieve information and even to utilize it as a means of learning English. For example, Agusta (2018) has developed reader response strategy-based reading material which he integrated with the Android program. By installing the program in their smartphones, students can learn English independently. Scholars in the field of language teaching and education have also conducted many studies focusing on the use of technology to help students improve their learning. In other words, technology is part of teaching and learning process.

It is worth noting that students do not have to wait for their teachers in order to utilize the technology for supporting their learning. This era is referred to the technological era in which technology has become part of people's everyday lives and it has also become part of students' lives. In relation to this, investigating students' perception

about the use of technology in teaching and learning process is necessary to conduct so it can provide a better picture about what students really think about technology integration. It is also worth doing to investigate how technology is practically utilized by students in their learning. It is teacher who utilize the technology to the students as technology is a device merely. It is relevant to what Higgins, Xiao &Katsipataki (2012) insist:

Overall, the over-arching implication is that the technology is solely a catalyst for change. The question is how can technology can bring about improvement and make teaching and learning practices more efficient or effective. Focusing on the change (and the process of change), in terms of learning is essential in supporting effective use.

Dealing with the insistence, Saba (2009) also emphasizes the following.

Research supports that technology has the potential to improve quantitative assessment performance in core subjects, as well as overall GPA. However, there is also mounting evidence that technology not only has a quantitative advantage over traditional methods, but also leads to qualitative improvements; resulting in higher-quality student work.

As previously described, students nowadays are the generation who live in the technological era. The fast development of technology has given much contribution to the teaching field. This current researchtakes a closer look at the utilization of technology at both Faculty of Teacher Training and Education, Sriwijaya University and Faculty of Arts and Education within Deakin University (Victoria, Australia).

LITERATURE REVIEW

The Use of Technology in Language Learning

In the 21st century, technology has spread worldwide and been used by world society. The use of technology is integrated into almost all aspects of human life, including education. In the educational field, technology has been a new notion of teaching and learning activity since it is the trend of the digital era of globalization.

The use of technology in teaching-learning activities has been advantageous for teachers and students. Inderawati (2011) puts forward that the students are being well-motivated to increase their

literacy due to the technology. Then, Stosic (2015) states that educational technology has three main roles:

1) Technology as a tutor (computer gives instructions and guides the user),
2) Technology as a teaching tool, and
3) Technology as a learning tool.

Technology is used as a tool for teaching and learning where teachers and students can share each other. The role of technology in teaching and learning activities is absolutely as medium or facilitation. Through the use of technology in the class, some researchers have found that students' motivation increase and teachers get some ease in teaching.

Technology is central to the way we work, learn, play, communicate and socialize. It remains an important issue today with debates about the impact of technology on our society; the implications of easy and quick online access to information for knowledge and learning and the effect of technology on young people's social, emotional and physical development frequently in the news.

Technology Engagement at Deakin University

In line with most other universities, Deakin has established an enterprise based technology environment for large scale enhancement, of the learning experience for students undertaking formal on campus professional studies and relevant professional workplace learning.

The role of technology becomes very essential in every sector. Thus, the demand of professional workers on ICT has been made some higher education build closer integration between academic and workplace learning. One of higher education in Australia which is well known for its ICT discipline is Deakin University. Therefore, this essay will highlight the use of technology in that university.

Schools and universities start to utilize technology in teaching learning activities. One of the universities using technology in teaching-learning activities is Deakin University, Australia. Deakin University, a public university in Victoria, Australia, began teaching in 1977. There are seven schools organized here including: School of Architecture, School of Education, School of Humanities, School of Management, School of Nursing, School of Sciences, and School of Social Sciences. The university offers on-campus study and off-campus study with various

offered courses either in diploma, undergraduate, master's or doctoral degrees.

