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A CORRELATION BETWEEN THE USE OF INTERNET AS LEARNING SOURCE, LEARNERS' LEARNING AUTONOMOUS AND LEARNERS' ENGAGEMENT IN LEARNING PROCESS

Agus Riwanda¹, Armin Fani², M. Irfan Islamy³

^{1,2}Universitas Islam Negeri (UIN) Antasari Banjarmasin, ³ Universitas Islam Negeri (UIN) Maulana Malik Ibrahim Malang, Indonesia

¹Utuhkatungkang@gmail, ²Armin.fani12@gmail.com, ³irfan.islamy87@pgmi.uin-malang.ac.id

Abstract. In recent teaching learning process, learners are treated as active processor of knowledge which requires learners' engagement in teaching learning process. As an active process, learners' engagement is influenced by several factors. This study investigates the correlation between the use of internet as learning sources, learners' learning autonomous and learners' engagement in teaching learning process. Further, this study also investigates factors that might influence learners' engagement in teaching learning process. Mixed method with sequential explanatory design was administered as approach in this research. Data of this research were taken through questionnaire, interview, and observation. Quantitative and qualitative analysis were administered to analyze the data in order to answer the research questions. The result of this study reveals that there is significant correlation between internet use, learners' learning autonomous and learners' engagement. The study also reveals several factors that influence learners' engagement in teaching learning process. Investigating the effect of learners' attributes and learning milieu are recommended for future research.

Keywords: Internet Use; Learning Autonomous; Learners' Engagement.

A. INTRODUCTION

In recent years, the development of technology information and digital era is very outstanding. The effect is also significant. One of the example of the effect is people now are addicted with digital devices especially hand phone which only to make them stay up to date. This phenomenon creates an extensive gap between parent and their children. Besides, parent is entering a new phase of life which requires them to reconstruct their point of view regarding digital era.

Prensky (2001) divides people who live in digital era into two categories those are digital native and digital immigrant. Digital native is defined as a person who has been lived in digital since he/she was child and are already familiar with digital devices such computer, internet and gadget. Meanwhile digital immigrant is defined as a generation which born before digital era starts and tries to learn about it when they already become elderly. Parent is categorized into the latter group of people. In his book; *Do They Really Think Differently*, Prensky states that using technology continuously will change how the way children perceive something. As digital native, children are already familiar with the language of technology which already becomes their daily language. Meanwhile parents, as a beginner of technology, hardly try to become adapted with the situation. Psychologically, parent believes that they are already too late to adapt with situation and have others target to be achieved.

Selwyn (2009) believes that Prensky's concept of digital native and digital immigrant as effort to investigate the latest culture and life style which is idolized by young people.

However, the concept of digital native fails to objectively and comprehensively clarify regarding young people's lifestyle of technology development. Empirically, the Prensky's concept regarding young generations' competencies and expertise of computer, internet, and gadget is lack of evidences. Besides, the discussion regarding teenager characteristic is mostly influenced by moral value and ideology which only rather show the confusion in facing technology invasion then formulating empirical concept of current teenagers' situation.

Even though lack of methodological aspect when formulating the concept of digital native and digital immigrant, Prensky's article gives us insight regarding how young people generation perceives the world when the digital effect strongly influences their life. In digital native context where most of social interactions are done through digital media, the way the made decision is different from digital immigrants. If it is seen from the educational context, the aforementioned phenomenon is one of the factors which influence the change in educational system. Nowadays, teacher is not the only learning source for learners. In line with the development of technology, others learning sources are now available. In recent years the way teaching learning process has been shifted. For instance, conventional teaching learning process which is face-to-face learning process is now gradually eliminated by the new concept of learning process that is based on technology development such, flipped learning, blended learning, and fully online class. The existence of new concept of learning process absolutely offers the change of educational process in significant way. For educational institution, this system can significantly reduce the dependence on classroom and teaching hours. Meanwhile for learners, the concept of e-learning provides flexibility to have several of learning sources and flexibility of learning style. Thus, hopefully, this system creates the improvement of learning success.

