ACTIVE LEARNING BY USING LEARNING MANAGEMENT SYSTEM (LMS) TO IMPROVE STUDENTS' COMPETENCE IN WRITING

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Abstrak: Dewasa ini telah terjadi perubahan paradigma pendidikan dari model pembelajaran pasif ke model pembelajaran aktif (*active learning*). Konsep *active learning* dan penggunaan *Learning Managemen System* (LMS) di internet dipandang cocok untuk diterapkan dalam pembelajaran bahasa Inggris, terutama dalam pengajaran ketrampilan menulis dimana pembelajar membutuhkan cukup banyak latihan untuk meningkatkan ketrampilan menulis mereka. Model pembelajaran ini sangat sesuai untuk diterapkan dalam pengajaran ketrampilan menulis karena hampir seluruh kegiatan melibatkan interaksi dalam bentuk tulisan, baik itu reseptif (membaca) ataupun produktif (menulis).

Dalam penelitian eksperimental semu (*quasi*) ini peneliti ingin menjawab pertanyaan penelitian sebagai berikut: "Apakah model pembelajaran *active learning* melalui *Learning Management System* (LMS) efektif dalam meningkatkan kompetensi menulis mahasiswa STKIP PGRI Jombang?". Berdasarkan hasil analisa data ANCOVA dengan menggunakan SPSS versi 20, nilai F adalah 5.505 dengan nilai signifikan .021. Nilai signifikan tersebut lebih kecil dari .05 yang berarti hipotesis alternatif diterima. Sehingga dapat disimpulkan bahwa model pembelajaran *active learning* melalui *Learning Management System* (LMS) efektif dalam meningkatkan kompetensi menulis mahasiswa STKIP PGRI Jombang.

Kata kunci: *Active Learning, Learning Management System (LMS), Argumentative Writing*

Abstract: Nowadays the educational paradigm has changed from passive learning into active learning where learners are actively involved in teaching and learning process. The use of Learning Management System (LMS) in the internet is viewed appropriate to be applied in teaching English especially the writing skill in which learners need more time and more exercises to improve their skill. By using LMS the teaching and learning process is not only depend on the classroom meeting but also can be done outside the classroom, anytime and anywhere.

In this quasi-experimental research the researchers were eager to know the effectiveness of active learning by using Learning Management System (LMS) in improving students' writing skill, especially in argumentative writing. The data was analyzed by using ANCOVA and the analysis was done by using SPSS version 20.

The result of ANCOVA shows that the value of F-value is 5.505 and the significant value is .021 which is less than .05 and the F-value is higher than F-table (3.94). It means that the alternative hypothesis (H_a) is accepted. Thus it can be concluded that teaching writing by using Learning Management System (LMS) is more effective than conventional classroom meeting.

Keywords: *Active Learning, Learning Management System (LMS), Argumentative Writing*

INTRODUCTION

Nowadays the educational paradigm has changed from passive learning into active learning where learners are actively involved in teaching and learning process in order to get more exercises and more experiences in the whole process of teaching and learning. Learning, according to Higard and Bower in Baharuddin (2010), is process of gaining or mastering knowledge through experiencing, memorizing, mastering experiences, and getting or finding information. Dale's cone of experiences (Dale, 1969) presented in the following figure shows the progression of experiences from the most concrete, in which learners are actively involved in teaching learning process, to the most abstract, where learners are passively involved.
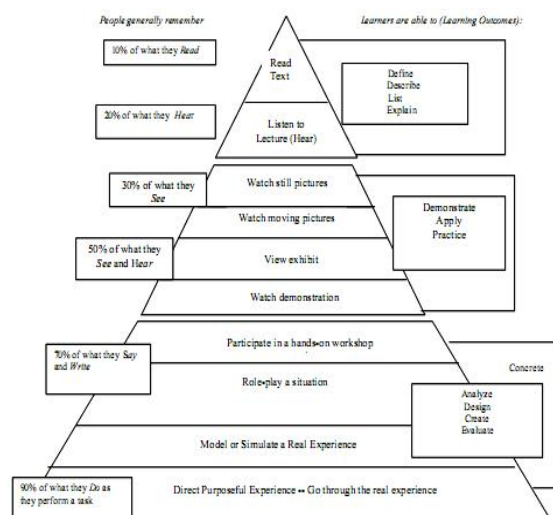
Source: Adapted from E. Dale, Audiovisual Methods in Teaching, 1969, NY: Dryden Press.

As illustrated in the figure, in active learning model learners have higher ability of memorizing what they have learned than in passive learning model. It is clear that the more concrete experiences learners have in learning process yields higher retention of the material learned; on the other hand, the more abstract experiences learners have yields lower retention. Hence the active learning model is effective in giving concrete learning experiences to the learners.

