ENHANCING STUDENTS' ACTIVITIES LEARNING USING SELF-DIRECTED LEARNING MODEL BASED ON ICT

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Abstrak

Penelitian ini bertujuan untuk meningkatkan aktivitas belajar mahasiswa melalui penerapan model self-directed learning berbasis teknologi sehingga mahasiswa dapat memanfaatkan perangkat teknologi secara benar dan tepat. Penelitian ini merupakan penelitian penelitian tindakan kelas (Classroom Action Research). Penelitian dilakukan di Universitas Graha Nusantara Padangsidimpuan. Subjek penelitian adalah mahasiswa Program Studi Pendidikan Bahasa Inggris pada semester genap Tahun Ajaran 2018/2019 yang berjumlah 16 orang. Teknik pengumpul data yang digunakan adalah observasi. Aspek-aspek aktivitas belajar mandiri mahasiswa yang diteliti adalah (1) kemampuan mahasiswa dalam mempersiapkan proses belajar mengajar,(2) kemampuan mahasiswa dalam memecahkan masalah,(3)interaksi mahasiswa selama kegiatan proses belajar mengajar,(4) tanggung jawab mahasiswa, dan (5) motivasi dan kegairahan mahasiswa dalam proses belajar mengajar. Hasil penelitian menunjukkan bahwa pelaksanaan pembelajaran pada mata kuliah academic writing dengan menggunakan Model Pembelajaran self directed berbasis ICT dapat meningkatkan aktivitas belajar mahasiswa pada mata kuliah academic writing. Hal ini dibuktikan dengan adanya peningkatan persentase skor aktivitas belajar mahasiswa aktivitas belajar siswa pada siklus I dan meningkat pada siklus II. Model pembelajaran self-directed berbasis ICT dapat dikembangkan lagi untuk dapat diterapkan pada program studi lain di lingkungan Universitas Graha Nusantara Padangsidimpuan. Bagi penggunna pertama kali, perlu pelatihan yang lebih mendalam dari dosen dan juga operator serta aktif dalam memperbaharui informasi, materi kuliah, dan tugas begitu juga dalam melakukan manajemen sistem e-Learning sehingga dapat sejalan dengan kurikulum yang berlaku.

Kata Kunci: belajar mandiri, ICT, menulis akademik, aktivitas belajar.

1. INTRODUCTION

Education is an activity completed by learner to improve themselves both independently and in groups consciously. The main educational goal is the process of forming students towards changes in behavior such as intellectual, moral, and social. Dwi Siswoyo (2007) stated the success of the education process cannot be separated from the numerous factors that have an effect on it such as the purpose of education, students, educators, educational content, educational techniques, educational equipment, educational environment. innovative learning expected with a view to shaping the culture of students for independent learning within the education process or while working. Hermann Holstein (1984) argued that independent learning in the learning method is a necessity that is clearly to the future of the student in order that it is useful in society and family.

Through observational study in the English Language education department, the students' academic English Writing capabilities have not achieved good ability or even tend to be within the fairly or low category. And most students of the English language education program cannot perform learning independently.

Regarding the low ability of academic writing, Dahlan (2000) and Harmer (2003) stated that the low ability of writing is as a result of many factors, which include the initial ability of students (input), interest in learning, learning motivation, teacher ability (both mastery of material or material delivery), teaching materials (textbooks, dictionaries), teaching tools, and techniques or strategies or teaching patterns so that interactions and teaching and learning methods do not occur optimally and communicatively.

Bistari BsY (2010) stated that the teaching system was still monotonous, there have been no challenges, that there was no variety of learning, and the learning process did not create a competition's atmosphere among students that eventually brought the low writing ability of students in general.

Based on past researchers ' findings and experiences, it was discovered that: teaching in the academic writing course still utilizes traditional learning techniques or strategies where the teacher explains a concept and when it is completed, students hear, record and make an example according to instructions or guidelines of the teacher. The process of learning communication that occurs now has a tendency to be one-way communication (from teacher to students), rarely two-way communication occurs. Likewise, students rely heavily on teachers ' information and understanding and not on other teaching resources.