Two modes of studies provided here allow students to choose either on-campus study which requires them to attend the class during the teaching and learning activities. While off-campus study not generally requiring attendance at the University which is also known as online learning. Through online study, students from all over the world can study in the university without necessity to leave their countries to study. This dual mode of learning has been one of the characteristics of Deakin University for a long time. Calvert (2001) put forward:

From 1987 all students were automatically given free e-mail accounts. The real growth of online communication in programs of study began in 1990, however, after an easy-to-use text-based system (known as TEAS), with bulletin board and e-mail capabilities, was developed for a particular course and presented as a model for other programs.

The use of technology in online (off-campus) study keeps growing as technology grows better. The technology used is now simpler that everyone can connect through internet really easily and makes the off-campus study better and more effective.

Deakin University has a long, distinguished history in distance education and postgraduate professional education majors offered at a distance. A sturdy commitment to experiential learning underpins these majors. The University's recent teaching and learning development plans emphasize the need to use experiential learning approaches to expand the range of work experience, community work or service schemes, clinical placements, internships, international experiences, and practice throughout the undergraduate program. The importance of developing generic or transferable skills as part of the undergraduate experience has been highlighted nationally and internationally (see, eg, Candy, Crebert& O'Leary, 1994; Gibbs, Rust, Jenkins &Jaques, 1994; Learning for Life Final Report, 1998).

Deakin University applied experiential learning which has consistently integrated between academic learning and workplace ambiance in order to support the era development of 21st century and fulfill the need of marketplace. Deakin University, a public university located in Victoria, Australia, is one of the world's universities which concerns to the use of technology in education. In this 21st century, moreover, technology becomes one of the best solutions to the implementation of education. As the evidence of their concern in

technology to be applied in educational sector, there are two innovations of the technological use provided by Deakin University, namely DeakinSync and Cloud Campus.

First of all, Deakin University develops program called as DeakinSync. It functions as a digital space that could be simply connected to the students' gadgets. University news and events, campus maps and transport information are available for the students to keep up with. In addition, DeakinSync allows the students to access their units, learning resources, library, timetable, and portfolio and cooperate with others to constantly be connected and keep their studies on the track. All of those activities can be done digitally and online.

The second innovation is Cloud Campus. It provides 15,000-strong community of students and 200 courses. This is aimed to realize the goal that its students can study anywhere and anytime. Thus, Deakin's Cloud Campus is the place in which students have an online learning units and courses. Students have access teachers and resources like those in on-campus learning while benefitting the flexibility of online learning which can be done anywhere at any time. Whether it is part of face-to-face learning or an entire online learning at Deakin's Cloud Campus, all Deakin students carry out some forms of online learning. Watching lectures, submitting assessments and participating in discussions, using their meeting room in the cloud to work together in real time with students and staff, including sharing videos and delivering presentations, downloading and streaming lectures and presentations at any time of the day are the activities that the students can do in their cloud classroom.

In brief, the role of technology in this era has been optimized by most of the universities; one of them is Deakin University. As one of those which allows the students to choose between face-to-face or online learning, DeakinSync and Cloud Campus are the two innovation of technology provided by Deakin University.

Digital Learning in Language Department of Deakin University

Digital learning, a kind of learning which integrates both technology and practical instruction, is nowadays widely implemented in education, especially in teaching and learning activities. Deakin University does the same thing. There are some courses that the students could choose which is designed specifically for digital learning – there is no face-to-face learning. Two of them are Master of Professional Practice (Digital Learning) and Graduate Certificate of

Professional Practice (Digital Learning). Besides those two courses, other courses are also available for online learning. In other words, students can choose whether they will have a face-to-face or on-campus learning or online learning, which is including to digital learning. Language department, which belongs to the Faculty of Arts and Education, also offers online or digital learning for the students. In this department, one of the learning outcomes is that the students' mastery towards technology usage are hoped to be transferred later on in their practice of teaching and learning.