Nonetheless, people who born, grow, and develop as digital native is not certainly become a digital learner. Many factors can influence the process of becoming a digital learner such, the experience in using internet, perception toward internet as a learning source, and different leaning styles. From the psychological point of view, the easiness of digital era constitutes learners become lazy, instant-minded, and internet addiction. More specifically Novick asserts that there is significant difference between nowadays learners and learners in couple years ago. The difference is produced by the disparity of era and social pattern. Nowadays, learners have more trouble in term of emotional and attitude, easier to feel depressed if something is out of their control. Furthermore, nowadays learners have strong curiosity but incapable enough to answer their curiosity.

Learners' incapability to learn more comprehensively surely influences their engagement in teaching learning process. In fact, the engagement in teaching learning process is a main foundation which supports the achievement of learning process. Through teaching learning process engagement, their achievement can be measured and learning product is in maximum state.

B. LITERATURE REVIEW

1. Internet Usage as a Learning Tool

The development of technology gives significant effect to education improvement especially internet. Educational institution starts to employ internet as part of teaching learning process. Teachers and lecturer are encouraged to create teaching material which can be accessed through internet. Moreover, learners are also encouraged to be more autonomous learners and able to access others learning sources such as internet. The aforementioned concept of teaching learning process is famous as e-learning.

Definitively, Hartley (2001) declares that e-learning as every learning activity which uses internet technology and online computer as medium of learning process. E-learning is an appropriate solution to make distanced education become easier. To regulate this education program, government declares The Act of Indonesia Government no 20 years 2003 about National Education System which defines distanced education as education process in which

the learners are separated and the learning process employs many learning sources through technology.

As a foundation of the use of ICT in education system, government formulates a five-years (2001-2005) action plan for development and implementation of information and communication which includes:

- a. The use of ICT as part of curriculum and learning media in school and university
- b. Formulate a distance learning program.
- c. Facilitate the use of internet to improve teaching learning process efficiency.

Dian (2017) states that in learning process e-learning has three functions; (a) supplement (b) complement and (c) replacement. E-learning works as a supplement when it is employed in a teaching learning process where face-to-face teaching learning as the main agenda and internet is as a supplement. As compliment, e-learning can be used in a situation where there is equality between face-to-face teaching learning process and internet use. Lastly, e-learning is a replacement when it becomes the main activity or learning source.

Miarso (2007) believes that every kind of technology includes internet is a system which is created by human to ease effort, excel the result, and to make every effort become more efficient. The focus of e-learning is to develop learners' autonomous and personal competencies by providing an accessible learning source which is appropriate with their learning characteristics. On their study Dabbag and Rithland (2005) reveals that the use of e-learning significantly improve learners' interactions, autonomous, and learning outcomes. In another study, Sujono (2011) concludes that e-learning provides learning material which suits learners' learning style of visual, audiotorial, and kinesthetic.

Even though many studies positively urge that the use of internet whether as learning media or learning source significantly improves learners' learning achievement, the effect of internet is still questionable. The use of internet also possibly has bad effect on students. Englander (2010) explains on his survey study that there is negative correlation between the duration of using internet and learners' examination scores. The negative effects of internet are emerged as a result of non-academic purposes of using internet. Sometimes learners' use internet for different kind of purposes and mostly is not for academic objectives.

2. Autonomous Learning

In education system where internet has critical role, become an autonomous learner is an obligation for students. Teacher is no longer play the main character in learning process the teacher's role has shifted to be an instructor. As an instructor, teacher only watch over their students activity and ensure that students experience the learning process autonomously by choosing learning sources in the internet. The readiness to learn autonomously is constructed by the awareness to be active and initiative in formulating planning and objectives of learning process. Another way is through self-motivating to properly experience learning process and choose learning style that can help to achieve the target and responsibly evaluate the learning outcomes. Sardiman (2008:45) mentions the characteristics of autonomous learning are:

- a. There is tendency to consciously give opinion, act and behave
- b. Have strong desire to achieve the target
- c. Making a clear planning and tenaciously execute the plan.
- d. To act and to behave creatively and initiatively
- e. Have strong motivation to enhance learning performance
- f. Able to regulate and monitor then solve his own problem.

