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The Use of E-Portfolio for Improving Students' English Skills:A Pilot Study in English Department, The State Polytechnic of Padang

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Abstract— **This research addresses the use of technology, especially information technology, by promoting the use of electronic portfolio (e-portfolio) for improving students' English skills. Some experts have suggested the use of e-portfolio for students in independent learning activities and others proposed this as one of alternative assessment tools. Barret (2005) defines e-portfolio as the store to collect and organize portfolio artifacts in many types of electronic media such as audio, video, graphic, and text; it usually uses hypertext links to manage the materials, connect evidence to appropriate outcomes, goals or standards. However, the term of e-portfolio has not been popular among English teachers in Indonesia, especially in English Department of the State Polytechnic of Padang, although some lecturers in this institution have been using social media in giving instructions, collecting assignments and giving feedback to students. Moodle LMS has been applied as a platform for the e-portfolio in this research. This research examines whether the use of e-portfolio improves students' English skills. The English skills include four skills: Listening, Reading, Speaking, and Writing. An experimental research design will be employed. More specifically, this article discusses the students' responses toward the use of Moodle LMS in their learning. The questionnaire was distributed to students to find out their perceptions about Moodle LMS. It was found that 64.62% of the responses indicates positive perceptions. In other words, the students gave positive responses to the use of Moodle LMS. It can be concluded that Moodle LMS is considered to be used supporting the use of e-Portfolio in the next main study, which will be conducted as an experimental study.**

Keywords— **E-Portfolio, Moodle LMS, Pilot Study.**

I. INTRODUCTION

A. The BACKGROUND of the RESEARCH

The advance of technology provides various useful tools which can be used in teaching and learning process. People have technology in his/her hand, such as computer, laptop, smart phone, etc. They can access many sources of information related to topics they want to explore by using the internet. Every student and teacher can use this technology as a tool in the learning process so that the goal of learning can be reached maximally. Students can get many learning materials and have communication with other people outside their environment by using the internet. The teacher can also find teaching materials and have sharing sessions with other teachers through the internet.

For higher education, at college and university levels, the ability of using information technology becomes a necessity. Academic people record all activities on their own computer, laptop, or through online tools, such as e-mail, facebook, dropbox, etc. in the form text, photo, voice, and others. Lecturers can also give online lectures using the internet. Students submit their assignment in the form of a soft copy. It is obvious that that computer, laptop and internet have become important tools for academician , especially in college and university environments.

This kind of information technology can be employed as learning and evaluating tools both by students and teachers. Students can

practice autonomous learning and teachers can evaluate the students' records from their soft documents. Some experts in education have promoted the use of electronic portfolio in education. According to Barret (2005) electronic portfolio or e-portfolio is the store to collect and organize portfolio artifacts in many types of electronic media such as audio, video, graphic, text; and it usually uses hypertext links to manage the material and connect evidence to appropriate outcomes, goals or standards. It means that students can record their activities in the form of text, video, audio, etc. and store them in an electronic portfolio. Then, the lecturer evaluates students from their portfolio. E-portfolio is also a practice of lifelong learning which students can track their learning, develop their learning experience and enhance their self-understanding (Bhattacharya & Hartnett, 2007).

For English department students, e-portfolio seems to be an appropriate tool to assist them in learning process. It enables students to store their learning subject activities such as listening, reading, speaking and writing. In listening subject, students can store their activities like voice record or video. While, in reading subject they can document the reading text. In speaking, they record their speaking in the form of audio or video, and in writing subject they can store their writing activities. The lecturer can give feedback and send it to the students who will store that in their own e-portfolio. The students use their e-portfolio to track and do a self evaluation. These activities may improve their English skills.

When English skills are being discussed, it will explain the four skills: listening, reading, speaking and writing. However, it is important to define the term skill. Skill is a noun which means the ability, coming from one's knowledge, practice, aptitude, etc., to do something well; competent excellence in performance; expertness; dexterity (http://dictionary.reference.com/browse/skill). It can be explained that English skills refer to students' knowledge, practice, and aptitude to do listening, reading, speaking and writing in English well.

In the State Polytechnic of Padang, for example, besides the four skills, English Department students also get other subjects such as translation, broadcasting, professional etiquette, multimedia in use, computer application, etc. Those are designed to prepare students facing the real world with professional skills. The curriculum which includes multimedia and computer application shows that information technology cannot be excluded from learning activities. From this idea, this research promotes the use of e-portfolio in English learning. It is also the continuation from two previous studies which conducted by researchers. One was about the use of paper-portfolio that can improve students' ability in translation. Another was also about the use of paper-portfolio, which showed significant improvement by the students of their mastery of grammar.

