



Active Learning Model in Geography Learning in Senior High Schools Indonesia (SMA Negeri Kuantan Tengah District)

Yusri Nawita

Student of Gography Education Master Program,
Faculty of Social Science, Universitas Negeri Padang, INDONESIA
Email: yusrinawita@gmail.com

Abstract

This research was aimed to investigate and analyze the implementation of Active Learning model in Geography Learning in enior high schools in Indonesia (SMA in Kuantan Tengah District). The researcher employed a mixed method research, a combination of quantiatie and qualitative research method. The population of the research were all senior high schools in Kuantan Tegah District the is 3 senior high schools that were cosen through *Cluster Random Sampling*. Techniques of data analysis are(1) Quantitative analysis by using t testing. (2) qualitative analysis was following these steps: data selection and reduction, Data clarification, dapresentation, conclusionand verification. Based on the data analysis, in can be concluded : (1) The process of active learning model areintroducing the topics to the students, students were given time to search the materials from other references of they discuss with other peers about the given topics, teacher emphasize the explanation of the materials, dad finally, teacher conducted individual evaluation and give homeworks to students. (2)There was significant result obtained from learning using active learning model in Geography classroom in SMA Negeri in Kuantan Tengah District.

Keywords: Active Learning, Geography Learning

Introduction

From Indonesia is a developing country that has many goals yet to be achieved. One of these goals is improving the quality of human resources by paying more attention to education. According to Section 28 of the Indonesian Constitution of 1945, the national educational system is charged with ensuring that all Indonesians receive a good education designed to increase their competence in life skills, their responsibility, and their dignity as human beings (Suherman *et al*, 2011). Education is one of the determinants of sustainability and progress of the nation. Various government efforts are made in order to improve the quality of education in Indonesia. One effort to improve the quality of education in Indonesia is to develop the system of education in schools. Implementation consists of a series of planned and organized activities, including activities in the teaching and learning process in the classroom (Yuliana 2009).

Geography is one of the many disciplines studied by students starting from elementary school to college. At the elementary and junior secondary levels, geography integrates the scope of an integrated IPS, thus integrating with other social sciences such as history, sociology, and economics. When entering the upper secondary education the science of geography is studied separately into individual subjects. The number of materials and teaching and learning process in a little time but will actually make students feel saturated. Geography learning activities itself is often done with a one-way method, where the teacher becomes the only source of knowledge and the position of students into a passive listener who can only receive lessons given. Because with such methods teachers assume that less hours of lessons can be efficient.



So here teachers have to creatively create the right strategy so that students are motivated to always want to learn. Indeed, Buck dalam Mor & Brock (2017) provides a fascinating account of learning machines designed by Archimedes, Hero of Alexandria, Quintilian a first century Roman teacher and rhetorician, and others, to teach subjects from philosophical principles to gladiator skills. Our era is distinguished by the wealth of open and readily available information, and the accelerated evolution of social, mobile and creative technologies. These offer learners and educators unprecedented opportunities, but also entail increasingly complex challenges. Consequently, the role of educators needs to adapt from distributors of knowledge to designers for learning. Educators may still provide access to information, but now they also need to carefully craft the conditions for learners to enquire, explore, analyse, synthesise and collaboratively construct their knowledge from the variety of sources available to them. The call for such a repositioning of educators is heard from leaders in the field of technology-enhanced learning (TEL) and resonates well with the growing culture of design-based research in education. Yet, it is still struggling to find a foothold in educational practice. We contend the root causes for this discrepancy are the lack of articulation of design practices and methods in education, the lack of a culture of teacher-as-designer among practitioners, and the shortage in tools and representations to support such practices.

One of the commonly used teaching methods used by the eye teacher while teaching in the classroom is the conventional method or lecture with notes. Some of the advantages of the method are: Subject material can be completed on time in accordance with predetermined schedule, students have a note that can be used for self study, the teacher will give time for students to ask, answer questions asked by teachers and teachers will provide value especially for students who are active, there is no dependence between students. The situation if it continues will certainly adversely affect the results of learning geography because the results of learning is a benchmark of student success, and if the subject of geography more students are not complete than the ones thoroughly it can be said that students have not succeeded in following the learning process. Wahidmurni *et al* (2010) explains that a person can be said to have succeeded in learning if he is able to show a change in him. Such changes include in terms of ability to think, creativity, or attitude to an object. Therefore, to improve student learning outcomes teachers need to select learning strategies that can make students active and creative. Drawing on Greeno and Engeström (1987), this paper suggests that teacher professional development needs to be concerned with the social aspects of learning, distributed across individuals and events, and both meaningful to teachers' practice. Teacher learning, therefore, is not limited to formal professional development, but takes place in all the arenas in which the teacher participates: the classroom, the community of (student-) teachers, and the school environment (Borko in Joke Voogt, 2015)