Digital learning is "learning facilitated by technology that gives students some element of control over time, place, path and/or pace". Time: learning is no longer restricted to the school day or the school year because internet access devices have given students the ability to learn anytime. Place: learning is no longer restricted within the walls of a classroom because the internet access devices have given students the ability to learn anywhere and everywhere. Path: learning is no longer restricted to the pedagogy used by the teacher because interactive and adaptive software allows students to learn in their own style, making learning personal and engaging. Pace: learning is no longer restricted to the pace of an entire classroom of students because interactive and adaptive software allows students to learn at their own pace, spending more or less time on lessons or subjects to achieve the same level of learning.

As Ifenthaler (2014) states, "Young people are growing up in a digital environment, and we are learning more and more about how to provide quality, personalised learning through technology". The use of technology in the educational establishments makes students learn quickly and easily (Sarica&Cavus, 2009). As an ICT based university, Deakin applies an online learning where students can access study and administrative tools through DeakinSync, and study all or part of their course through Deakin's Cloud Campus. Deakin plans to bring the opportunities of the digital age into the real world through Learning, Ideas, Value and Experience (LIVE). In Deakin University, especially Language Department, there are four majors of world's most important languages – Arabic, Chinese, Indonesian, and Spanish. Learning a language gives other insight into different cultures, develops adaptability and communication skills, and can make someone more employable. Deakin's courses really lead to excellent career outcomes. They follow direction on curriculums based on what's affecting industry or marketplace now and later. Deakin's Graduate Certificate of

Professional Practice (Digital Learning) offers professional educators a validated, practice-based model of learning that matches developing capabilities in digital learning with opportunities for career development in the field.

In conclusion, digital learning is part of teaching and learning process. It plays an important role in this era, because it helps teaching and learning process much easier and more attractive than before. Due to digital era increases rapidly day by day, Deakin University equilibrates it by implementing digital learning in its daily teaching and learning process because digital learning can optimize time, place, path and/or pace.

METHODOLOGY

Research Site and Participants

For the purpose of the 1st Year study, the investigation was conducted at both Faculty of Teacher Training and Education, Sriwijaya University, IndralayaCampus (OganIlir, South Sumatera, Indonesia) and Faculty of Arts and Education, PunthillCampus, Deakin University (Victoria, Australia).It also got involved one lecturer from each institution, specifically from the field of language teaching.

Research Method and Procedure

This proposed study (Year 2018 and Year 2019) apply *mixed-method research approach* which is the combination of quantitative and qualitative research. As Johnson, Onwuegbuzie and Turner (2007) explain, a mixed-method research is the type of research in which a researcher or a group of researchers incorporate elements of qualitative and quantitative research approaches (for example, the use of qualitative and quantitative perspectives, data collection, analysis, inference techniques) for broad and deep understanding and verification. The lecturers' interviews and observation form the qualitative data, while quantitative data will be from the result of the students' questionnaire.

Data Collection

The data for this first year (2018) investigation was collected through the interview with the lecturers and also the field observation in order to gain the information about how the ICT and ELT approach are realized in the curriculums of both institutions. Therefore, the interview questions were centered on the utilization of technology in the teaching and learning proces. The data for Year 2 (2019) will be

collected by using a survey questionnaire which focuses on the students' perception on the utilization of ICT integration in teaching and learning process. The questionnaire is a ready-made one developed by Ghavifekr and Rosdy (2015). The data in Year 2 will also be collected through interviews with the students who will be randomly selected and the observations which will be taken place in the classroom during the teaching and learning process.

Data Analysis

The data gathered from the interview with the lecturerswereanalyzed qualitatively through coding and thematic techniques to get core themes which are described in the form of narrative. Meanwhile, the data of Year 2 investigation will be analysed statistically to see the frequency and percentage of the students' responses. The data which will also be collected through interviews with the students and the observations in the classroom during the teaching and learning process will be analysed qualitatively.

FINDINGS AND DISCUSSION

The findings reported are related to the focus of first Year study: the results of discussion through interviewing one lecturer or teaching staff from each institution. The following are the themes that emerged from the analysis of the interviews.