The student's work is only examined by the teacher and returned with the given value.

Thus in general, It can be said that the foundation problem of the low writing ability is influenced by students not yet applying the independent learning process. The utilization of technology for learning has changed the process "from school to anywhere, from cycle time to real time, from paper to online and from physical to network equipment" (Abdullah, 2009). Learning can occur in a classroom or at home or anywhere depending on students ' willingness. The application of this technology refers to an unlimited learning process as long as students want to do so. The present technology innovation in English learning would support attempts to achieve learning goals, using various techniques and approaches. Thus it is important to establish a positive approach to technology in order to accelerate the distribution of education and development through the use of new technology. (Harputra, 2018).

Lusy et al. (2018) investigated learning using technology learning is able to increase interaction and fun for student learning process, particularly when students learn English as a foreign language as new teaching methods, new devices, and facilities that match to their characteristics.

According to Gibbons (2002), Self Directed Learning is an increase in knowledge, expertise, achievement and self-development wherein individuals use many strategies in many situations at all times. Self-directed learning consists of how students learn every day, adapting to a rapidly changing situation and taking their own initiatives while a possibility does not occur or does not appear.

Biggs (2003) stated science and technology development will help to improve the independent learning abilities of individuals. The use of digital technology and devices enables individuals to develop independent learning abilities through a variety of activities and actual resources, such as participation in groups for online learning, reflective writing activities and online dialogue (Hiemstra, 1994).

Three most important areas in technology-based learning in the process of self-directed learning, namely (a) planning, in e-learning studying students still have the flexibility to choose the most comfortable place to participate in learning activities. unlike in class where time, place, specific and schedule of activities are arranged for classroom requiring students, e-learning can create learning space and determine the speed and accuracy of their own learning; (b) monitoring, some things can be directly felt through newbies in monitoring their learning. in contrast to classrooms where teachers can easily see whether students take note of or actively participate in class activities by looking at their physical indications such as facial expressions; and (c) evaluation, through e-learning evaluation can be performed as feedback. (Gibbons, 2002).

Based on the description above, the researcher has an interest in studies with the objective of enhancing student learning activities through the implementation of technology-based models of self-directed learning in order to allow students can use technology devices effectively and precisely.

2. RESEARCH METHOD

The method used in this study is classroom action research. an attempt to solve the problem, this research was conducted by carrying out a number of actions in the class consisting of two cycles, and each cycle lasted for an effective month. Each cycle consists the planning, action, observation, and reflection (Arikunto, 2007). The four components that were performed in several cycles sequentially. Class action research aims to improve the outcomes of reflection on previous actions which can be considered unsuccessful.

This research was conducted at the Teacher Training and Education Faculty at the English Language Education Study Program at Graha Nusantara Padangsidimpuan University. To obtain the data, this study was conducted for 2 months in the even semester of the 2018/2019 academic year. The research subjects were taken one class, there are 16 students of the English education study program at Graha Nusantara Padangsidimpuan University.

The data collection technique used is observation. The observation was conducted during teaching and learning process using a previously designed observation sheet. Observations were made on all learning process activities for both students and teachers. The factors of student self-directed activities studied had been (1) the students' ability to prepare for teaching and learning process, (2) the students' ability to resolve problems, (3) student interaction during the teaching and learning activities, (4) student responsibility, and (5) students' motivation and enthusiasm in the teaching and learning process.

The collected observation data are analyzed qualitatively. Qualitative data is obtained from non-test data, namely the observation guide sheet. Observational data are used to determine the extent of student activities in the learning process after implemented technology-based self-directed learning. The achievement of student learning activities in the learning process is analyzed by determining the average value calculated using the formula:

$$\text{Success rate} : \frac{\text{total score acquisition}}{\text{number of activity items}} \times 100\%$$

After the data that has been analyzed will be determined by frequency distribution within each category in the table below:

Table 1 Percent distribution for students'
activities learning

Value Range	Criteria
85% - 100%	Very active
75% - 84%	Active
65% - 74%	Enough
45% - 64%	Less
44%	Much less

Modification: Arikunto, 2007

The criteria for the success of student learning activities is if the percentage of students who have high (T) and very high (ST) learning activities is greater than the percentage of students who have to learn independence with moderate (S), low (R) and less (SR) qualifications in each cycle.