B. IDENTIFICATION of the RESEARCH

Many students of English Department, the State Polytechnic of Padang cannot give good performance in English both in speaking and writing. It can be seen from what they do in arranging final projects. There are many mistakes in their writing and they find difficulties in giving a presentation in English. It can be identified that first, the students may not have appropriate strategies in learning the subjects. Other problem may come from the subject themselves which are very complicated to be learned. The third may come from the learning facilities and tools like literature books, library, laboratory, internet access and others. The next problem may come from the lecturers who may not give good manner and materials during the learning process.

C. LIMITED of the RESEARCH

To make focal point and generate a deep analysis of the problem, it is important to limit the research. Based on the explanation above, the researchers will examine the use of e-portfolio in English Department, the State Polytechnic of Padang. There are many kinds of e-learning systems such as WebCT 1.0, Blackboard, Edmodo, Moodle, and about 150 other different systems, providing e-learning services (Kumar et al, 2011). However, in this research the researcher applied the use of Moodle as the limitation of the research. It studied the use of it in classes of listening,

reading, speaking and writing. These subjects will be chosen because they represent the term of English skills. The researchers will request agreement from the lecturers who teach these subjects. This research will be conducted in 2 years in order to gain deeper research finding. Furthermore, this research will be formulated by proposing the question: **Will the students' English skills improve after they used e-portfolio?**

D. HYPOTHESES

To answer the question above, the writers will propose the following hypotheses:

H_1: The use of e-portfolio will improve students' English skills in English Department, State Polytechnic of Padang.

H_0: The use of e-portfolio will not improve students' English skills in English Department, State Polytechnic of Padang.

E. The OBJECTIVE of the RESEARCH

The objectives of the research are:

1. to explain the use of e-portfolio in learning subject of listening, reading, speaking and writing;
2. to test the proposed hypotheses.

F. The SIGNIFICANCE of the RESEARCH

The finding are useful because they can be used as a base for developing media for learning and tool for evaluation. . It also can be used as a base to develop information technology in English Department to facilitate students, lecturers, and stakeholders.

II. REVIEW OF RELATED OF LITERATURE

A. ELECTRONIC PORTFOLIO
1) CONCEPT

A portfolio is a place to store the evidence of the students' activities. The term of electronic portfolio or e-portfolio has been introduced by David Niguidula who defines e-portfolio as software which enables students to present their mastery and skills in a richer way (Tosun and Baris, 2011). In education, Hellen Barret (2005) explains that an electronic portfolio uses electronic technologies as the container, enabling students/teachers to collect and organize

portfolio artifacts in many media types (audio, video, graphics, text); and using hypertext links to organize the material, connecting evidence to appropriate outcomes, goals or standards. Both terms, paper/traditional portfolio and electronic/digital portfolio, have the same purpose which is as a store to collect and organize the artifacts or evidence, but the media to store them are different.

In addition, Barret (2005) classifies the difference in the following table;

TABLE 1. Traditional and Electronic Portfolio

Traditional Portfolio Processes include:	Adding Technology allows enhancement through:
Collecting	Archiving
Selecting	Linking/Thinking
Reflecting	Storytelling
Projecting	Collaborating
Celebrating	Publishing

The classification above explains that e-portfolio gives more attractive activities like collaborating and publishing. Besides using paper-portfolio this kind of activities is not available. It means students do and collect their activities individually.

Barker (2006) explains that e-portfolio is shorthand for both process and product which help creators to recognize and reproduce on the outcome of learning experiences. The students can pour their creativities to create their own portfolio. In addition, according to Paulson and Paulson (1991) in Ring and Ramirez (2012) the ePortfolio is viewed as a laboratory where students construct meaning from their accumulated experiences. According to them, it is a story of knowing backed by evidence. It means that students can track their learning experience by creating-portfolio and store their evidence of learning. They can look back their e-portfolio whenever they want and may do some revises to make it good.

Wikipedia.com describes that in education the electronic portfolio can advance learning by providing a way for them to organize, archive, and display work.