1) Well-Structured and Well-Planned Activity

According to both teaching staff, before planning about integrating the use of technology in the teaching and learning process, a well-stuctured and well-planned activity is very important. For example, as stated by the lecturer of Faculty of Arts and Education, Deakin University,the use of technology should match with the level of the students' level of performance so it will help them improve their language performance. Likewise, the lecturer of Faculty of Teacher Training and Education, Sriwijaya University also believes that a well-planned activity is necessary that it can keep the lecturer on the right track during the teaching and learning activities

2) Well-Supported Technology Devices and IT-Help Desk

Both parties believe that a well-structured and planned activity should be supported by the technology devices that students can use and can be easily accessed by the students. Based on the explanation of the teaching staff of Deakin University, it can be concluded that there is availability of well-supported technology devices as well as the IT-help

desk. An example of on-line Bahasa Indonesia language teaching and learning material shown by the Deakin University's teaching staff demonstrated the existence of well-supported of technology devices and also the IT-help desk. This also shows that there is a collaboration among the teaching staff, students and the IT people.

However, a bit different story was told by the teaching staff of Sriwijaya University. It is true that the use of technology has been incorporated in the teaching of English. For example, some teaching staff of the English Education Study Program makes use of the availability of social media such as Facebook and WhatsApp as the flatform in teaching English writing. However, one they are off-campus, there is no access to the discussion forum (Facebook and WhatsApp) if the teaching staff and the students do not use their own data connection to connect to the on-line learning. This also means that whenever the teaching staff and the students are having technical problem with the technology they are using, they have to manage it by themselves.

In addition to the interview, an observation was also conducted during the visit to Deakin University. The following notes are the descriptions of the result of the observation. It is written in Bahasa Indonesia since this Collaboration Research comprised of the teaching staff or lecturers of Postgraduate Study of "PendidikanBahasa" (English and Bahasa Indonesia fields of study).

The Faculty of Arts and Education, Deakin University, has an Indonesian Language (BI) learning program as an established foreign language. On this faculty, the BI learning program is organized in two modes: on campus and off campus. On-campus learning mode is held in full face-to-face, communication between instructors and students takes place in a prominent way (face-to-face), in the form of lectures in class, exercises in class and outside the classroom, and projects carried out outside class. Off campus learning mode is held by using ICT in full without face-to-face activities. Communication between instructors and students is done indirectly using ICT, in the form of virtual classes, exercises and student assignments are given and done through application software owned by the university.

The following are the results of observations and interviews conducted with instructors and users of BI off campus learning programs.

1. The place where learning activities take place

In accordance with its characteristics, off campus mode, learning activities are generally carried out outside the campus. The place of activity can be anywhere: in a student's residence, in a library, in public places, etc. All places can be places of learning as long as there is an internet connection. However, at the beginning of the program students come to campus to register and receive software packages that are directly installed on student laptops, as well as instructions for use, as well as parties that can be contacted in case of difficulties or technical problems during the learning process.Some literature focuses on the use of simulations within the higher education environment to supplement workplace learning (eg. Canyon &Podger, 2002; Cassidy, 2002; Segrave, 2003a, 2003b).

2. Class management

The off campus mode learning process is mostly done individually, by working / studying independently. However, there are also group activities in the form of discussions or carrying out joint projects. In an agreed or scheduled time, students go online together and do group or project assignments that are programmed in the application software. In addition, there are also online meetings with instructors on a "classical" basis. On this occasion, the instructor assigns assignments to students or answers student questions that can be followed by all students. In classical activities, video conferencing can also be done or through live streaming.

3. Equipment Used by Students

The equipment used by students is in the form of hardware in the form of software. Tools in the form of hardware belong to the students themselves individually. To participate in this program students are required to have a laptop with specified specifications so that the laptop can be used to install software and can be filled with content in the form of text, images, animations, photos and videos. Other hardware tools, such as printers, data storage disks, and scanners can use private property of students, can also be rented or use rental services in rental places in various places, both in kalmpus and off campus. The software used for learning activities is a package prepared by the manager or organizer of this program.