To overcome these problems, learning models that can be applied to involve the participation of students in teaching and learning activities and student learning outcomes can be increased one way is to apply the learning model of active learning. The learning learning model emphasizes the independent student learning process or the students who construct their own understanding. The active learning process will help students find and build their own understanding of the subject matter not obtained from the lecture model. Active learning learning is one of the lessons developed from the theory of constructivism because it develops the cognitive structure to build its own knowledge through rational thinking (Rustaman *et al.*, in Karlina, 2004). In the field of learning design, the processes of research participatory research and action research have proved effective in the classroom while demonstrating a strong learning potential as a professional teaching development strategy (Craft & Mor in Elena *et al.*, 2017).

Method

Research method is an important factor to solve a problem and also determine the success of a research. According Sugiyono (2014) research method is basically a scientific way to get data with a specific



purpose and usefulness. In this research the method used is Mixed Method method, that is research method that combine between quantitative method and qualitative method. The population of this research is all state senior high schools in Kuantan Tengah subdistrict as many as 3 schools. Respondent sample is taken based on random sampling cluster. In accordance with the type of data to be searched in this research, the instrument used is test test to find out student learning outcomes, interview to the teacher of field study to know the process in learning geography. While the data that can not be collected by questionnaire and interview is done by observation and documentation. Data sources are primary data and secondary data. While the research technique is observation, test, interview and documentation. Data analysis techniques used to analyze this research are: (1) quantitative analysis using t test formula, that is to see the mean of student value. (2) qualitative analysis, according to the title and problem that the researcher proposed, the analysis technique used is qualitative analysis technique with the following paths: data selection and reduction, data classification, data presentation, conclusion and verification.

Results and Discussion

The process of Active learning model

Active Learning is meant that in the learning process the teacher must create an atmosphere in such a way that the student actively asks, questions, and puts forward the idea. Learning is indeed an active process of the learner in building his knowledge, not a passive process that receives only the teacher's lecture on knowledge. If learning does not provide an opportunity for students to play an active role, then the learning is contrary to the nature of learning. The active role of the student is crucial in the creation of a creative generation, capable of producing something for him/herself and others. This learning developer assumes that learning is an active process of assembling experiences to gain new insights. Students are actively involved in the process of learning to construct their own understanding. The process undertaken in the active learning learning model is the teacher introduces the topic and subject afterwards conveying the topics to be discussed in each student. Students are given a special time to search for material through other references or students can discuss with a classmate about the problems faced with respect to the material to be discussed. Students with teacher guidance to ask what problems or difficulties faced by students.. The teacher gives reinforcement to the informed material, the teacher gives a positive appreciation to every student who has completed his task by providing reinforcement related to the material discussed. And at the end of the learning the teacher holds individual student evaluations and gives assignments as homework.

Students learning outcomes using active learning model in Geography classroom in SMA Negeri Kuantan Tengah District

Students learning outcomes using active learning model in Geography classroom in SMA Negeri 1 Sentajo Raya

Based on the results of Descriptive data analysis of 28 students using learning learning model in the geography learning subjects obtained the total score of 2706, the average value of 75, the minimum score of 60, the maximum score of 93.33, the range of the score 33.33, the standard deviation of 7.45, 55.51 data variant, 70 mode values, many grade 6 and class length of 5.43. Selanjutnya trend distribution of geography learning results in SMA Negeri 1 Sentajo Raya Using Learning Learning Model above is described also in the following frequency distribution. Based on the results of the frequency distribution of data in the table above shows that as many as 5 respondents students (13.89%) are in the average class that is between the intervals 70.87-76.29. Then 14 students (38.89%) were below the average class where 13 respondents (36.11%) were in the interval 65.43-70.86 and 1 students were in interval class 60-65.42. Then there were 17 respondents (47.23%) in the data group above average, ie 3 classes of data each in class 76.30-81.72 there were 10 students (27,78%), at interval class 81.73- 87.15 there are 6 students (16,67%) and at interval of

87.16-92.59 class there is 1 student (2,78%) Based on the result histogram presented student learning result with learning model Active Learnings as follows.