In education e-portfolio has six major functions:

Document, skills and learning;
Record and track development within a program;
Plan educational programs;
Evaluate and monitor performance;
Evaluate a course;
Find a job

Fig 1. Portfolio example

2) OGANIZING E-PORTFOLIO

To organize a portfolio, there are three aspects which must be considered (Birgin and Baki, 2007). There are the aspects:

(a) Determining the purpose of the portfolio
It is a significant act of portfolio preparation to determine the purpose for the portfolio. It can be used for a different purpose in education. Furthermore, Mume and De Fina in Birgin and Baki (2007) concluded that the aim of teacher using portfolio is to assess the progress of the student over a period of time, to determine the efficiency of the teaching, to have a connection with the parents of the students, to evaluate the education program, to enable schools to have contact with the commodity, to help students for self-assessment and to determine the students' weak points in the learning process.

(b) Determining the evidence, including in the portfolio
The evidence, including in portfolio is as significant as determining the purpose of portfolio. It is about what evidence collected in portfolio. Still according to Birgin and Baki (2007) there is no a strict rule in order to determine the evidence in a portfolio, it is depending on the users or purposes. Teachers can discuss it with their students. For example, a portfolio can contain visual or activity materials such as individual or group studies, his/her best studies, tests, projects, presentations, control lists, problem solutions, questionnaire, teacher comment, reading list and reviews, self-assessment/peer-assessment checklist, interview notes, course note, cd and disks (Birgin and Baki, 2007).

(c) Determining assessment criteria
Since a portfolio can be used and mainly use as one way in assessing student's progress, it is important to determine the criteria of assessment. According to Birgin and Baki (2007):
"Assessment criteria which have been used to determine the quality of the student's performance should be clear and easy to understand. This is quite important in terms of student to assess his own works and to be able to fulfill his weaknesses. Rubrics should be used in order to determine the quality of the evidence in portfolio and to make a reliable and valid assessment".

3) MOODLE LMS

There are many tools that support the use of e portfolio such as Edmodo,

Moodle LMS, Blackboard, Blog, and others. In this research the researcher applies Moodle LMS to find the use of e portfolio by using this kind of tool. Moodle was released in 2001 and it is becoming one of the most common used learning management systems (Kumar, Gankotiya and Dutta, 2011). In addition, Rice (2015) introduces that Moodle is a kind of online tool which is the learning management system is open source that enable everyone to create powerful, flexible and engaging online learning experience.

Moodle enables both teachers and students interact in online experience among them. Besides, Rice (2015) gives more explanation:

> "It connotes, among other things, web pages that can be explored in any order, courses with live chats among students and teachers, forums where users can rate messages on their relevance or insight, online workshop that enable students to evaluate each other's work, impromptu polls that let the teacher evaluate what students think of a course's progress, and directories set aside for teacher to upload and share their files."

This Moodle supports the use of e portfolio in the form of that teacher can share their files so the students can access the files every time. Moreover, students can evaluate their progress easily by looking their account.

Fig 2. The Use of Moodle LMS

Generally, there are four skills in English language skills : listening, reading, speaking and writing. It was classified into respective skills: listening and reading and productive skills: speaking and writing.

1. Listening Skills

Listening as one of the four basic skills in English has its own importance. Some experts have defined listening with many various definitions. Listening has emerged as an important component in the process of second language acquisition (Feyten, 1991).

Listening, as defined by the ILA (The International Listening Association), is"the active process of receiving, constructing meaning from, and responding to spoken and/or nonverbal messages." So listening is the complete process of receiving and then responding the information. Moreover, Tyagi(2013) said," Listening is a skill of Language. It requires a desire to understand another human being, an attitude of respect and acceptance, and a willingness to open one's mind to try and see things from another's point of view. It requires a high level of concentration and energy".

Based on definition above, it can be said that listening skill is required to understand another human and it is an active process of receiving, reconstructing and then responding the information. To do the listening, human is required to have a high level of concentration and energy.

2. Reading Skills

Reading is an activity to look and understand what is written. However, it is not so simple. Research shows that the efficient reader does not read word by word, but in groups of wards, taking what he needs to discover the meaning of the text in the activity (Bottino, 2015). In further description, according to Afflerbach, Pearson and Paris (2008), at different historical times, reading has been defined by referring to specific skills such

as reading the Bible, understanding direction, or answering questions about the text. It can be said that reading skill is a skill to comprehend what is written and do the direction. For the students, reading skills is a term shows their competency to comprehend the text and do the instruction after the text.

3. Speaking Skills

Speaking is one of the four language skills. It is the means through which learners can communicate with others to achieve certain goals or to express their opinions, intentions, hopes and viewpoints (Torky, 2006). The speaking skill is included in productive skill. Brown (1994) and Burns & Joyce (1997) mention that speaking is a process of constructing meaning which is conducted interactively and involves the producing *and* receiving and processing information. They also extent that the form and meaning of speaking are dependent on the context in which it happens. The context must include the participants and their collective experiences, the physical environment, and the purposes for speaking. Speaking is also often spontaneous to occur, involving open-ended discussion, and evolving during the process.