According to Dale's cone of experiences, retention rates increased with the amount of learners' experiences. The cone described that the highest rates were 70% of what learners say and write and 90% of what the learners do as they perform a task. In this case the learners' involvements were in the form of analyzing, designing, creating, and evaluating the material they learned. While the learners' retention rates were only 10% of what they read, 20% of what they hear, 30% of what they see, and 50% of what they hear and see.

Internet, as one of information and communication products, is believed to be able to facilitate an active and interactive teaching and learning process. One of the examples is the use of Learning Management System (LMS). Learning management system, according to Ellis (2009), is a software application for the administration, documentation, tracking, reporting and delivery of e-learning education courses or training. It is viewed appropriate to be applied in teaching English especially the writing skill in which learners need more time and more exercises to improve their skill.

For many years the teaching of writing focused on the written product rather than on the writing process (Harmer, 2007). Some of teaching and learning process of writing, for example, expect learners to write a composition in the classroom which is, then, submitted and corrected by the teacher and handed back on the next meeting. But, most of learners rarely check the corrected pieces of work they have received. The illustration shows that the limited time of classroom meeting makes the learners' need of exercises and direct feedbacks are impossible to be fulfilled. By using LMS the teaching and learning process is not only depend on the classroom meeting but also can be done outside the classroom, anytime and anywhere. So the learners' attention will not only be directed to the *what* but also the *how* of text construction.

RESEARCH METHODOLOGY
Research Design
In this research the researcher used the experimental research to measure whether the use of Learning Management System (LMS e-front) as media in teaching argumentative essay is effective or not. There are some experimental designs suggested by experts. In this study, *quasi experimental design* is used since it is impossible to assign the existing subjects randomly to group.

Research Variables. In this study, teaching argumentative essay by using Learning Management System is independent variable since it influences the teaching learning process and the result of the research in the form of the learners' writing achievement as the dependent variable.

Treatment. The two selected groups were taught in different ways. The experimental group was taught argumentative essay by using Learning Management System (LMS e-front) while the control group was taught without using LMS e-front with the

same materials. At the end of the experiment the two groups are post-tested.

The followings are the basic teaching procedure of the two methods.

ExExperimental Group (Teaching writing Argumentative essay using LMS e-front)	Control Group (Teaching writing Argumentative essay without using LMS e-front)
• Learners got pre-test in writing argumentative essay. • Discuss the definition and step to write argumentative essay in the class. • Practice to write argumentative essay based on certain topic by using LMS e-front.* • Learners' writing is given feedback by lecturer and commented by other learners.*	• Learners got pre-test in writing argumentative essay. • Discuss the definition and step to write argumentative essay in the class. • Practice to write argumentative essay based on certain topic in the class.* • Learners' writing is collected and corrected by the lecturer.*

The Subject of the Study
The subject of this study is the learners of STKIP PGRI Jombang in academic year 2013-2014. The samples of this study are learners of 2012 A and 2012 B which are available to be researched. 2012 A consists of 50 learners, while 2012 B consists of 40 learners.

Research Instrument
The instrument of the study to collect the data was test. Since the dependent variable of this research is the learners' writing, a writing test is administered to obtain the data. Harris (1969) mentions that there are two basic kinds of test instrument used to measure the four language skills of learners, i.e. the objective test and essay test. Based on Harris' opinion, the researcher considers applying the essay test in collecting the data of this research. In this study, the researcher used the essay items for try out, pre-test and post-test.

Pre-test. Pre-test is used to know the learners' basic ability in writing before the researcher gives some treatments. This test is given to both experimental and control group. The test consists of 1 question, which is writing an outline of argumentative essay based on certain topic.

Post-test. It consists of 1 question in essay forms. The learners were asked to write an argumentative essay based on certain topic such as education, social, politics,

entertainment, health, economy, technology, and sport.

Data Collection
In accordance with the research design of this study, the process of data collection generally done in this study is categorized into 3 steps or phases. Those are pre-testing, treatment process and post-testing. In this research, the writer uses essay test, because it enables the researchers to measure the effectiveness of the specific learning objective. Before the test is given to the respondent, it is made valid and reliable.

Technique of Data Analysis
The technique of analysis the data in this research used ANCOVA by using SPSS 20.00 for windows. Ancova is the combination between correlation and Anova. It measures the score of post test after ignoring the score of pre test. The score of pre test is assumed as the first situation or performance which illustrates the learners' difference ability.