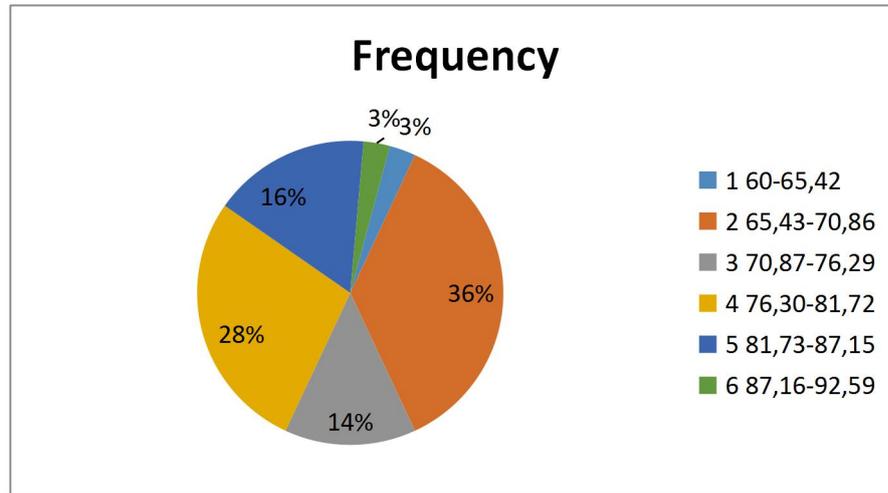


Figure2: Pie Chart of Students learning outcomes using active learning model in Geography classroom in SMA Negeri 1 Sentajo Raya

Students learning outcomes using active learning model in Geography classroom in SMA Negeri 1 Taluk Kuantan

Based on the results of descriptive data analysis of 28 students by using the active learning model in the geographic learning subjects obtained by the total score of 2593, the average value of 72.04 minimum score of 60, the maximum score of 90, the score range 30, the standard deviation of 8,72, 76,03 data variations, 67 mode values, multiple grade 6 and class length of 5.01. Furthermore, the trend of distribution of students' geography learning outcomes with Active Learning learning model above is illustrated also in frequency distributions as follows. Based on the results of frequency distribution data in the table above shows that as many as 2 respondents students (8.33%) are in the average class that is between the intervals 70.02-75.02. Then 24 students (58.33%) were below average class where 13 respondents respectively (36.11%) were in interval 65.01-70.01 and 8 student respondents (22.22%) were at class interval 60-65. Then as many as 12 respondents (33.33%) are in the data group above average, ie as many as 3 classes of data each in the class 75.03-80.03 there are 5 students (13.89%), the class 80.04-85.04 there are 3 students (8.33%) and at the classroom interval 85.05-90.05 there are 4 students (11.11%) Based on these results histogram presented the learning outcomes of students' learning geography Active Learning model with the following.

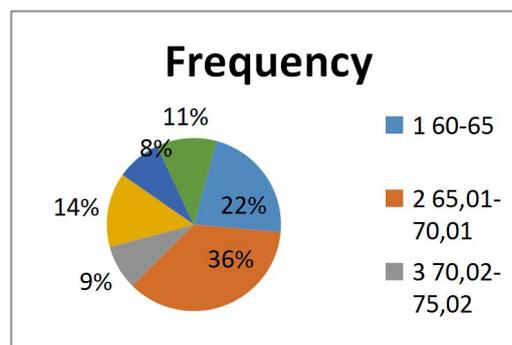


Figure 3: Pie Chart of Students learning outcomes using active learning model in Geography classroom in SMA Negeri 1 Teluk Kuantan



Analysis Requirement Test

Normality Testing

Based on the calculation of normality test conducted on the data with the results of learning geography of students using Active Learning learning model in the eyes of geography learning in SMA Negeri 1 Sentajo Raya and SMA Negeri 1 Taluk Kuantan District Kuantan Tengah. Results of processing above, it can be seen that the overall acquisition of significant variables is below 0.05, with the details are (1) Active Learning Model in SMA Negeri 1 Taluk Kuantan with significant numbers of $0.069 < \alpha 0.05$, (2) Active Learning SMA Negeri Model 1 Sentajo Rayadengan significant numbers $0.075 < \alpha 0.05$. Thus, all variables, ie geography learning results with derived from normal data distribution because the acquisition of significance $\alpha < 0.05$

Homogeneity Testing

In accordance with above hypothesis, if the value of F-count is greater than F-table which means the data group or each variance value is not homogeneous. Instead, accept the null hypothesis if the Fcount value is less than Ftable of 0.05 which means the normal homogeneous data group. The result of homogeneity analysis of group data seen on:

Conclusion

Based on the data analysis, in can be concluded : (1) The process of active learning model areintroducing the topics to the students, students were given time to search the materials from other references of they discuss with other peers about the given topics, teacher emphasize the explanation of the materials, dad finally, teacher conducted individual evaluation and give homeworks to students. (2)There was significant result obtained from learning using active learning model in Geography classroom in SMA Negeri in Kuantan Tengah District. This can be seen from the result of average analysis of student learning outcomes after the implementation of Active Learning method in geography learning subject in SMA Negeri 1 Sentajo Raya obtained Students'average learning outcomes of 75 when compared to the learning modelActive Learning in the perspective of geography learning in SMA Negeri 1 Taluk Kuantan obtained average value of 72. Furthermore, based on the results of hypothesis test obtained tcount value> ttable is $4.61 > 1.69$ at a significant level of 5% thus hypothesis (H1) "There is a Significant Result of Active Learning Model in Geography Learning on Student Results in SMA Negeri Kuantan Tengah District.

Reference

- Ahmed, A., Patrick, P & Karsten, L. (2017). The Effect of Universal Design for Learning (UDL) Application on E-learning Acceptance: A Structural Equation Model. *Jurnal Internasional*. Vol. 18, No. 6
- Bornok, S. And Mustafa. (2017). Development of Learning Devices Through Problem Based Learning Model to Improve Students Metacognition Skill at SMPN 17 Medan. *Jurnal Internasional*. Vol. 8, No. 24
- Elena, B., Iolanda, Garcia & Marc, F. (2017). A Co-Design Process Microanalysis: Stages and Facilitators of an Inquiry-Based and Technology-Enhanced Learning Scenario. *Jurnal Internasional*. Vol. 18, No. 6
- Huda, Miftachul. (2015). The Effect Of Learning Strategy Of Reading Aloud On Students' Achievement In The Subject Of Islamic Studies At Secondary School In Semarang. *Jurnal Internasional*. Vol. 3, No. 2
- Istarani & Ridwan, Muhammad. (2014). 50 Tipe Pembelajaran Kooperatif. Media Persada. Medan.
- Joke, V., Therese, L, *et al.* (2015). Collaborative design as a form of professional Development. *Jurnal Internasional*. Hal. 259-282



-
- Karlina, Ina. (2004). Pembelajaran Kooperatif (Cooperative Learning) sebagai Salah Satu Strategi Membangun Pengetahuan Siswa. Artikel. [Online] https://www.academia.edu/13188277/Pembelajaran_Kooperatif_Cooperative_Learning_sebagai_Salah_Satu_Strategi
- Kerlinger, Fred N. (2002). Asas-Asas Penelitian Behavioral. Yogyakarta: Gajah Mada University Press
- Micheal, M. (2010). The Effects Of Teams-Games-Tournaments On Achievement, Retention, And Attitudes Of Economics Education Students. EABR & ETLIC Conference Proceedings
- Mochele, A and Ketja, M. (2013). Implementation of inquiry-based learning in day-to-day teaching: a synthesis. *Jurnal Internasional*. Vol. 45, Hal. 770-795
- Muddah, Elis Yuliana. (2009). Penggunaan Metode Pembelajaran Kooperatif Model Think Pair Share untuk Meningkatkan Hasil Belajar Geografi Siswa pada Pokok Bahasan Unsur Fisik Wilayah Indonesia Kelas VIII B di MTS Negeri 1 Pacitan. *Jurnal. Fakultas Keguruan dan Ilmu Pendidikan*.
- Munandar, Utami. (2009). Pengembangan Kreativitas Anak Berbakat. Jakarta: Rineka cipta.
- Pebri, Martina. (2010). Pengaruh Pendekatan Open-Ended dan Kemampuan Berpikir Kreatif Terhadap Hasil Belajar Siswa dalam Pembelajaran Matematika Siswa SMK N 1 Bandar Seikijang. Tesis. Program Studi Teknologi Pendidikan Program Pascasarjana UNP.
- Sugiyono. (2014). Metode Penelitian Kombinasi (mixed methods). Alfabeta. Bandung.
- Suherman, A., Oediyani, S, *et al.* (2011). Active Learning to Improve Fifth Grade Mathematics Achievement in Banten. *Jurnal Internasional*. Vol.2, No. 2, Hal. 103-108
- Tampo, B., Arifin, A, & Muris. (2016). The Development of Discovery-Inquiry Learning Model to Reduce the Science Misconceptions of Junior High School Students. *Jurnal Internasional*. Vol. 11, No. 12
- Wahidmurni, Alifin Mustikawan, dan Ali Ridho. (2010). Evaluasi Pembelajaran: Kompetensi dan praktik. Yogyakarta. Nuha Letera.
- Yishay, Mor and Brock Craft. (2012). Learning design: reflections upon the current landscape. Association for Learning Technology. Conference Proceedings