Jhonson (2014:153) assert that autonomous learning can enhance learners' enthusiasm in all education level. Students are free to elaborate their opinion, interest, and their propensity. In order to be autonomous, students must be confident that they have the knowledge and competency to do it. By correctly set up their awareness of learning, students can formulate their learning target and actions to get maximum result. Generally, autonomous learning process is based on Deming's (1994) concept those are planning, do, study and act. To successfully apply the planning they set before, students must have a sense of discipline and

responsibility. They have to regulate themselves to be in the right line of learning process. When implementing to the e-learning concept, they must have strong commitment to use internet learning source for educative purposes and minimize the use for others purposes. Once their focus is shifted the plan the set before will be broken. Thus, motivation has critical role in tackling this problem. Motivated student will focus only on their target and achievement through endurance, hard work, determination, and strong initiative. By becoming strongly initiative, students will be able to solve problems emerged in their learning process. Initiative is the ability to develop idea and new ways to solve problem based on available information (Suryana, 2006). According to Guilford (in Mardiyanto, 2008:24) the main characteristic of initiative is fluency (i.e the ability to produce many idea) and flexibility (i.e originality and flexibility in thinking process). Based the explanation above, it can be concluded that learning autonomous can be assessed from following indicators; confidence, discipline, motivation, responsibility, and initiative.

3. Learners' Engagement during Learning Activities

Learners' engagement in learning process is the main requirement to get knowledge. In learning process, students are required to reconstruct their knowledge from many learning sources. Thus, learners' engagement in learning process is required. Chapman (2003) believes that learners' engagement in learning process can be seen as learners' engagement in daily learning process in the area of cognitive, affective, and psychomotoric. Fredricks (2004) points out three dimensions of learners' engagement in learning process they are; behavioral engagement, emotional engagement, and cognitive engagement.

Behavioral engagement is defined as learners' in learning process which can be seen in their attitude such; diligence, focus, attention, actively enhance knowledge coverage and positively contribute in following rules in teaching learning process. Emotional engagement is affective reaction of students toward learning process. The reaction can be positive such enthusiasm, love and curious regarding teaching learning material, or can be negative such getting bored, sad, losing focus or underestimating learning process. Cognitive engagement is the engagement of students in organizing and choosing then applies learning strategies to make learning successful and produce a significant enhancement of knowledge.

In addition, Reeve and Tseng (2011) explain another kind of learners' engagement in learning process that is agentic engagement. They explain that agentic engagement is learners' constructive contribution to the flow of learning process. Agentic engagement consists of three distinct namely behavioral, emotional, and cognitive aspects. Behavior engagement refers how to involved the students in learning process is in the learning activities in term of attention, effort and persistence. Emotional engagement is defined as the presence of positive emotions in the learning process such as interest, and to absence of negative emotion such as anxiety. Lastly, cognitive engagement refers to how strategically the students attempt to learn in term of employing sophisticated rather than superficial learning strategies such as using elaboration rather than memorization.

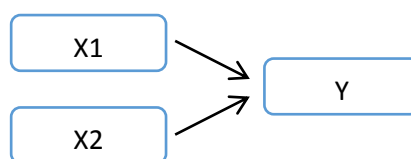
Blumenfeld and Paris list the factor that influence learners' engagement in the learning process in the following:

- a. School characteristics which provide student good condition to learn with clear objective and consistent rules, and the policy which enhance learners' involvement and engagement.
- b. Classroom which built based on positive encouragement from teacher, friends, classroom structure, and learning characteristics.
- c. Individual need which can fulfill psychological basic requirement as a learner such as need of relatedness, need for autonomy and need for competence.

C. METHOD

This is a correlation research with mixed method approach with sequential explanatory design. The population of this research is 1430 students of Education and Teachers Training of UIN Antasari Banjarmasin Academic years 2017. Random sampling of Isaac and Michael with 5 % margin of error is administered to select 290 students as

participant of this research. This research has 2 independent variables and 1 dependent variable. The independent variables are the use of internet as learning source (X1) and learning autonomous (X2), meanwhile dependent variable is learners' engagement (Y) in learning process.



Likert scale questionnaire was administered to collect quantitative data of this research meanwhile qualitative data were collected through observation and interview. Qualitative data was analyzed using statistic product and hypothesis test to determine correlation of coefficient and determent of coefficient. Further, qualitative data were analyzed as supplementary data to elaborate qualitative data and to find others independent variable that might influence independent variable.