4. Application / Software Programs Used

The application program or software used in learning activities is a package that is owned by the manager of this program. This package was officially adopted from a software developer who already has a

name. In adopting this program the manager has fulfilled the requirements for using copyright with official permission and paid the required royalty. In this case the instructor just needs to use and fill it with the necessary content. Included in the application program package is maintenance and service to overcome the difficulties experienced by instructors or students.

5. Instructional Materials Used

Teaching materials that become the content of this program are basically independently developed by the instructor. Teaching materials can be in the form of text, speech, pictures, animations, photos and videos. The materials are made by the instructor themselves, can also be taken from available sources. However, instructors try to find material from credible sources so that the truth of the content can be guaranteed. In fact, if you need to take a source that is protected by copyright, official permission and royalty payments must be made. This is usually for material in the form of text (information), photos, and videos. As for teaching materials in the form of individual or group exercises, projects are also made by the instructor himself.

6. Supporting Crew

There are two categories of supporters supporting this program: IT supporters and administrative supporters. IT support is a very important supporter of this program. Without strong IT support, this program is difficult to run. There are a number of IT staff who are always stand-by serving instructors and students when there are obstacles in daily learning activities. In fact, instructors are trained to use the application, fill in content, practice, and so on. The IT technical matters are fully the responsibility of the IT team / staff. IT staff occupy a separate unit that is part of the University's service unit. This unit serves all IT needs: various information systems, internet connections, administrative, financial, academic and recreational services. Meanwhile, administrative staff are supporters who take care of administrative activities such as registration, recording, filing, and correspondence.

7. Relation with Instructors in Learning Activities

When associated with instructors / teachers, the use of ICT in learning can be grouped into several categories: primary, substitution, complementary, and supplementary. This is the continuum of the existence of ICT whether it is something primary, substitute, complement, or just complementary. In this case it can be said that the

use of ICT is the primary or primary thing. This can be understood because ICT is used to support Language learning programs in off-campus mode. All activities depend on ICT. Learning activities and all their supporters are carried out through ICT facilities, including the delivery of teaching materials, the provision of training and feedback, formative tests, and summative tests. Academic administration supporting activities also use ICT: registration, recording, filing, and correspondence services. Nevertheless, the presence of instructors is still needed with a somewhat different role. The instructor's role shifts to the development of instructional materials, including exercises, and examinations, student guidance in working on exercises and projects, and evaluating student work results in various stages. Nevertheless, technology is just a device until instructor utilizes it to the students and they make use of it in order that improvement in learning can happen as Higgins, Xiao&Katsipataki (2012) insist:

Overall, the over-arching implication is that the technology is solely a catalyst for change. The question is how can technology can bring about improvement and make teaching and learning practices more efficient or effective. Focusing on the change (and the process of change), in terms of learning is essential in supporting effective use.

By taking closer a look to the findings from interview and observation, it is true what Stosic (2015) states that technology in education has three main roles: 1) a tutor (computer gives instructions and guides the user), 2) a teaching tool, and 3) a learning tool.

CONCLUSION

The Faculty of Arts and Education, Deakin University, has an Indonesian Language (BI) learning program as an established foreign language. On this faculty, the BI learning program is organized in two modes: on campus and off campus. On-campus learning mode is held in full face-to-face, communication between instructors and students takes place in a prominent way (face-to-face), in the form of lectures in class, exercises in class and outside the classroom, and projects carried out outside class. Off campus learning mode is held by using ICT in full without face-to-face activities. Communication between instructors and students is done indirectly using ICT, in the form of virtual classes, exercises and student assignments are given and done through application software owned by the university.

Based on the observation and interview, it could be identified that1) Learning activity: Mode off campus, everywhere in which there is

an internet access 2) Classroom Management is conducted individually or in group and a virtual meeting with the instructor and or via video conference 3) Devices utilized by the students were hardware and software with certain specification, 4) Application/software utilized was adopted package software, 5) Learning material was developed by the instructors, 6) Supported crew was the IT staff, and 7)Instructur in the learning activity was still required with different role as the learning material developer.

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