4. Writing Skills

Writing skill is the students' competence to express their idea in the form of writing which must fulfill the requirement of good writing. Pulverness et al. in Utami (2014) explains that as one of productive skills, writing includes delivering a message by creating signs, forming letters and words, and joining them into a series of sentences that bond together to correspond that message.

5) *PREVIOUS STUDIES*

The research about the benefit of using paper portfolio had been conducted in translation class in English Department, State Polytechnic of Padang in 2013. It was found that the use of portfolio can improve students' ability in translation (Aulia, Yulastri and Sari, 2014). In addition, the researchers continue the research about the use of portfolio in grammar class. This research is in process of collecting data.

The use of e-portfolio, actually, in education has been popular in developed countries. Some researchers have published their research findings in some journals. Ring and Ramirez (2012) exposed their research about the use of e portfolio in their university. The e Portfolio is becoming an active part of the dialogue about students. In addition, the e-portfolio infrastructure was radically changed to encourage greater creativity and ownership on the part of students.

III. RESEARCH METHODOLOGY

Moodle LMS is a new tool for both students and teacher in State Polytechnic of Padang, especially for English Department students. The researcher introduced this Moodle LMS to both students and teacher. In addition, questionnaires were shared to collect information about their perception about the use of this tool in teaching and learning process. The questionnaires were given after teacher introduced Moodle LMS to the students and use this for more than three meetings.

The questionnaires collected information about the students' perception: its utility and accessibility of Moodle LMS which they have utilized in learning. Before giving to the participants, the questionnaires were tried out to test the reliability of the items in the questionnaires.

IV. DISCUSSION OF RESULT

The questionnaire had been distributed to English Department students of the State Polytechnic of Padang. It was given to both teachers and one class of first year students in English Department, State Polytechnic of Padang. Before the questionnaires given, the researcher introduced and gave a workshop to the teacher about the use of Moodle LMS. After the teacher understood and can utilize it well, she introduced and guided the students to utilize Moodle LMS in

the class. Then, this class used Moodle LMS in teaching learning process.

In order to include the process of teaching learning in this Moodle LMS, the researchers were registered as students, teacher and administrator. The researchers kept following the process of teaching learning in this server to get beneficial information toward their research.

After more than three weeks using this tool, the questionnaires were given to both teacher and students. This questionnaires were proposed to find teacher's and students' perception about the use of this Moodle LMS in learning. Generally, it was found that more than a half number of students gave positive response toward this tool. The following is the table of items existed in the questionnaire as well as the number of students' response toward each items.

TABLE 2
QUESTIONNAIRE FOR STUDENTS

		Strongly Disagree				Strongly Agree
		1	2	3	4	5
1.	Moodle LMS facilitates me to get learning materials		1	5	12	8
2.	Features in Moodle LMS are easy to be understood		5	10	8	3
3.	Moodle LMS motivates me in learning English		2	8	9	7
4.	Moodle LMS facilitates me to communicate with my classmates and lecturers		2	2	10	12
5.	Moodle LMS facilitates me in doing my assignment		1	5	10	10
6.	I can post my thoughts, ideas and comments in Moodle LMS		1	11	8	6
7.	I can track my assignment and feedback in Moodle LMS		3	5	10	8
8.	I can access Moodle LMS easily anywhere	1	7	2	7	9
9.	I did not find any problem in submitting my assignment to Moodle LMS	1	4	7	10	4
10.	I did not find any problem in downloading learning materials in Moodle LMS	1	4	4	11	6

Data collected from questionnaires for students were analyzed by using application in SPSS. The result of analysis was, in general, 64.62% of response indicated positive value (agree and strongly agree) about the use of Moodle LMS. It was only 12.69% of rensponse gave negative value (strongly disagree and disagree). Meanwhile, the rest of data which did not give any opinion was 22.69%.

In addition, most positive responses existed in the item 4 which got 22 positive values (10 agree and 12 strongly agree). Students may feel convenience when they ask and communicate about the material through this tool. The second item which got positive response was item 1 (12 agree and 8 strongly agree). It means many students can easily get learning material through this tool. And the third highest positive response was item no 5 (10 agree and 10 disagree) which stated about the use of Moodle LMS in doing their assignment.