RESULT OF THE STUDY
Data Analysis
There are some points that explained in data analysis, those are the description analysis of Pre-test score, the description of posttest score and analysis of covariance as describe below:

The Description of pre-test score. The descriptive statistic of learners' pretest both of experimental and control group presented in a table below:

Descriptive Statistics

	Teaching Method	Mean	Std. Deviation	N
Pretest Score	Without LMS	68.58	12.244	43
	LMS	63.50	9.543	50

The table of descriptive statistics shows that mean score of experimental group (in this case group which is taught writing by using LMS e-front) is 68.58 (s.d = 12.244) and the control group (in this case group which is taught without using LMS e-front) is 63.50 (s.d. = 9.543). It means that, group which is taught without using LMS e-front is

actually better than the group that is taught without using LMS e-front.

The Description of Post-test Score. The descriptive statistic of learners' posttest both of experimental and control group presented in a table below:

Descriptive Statistics			
teaching media	Mean	Std. Deviation	N
Without LMS e-front	71.05	8.968	43
LMS e-front	74.20	10.990	50

The table of descriptive statistics of posttest shows that mean score of experimental group (in this case group which is taught writing by using LMS e-front) is 74.20 (s.d. = 10.990). The increase of mean score from pretest mean score of experimental group is 10.7 or 14.42% while the mean score of control group (in this case group which is taught without using LMS e-front) is 71.05 (s.d. = 8.968) and the increase of the mean score is 2.47 or 3.48 %. The increase of the mean score of teaching reading by using LMS e-front is higher than the conventional method group.

Analysis of Covariance.
Tests of Between-Subjects Effects

Dependent Variable: posttest (learners' achievement)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1335.441a	2	667.720	7.337	.001
Intercept	6361.287	1	6361.287	69.901	.000
Media	500.943	1	500.943	5.505	.021
pretest	1105.541	1	1105.541	12.148	.001
Error	8190.366	90	91.004		
Total	501625.000	93			
Corrected Total	9525.806	92			

a. R Squared = .140 (Adjusted R Squared = .121)

Based on the table of Tests of Between-Subjects Effects it can be seen that the independent variable (in this case teaching media) finds an F-value of the effect of teaching method 5.505 and column labeled Sig the value is .021 where it is less than 0.05 (an alternative alpha level). It means that two groups both of experimental and control differ significantly.

In line pretest finds an F-value of the effect of pretest 12.148 column sig, the value is 0.01. This is less than 0.05, therefore the covariate is significant.

Hypothesis Testing

In the table of tests of between-subjects effects line teaching method shows that the value of F-value is 5.505 and the significant value is .021 which is less than .05 and the F-value is higher than F-table (3.94).Thus it can be concluded that both of experimental group and control group differ significantly. It means that the researcher hypothesis (H1) shows that there is a significant effect of learners' achievement who were taught writing by using LMS e-front the Ho is rejected.

DISCUSSION

In the statement of the problem, it was asked whether the learners who are taught writing by using Learning Management System (LMS e-front) have higher score in writing than those who are taught without using LMS e-front. The result revealed that the learners who are taught writing by LMS e-front have higher score than those who are taught without using LMS e-front.

Based on the result of the implementing teaching writing using (LMS e-front), there was influence to the learners' achievement in writing. This statement is supported by the opinion of Harmer (2007) which stated that not only product approach that should be considered in teaching writing, but also the writing process. Active learning are purposed to keep students' focus on

teaching and learning processes (Hartono, 2008:20) since in active learning model students do various activities (Silberman, 2010:9). They actively use their brain to learn new ideas, solving problems, and apply what they have learned. Those exist in the teaching-learning process by using Learning.

Management System (LMS) e-front. In teaching writing by using LMS e-front learners practiced the writing process especially in reflection and revision in which learner responded to each other's ideas in terms of language and content, gave suggestion to make changes and contributed to the success of finished product. By involving learners actively in designing and creating their own ideas and also analyzing and evaluating other's ideas increased learners' retention rates and improved their writing ability as illustrated by Dale (1969) in his cone of experience.

The use of LMS e-front as media of active learning model in teaching writing gives many benefits both for teacher and learner. Since writing is a long process it needs long time; LMS e-front helps teacher to save the time in delivering the material and also give the flexibility for learners to practice. Learners not only be up-to-date on course material but also assimilated the material so they can use and build on it. When learners knew that the writing course involves active learning, they would also recognize that they have to be active if they want to be success in the course. When learners learn actively, they retain more course content for a longer time and are able to apply that material in a broader range of contexts. From the research it was also found that there were some students are not actively involved in using LMS e-front. The major factor which causes this phenomenon is the limited access to internet.

CONCLUSION

Based on the result of the data analysis and discussion in the previous chapters, it shows that there is a significant difference between the mean scores of the learners in the control and the experimental groups. Therefore the gain score in the experimental group led to the rejection of the null hypothesis which stated the learners who are taught writing by using LMS e-front have higher score than those who are taught without using LMS e-front. In addition, Learning Management System (LMS e-front) can be an effective media in teaching writing especially in writing argumentative essay.

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