Objectives of Research and Hypothesis

This research has 3 objectives. The first and the second objective are answered using quantitative data. Meanwhile the third objective is answered using quantitative data. The first research question is to measure correlation between the use of internet as learning source and learners' engagement in learning process. The first hypothesis is that the use of internet as learning source has positive correlation and significantly improves learners' engagement. The second research question is to measure the correlation between learning autonomous and learners' engagement in learning process. The second hypothesis is that learning autonomous has positive correlation with learners' engagement in learning process. The third research objective is to find out others factors that might influence learners' engagement in learning process.

D. RESULT AND DISCUSSION

1. Correlation analysis

Correlation analysis is divided into two parts, they are:

- a. To investigate the correlation between variable X1 (autonomous learning) and variable Y and the correlation between variable X2 (internet usage) and variable Y.

Correlations

		Autonomous	Internet Usage	Pupil's Engagement
Autonomous	Pearson Correlation	1	.486**	.518**
	Sig. (2-tailed)		.000	.000
	N	227	227	227
Internet Usage	Pearson Correlation	.486**	1	.434**
	Sig. (2-tailed)	.000		.000
	N	227	227	227
Pupil's Engagement	Pearson Correlation	.518**	.434**	1
	Sig. (2-tailed)	.000	.000	
	N	227	227	227

** . Correlation is significant at the 0.01 level (2-tailed).

From the table above, it can be explained that r count value variable X1 is 0.518 and r count value variable X2 is 0.434 which means the r count value of two independent variables are higher than r value table with 227 sample in 5% of significant level that is 0.138. Thus, it can be concluded that the two independent variables have correlation with dependent variable.

Meanwhile for the level of correlation can be determined by referring to the Guilfors Emperical Rules Table as follow:

Correlation value	Description
0.00 - < 0.20	Very low can be ignored correlation
0.20 - < 0.40	Low correlation
0.40 - < 0.70	Medium correlation
0.70 - < 0.90	High correlation
0.90 - < 1.00	Very high correlation

Therefore, it can be concluded:

Coefficient	R count	Correlation value	Level of correlation
X1-Y	0.518	0.40 - < 0.70	Fairy strong correlation
X2-Y	0.434	0.40 - < 0.70	Fairy strong correlation

- b. Double correlation analysis to simultaneously investigate the correlation between variable X (autonomous learning and internet usage) and variable Y.

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2226.305	2	1113.152	50.656	.000 ^b
Residual	4922.321	224	21.975		
Total	7148.626	226			

- c. Dependent Variable: Y
d. Predictors: (Constant), X2, X1

From the ANOVA or F test it can be determined that F count is 50.656 with the significant level 0.000. Because the probability 0.000 is smaller than 0.05, thus bias regression model is used predict variable Y. Therefore, it can be concluded that both variable X1 and X2 are simultaneously correlated with variable Y.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	14.754	2.362		6.247	.000
X1	.436	.069	.402	6.332	.000
X2	.319	.085	.239	3.763	.000

- e. Dependent Variable: Y

The table above shows the equation of regression. Regression of coefficient X1 (learners' learning autonomous) is 0.436 which show that every increment of 1 point of X1 will increase Y (learners' engagement in learning process) to the number of 0.436. Further, regression of coefficient of X2 (the use of internet as learning tools) in 0.436 shows that the increment of 1 point of X2 will increase Y (learners' engagement in learning process) to the number of 0.319.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.558 ^a	.311	.305	4.688

f. Predictors: (Constant), X2, X1

g. Dependent Variable: Y

R Square (R²) is a value of coefficient determinant that shows contribution effect from independent variable (X) to the dependent variable (Y). The value of R Square which is shown by the table above is 0.311. It shows that 31.1 % of variable Y (learners' engagement) is influenced by variable X1 (autonomus learning) dan X2 (internet usage as learning tools). Meanwhile the rest (100%-31.1%=68.9) are affected by others variable out of regression model.