However, the most negative response recorded from this questionnaire. Item no 8 which was about the accessibility got eight negative responses (7 disagree and 1 strongly disagree). It may be caused by that the students, at that moment, did not have free internet account in campus in order to access the internet easily.

The questionnaire was given to the teacher as well in order to get her response about the use of this Moodle LMS in her class. It was found that the teacher gave positive response to the use of it. Each item was ticked in the column of 4 (agree) or 5 (strongly agree). The teacher has utilized almost all features in this tool and she did not find any significant problem.

From the data above, it can be concluded that the use of Moodle LMS in the process of teaching learning in English Department, State Polytechnic of Padang is positive to be utilized. This pilot study showed that the use of this Moodle LMS can be continued to the main study, which study about the e-portfolio in improving students English skills. The experimental study will be conducted to find the effectiveness of the e-portfolio, in this occasion will use Moodle LMS, toward the improving of the English skills of the students.

V. CONCLUSION

The use of Moodle LMS in teaching learning process has been well known in the world. It facilitates the effectiveness of learning process through the use of the server in this LMS included e portfolio. However, the use of e

portfolio and Moodle LMS is not so familiar in State Polytechnic of Padang. The pilot study showed positive responses of the participants toward the use of Moodle LMS in teaching learning process. In addition, in order to find whether the use of e-portfolio in the learning process can improve students' English skills, an experimental research should be conducted.

REFERENCES

[1] Afflerbach, P. P, Pearson, D, and Paris, S. G. (2008). *Clarifying Differences Between Reading Skills and Reading Strategies* [online] www.deepblue.lib.umich.edu/bitstream/ *retrieved 29 April 2015.*

[2] Arikunto, S. (2009). *Manajemen Penelitian.* Jakarta: Rineka Cipta.

[3] Aulia, D, Yulastri, D and Sari, I. (2013). The use of portfolio to improve the translation Ability of English Department Students in the State Polytechnic of Padang. *Proceeding of International Seminar of English Language Teaching 2. UNP Press: Padang.*

[4] Barker, K. C. (2006) *E-portfolio: Introduction, Applications and Implications Beyond the Classroom* (online) from www.FuturEd.com retrieved 20 April 2015.

[5] Bhattarcharya, M and Hartnett, M. (2007) *E-portfolio Assessment in Higher Education.* [online] retrieved 24 June, 2013.

[6] Birgin, O and Baki, A. (2007). *The use of portofolio to asses student's performance. Journal of Turkish Science Education*, [online]. Volume 4, Issue 2. www.tused.org, retrieved 24 June, 2013.

[7] Bottino, Olga. (-) Developing Reading Skills [online] *ler.letras.up.pt/uploads/ficheiros/6261**.pdf*** *retrieved 28 April 2015.*

[8] Brown, H.D. (1994). *Teaching by principles: an interactive approach to language pedagogy.* Englewood Cliffs, NJ: Prentice Hall Regents.

[9] Creswell, J. W. (2008). *Educational Research: planning, conducting, and evaluating quantitative and qualitative research. 3rd ed.* New Jersey: Pearson.

[10] Feyten, C. M. (1991). The Power of Listening Ability: An Overlooked Dimension in Language Acquisition. *The Modern Language Journal* 75:173-80.

[11] Kumar, S, Gankotiya, A. K. and Dutta, K. (2011). A Comparative Study MOODLE with Other E- Learning Systems. 11th *IEEE.* pp 414-418.

[12] Rice, W. (2015). *Moodle E-Learning Course Development.* 3rd ed. Birmingham: Pack Publishing

[13] Ring, G and Ramirez, B. (2012) *Implementating ePortfolio for the Assessment of General Education Competencies.* [online] from www.theijep.com retrieved 20 April 2015.

[14] Seltman, H. J. (2013). *Experimental Design and Analysis.* [online]. www.stat.cmu.edu/Book.pdf. retrieved 30 June 2013.

[15] Shuttleworth, A. (2008). *Experimental study design.* [online]. www.explorable.com/experiemntalstudydesign/ retrieved 4 July 2013.

[16] Torky, S. A.F. (2006). *The Effectiveness of a Task-Based Instruction program in Developing the English Language Speaking Skills of Secondary Stage Students* [online] www.cambridge.org/servlet/file/9780521805162c02_p14-20.pdf? Retrieved 28 April 2015.*

[17] Utami, A. B. (2014). English education in EFL context: Intergrated approach for collaborative writing in the university level. *Journal of Education*, Vol. 7, No.1, pp.40-50.