3. FINDING

This research was carried out in two learning cycles, each of which consisted of four stages, starting from the planning, action, observation, and reflection.

The implementation of learning with the self-directed e-learning model in the first and second cycles showed that student activity increased. The two-cycle learning process produces percentage data which are then compared to determine the increase in student learning activities.

The observation results of student learning activities in academic writing subjects in the first cycle showed that the average percentage of student activities was 62.73% in the poor category and had not reached the active criteria of expected action. The first cycle continued with the second cycle and went well. Of the 5 indicators of student learning activities observed, all indicators have achieved quite active criteria of 72.38%. Five indicators that have achieved the research success criteria are indicators of students 'ability to prepare teaching and learning processes at 76.37%, students' ability to solve problems by 71.35%, student interactions during teaching and learning activities at 72.27%, student responsibility in working on group and independent tasks 70.44%, and student motivation and enthusiasm in the teaching and learning process amounted to 71.48%. The results obtained are the average overall percentage of student attention in the second cycle increased to 72.38%. The following table is the attention percentage first cycle and second cycle.

Table 2 Percentage of student learning activities in First Cycle and Second Cycle
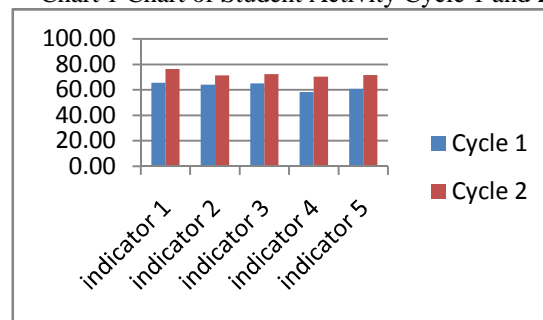
No	Indicator of Student Learning Activity	Cycle 1	Cycle 2
1	Student's ability to prepare the teaching and learning process	65.63	76.37
2	student's ability to solve problems	64.06	71.35
3	student interaction during teaching and learning activities	65.00	72,27
4	student responsibility in working on group and independent tasks	58.20	70,44
5	student motivation and enthusiasm in the teaching and learning process	60.74	71,48
	The average	62.73	72.38

Source: Primary Data

If presented in graphical form, as shown below.

Chart 1 Chart of Student Activity Cycle 1 and 2

Based on the results of research that has been done, each indicator of student activities learning has increased in each cycle. This showed that the self-directed learning model based can be an alternative learning model that can increase students' activities during learning. The average overall indicator of student activities in the first cycle reached 62.73% and increased in the second cycle to 72.38%. The increase in the average indicator cycle 1 to cycle 2 is 9.66%. Based on the results of the research that has been done, it can be concluded that the self-directed learning model based on ICT can improve student learning activities.

4. CONCLUSIONS

The implementation of learning academic writing using the self-directed learning model based on ICT can improve learning activities students of the English education study program of Teacher Training and Education Faculty at University of Graha Nusantara in the even 2018-2019 academic year. This was evidenced by the increase in the percentage of student learning activity scores by 9.66% from 62.73% in the first cycle and increased to 72.38% in the second cycle. Supported by research data that showed an increase in the observed indicators, namely the ability of students to prepare the teaching and learning process, students' ability to solve problems, student interaction during the teaching and learning activities, student responsibilities, and student motivation and enthusiasm in the teaching and learning process.

To improve the application of the self-directed learning model based on ICT, the suggestions

offered by the author, there are this learning model can be developed for a wider scope and can be applied to other study programs in the UGN FKIP and in all study programs at the UGN. The active role of admin and lecturer is needed to update information, lecture material, assignments and so on as well as in conducting e-Learning system management so that it can be in line with the applicable curriculum.

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