Contribution effective variable X1 : $X1 \times r_{XY1} \times 100\%$
: $0.402 \times 0.518 \times 100\%$
: 20.82%

Contribution effective variable X2 : $X2 \times r_{XY2} \times 100\%$
: $0.239 \times 0.434 \times 100\%$
: 10.37%

Based on the aforementioned analysis, total effective contribution of each independent variables (X1 and X2) to the dependent variable is: $20.82 + 10.37 = 31.19\%$

Relative contribution variable X1 : $SE(X1) : R^2 \times 100\%$
: $20.82 : 31.19 \times 100\% = 66.75\%$

Relative contribution variable X2 : $SE(X2) : R^2 \times 100\%$
: $10.37 : 31.19 \times 100\% = 33.25$

Based the analysis above, it is found that the contribution of each independent relative variable is $66.75 + 33.25 = 100\%$

2. Qualitative Data Analysis

Learners' engagement in teaching learning process is a critical point for to achieve their learning goal in university level. In this study learners' autonomus can be seen through several indicators such discipline, commitment and responsibility, hard work, initiative, confident, and motivation. Qualitative data in this study show that generally learners' autonomus in low level except discipline.

Through qualitative data, it can be seen that learners' discipline is in high level. In qualitative interview all respondents agree that learning discipline is significantly affected by their learning habit in high school level. Mostly, they face the dame problem that is different learning schedule. In high school level, learners have fix learning schedule. They start their learning process in the morning at 6 a.m. then finish at 4 p.m. in the afternoon. It is different

from university level where their learning schedule depends on the subjects they take on that semester.

On the aspect of hard work and commitment, 18 of 20 respondents who were observed and interviewed stated that they do not have another learning schedule but formal learning schedule. This situation happens due to the fact that they have very busy learning schedule, a lot of homework, and organization activities they followed. Further, the situation is getting more complicated for the students who were asked to live in dormitory, the dormitory activities make them feel tired and make them preferring to take a rest over studying.

Besides, they also do not have clear target except getting sufficient grade in all subject they take in program semester. Meanwhile the subjects provided by the faculty in the first semester are mostly obligatory subject. The absence of clear target affects learners' motivation in attending teaching learning process in campus. It can be seen from the data which show only one respondent stated that he attends the class to deepen and enhance his knowledge. The other 19 respondents stated their extrinsic motivation is the reason why they attend the class. The lack of motivation reduces learners' intention to get and enhance their knowledge.

In this study, the use of internet as learning source is classified into three indicators namely attitude toward internet use, using internet norm, and interest to learn through internet. Quantitative data show that the use of internet as learning tools is in low level. Further, for attitude and norm of internet usage all respondents admit that their internet usage as learning tool is more on entertaining activity such as online game, watching video, chatting, sharing photos and watching television online. Interview data show that they are not accustomed to use internet as learning tools.

Data interview also shows that teacher also plays a role in promoting internet as learning tools. 9 respondents stated that their teacher does not recommend internet as learning tool because of lack of validity and does not increase learners' reading habit comprehensively. 8 respondents stated that the use of internet and social media is merely limited on sharing teaching learning material and learning task without further discussion. The other 3 respondents stated that many lecturers use Google form as learning media.

Lack of autonomous learning and the use of internet influences learners' engagement in teaching and learning process. The result of synchronizing between quantitative data and observation data show that learners' engagement in teaching learning process is low. In teaching learning process many learners are less active. They rather engage in other activities such as using hand phone, talking with friends. Therefore their understanding regarding the topic of discussion is rather bad.

In emotional and behavioral perspective, learners' engagement is good. They feel happy and enthusiastic when they attend teaching learning process in classroom. Unfortunately many of them have low interest regarding the lesson in teaching learning process. This finding is supported by the data which show that the reason many learners feel happy in classroom is they can meet their friend. Many participants reveal that they attend the class only because they want to make their parent proud. Just few of the learners said they attend the class to get knowledge.

Through this qualitative enquiry, the quantitative result can be enhanced to find other factors which might influence learners' engagement in teaching learning process. Through interview, observation, and triangulation sources the researcher concludes that other factors which influence learners' engagement are: learners' motivation, learners' competences, learners' learning style, and lecturer competencies including pedagogic, social, professional and personality.

E. CONCLUSION AND SUGGESTION

Using sequential explanatory design, this study investigates correlation between the use of internet as learning sources, learning autonomous, and learners' engagement in teaching learning process. To answer the research questions quantitative and qualitative data are gathered. The result shows that there is significant correlation between the use of internet and

learners' engagement in teaching and learning process. The result of the study also shows that there is correlation between learners' learning autonomous. Lastly, the result of this study reveals that there are many others factor that might influence learners' engagement in teaching learning process. For future research, this study suggest for investigating others the correlation among other factors regarding learners' engagement in teaching process and learners' attributes and learning milieu.

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