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THE EFFECT OF LEARNING STRATEGIES AND LEARNING INDEPENDENCE ON LEARNING OUTCOMES IN LEARNING EVALUATION SUBJECT

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Abstract. *This study aims to find out and stress: (1) differences in learning outcomes between those taught with collaborative learning strategies with competitive learning strategies, (2) differences in student learning outcomes with different learning independence, and (3) interactions between learning strategies and independence learning about learning outcomes The research instrument is a test used to obtain learning outcomes and questionnaires to obtain data on learning independence. The analysis technique is two-way Anava at significance* $\alpha = 0.05$. *The results showed: (1) the average learning outcomes of students taught with collaborative learning strategies* $\overline{X} = 28.15$ *higher than those taught with competitive learning strategies* $\overline{X} = 26.92$, *with* $F_{count} = 29.57 > F_{table} = 3.968$, *(2) the average student learning outcomes with high learning independence* $\overline{X} = 29.93$ *is higher than low learning independence* $\overline{X} = 25.94$ *with* $F_{count} = 4.43 > F_{table} = 3.968$, *and (3) there is an interaction between learning and independence learning strategies towards learning outcomes with* $F_{count} = 7.18 > F_{table} = 3.968$.

Keyword: Learning Strategies, Learning Independence, Learning Outcomes

INTRODUCTION

There are many interrelated factors that determine the success of learning. These factors are: student educators, curriculum, teaching, and the environment. The task of educators is to create a learning atmosphere that can make students always learn well and be excited. Such learning atmosphere will have a positive impact on achieving optimal learning outcomes. The application of appropriate learning strategies determines the effectiveness and efficiency of learning. As an educator, you need to know learning strategies. By knowing the learning strategy, educators are expected to

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be able to deliver teaching materials with various variations so that learning objectives can be achieved more easily.

Furthermore, the characteristics of students who are factors that must be considered include motivation, learning independence, interest, initial ability, learning style and so on. The researcher focused on the characteristics of students in the learning independence variable. The learning independence of students as internal factors needs to be considered and considered, because this will affect learning outcomes. This is supported by the results of Saefullah, Siahaan and Sari (2013), Sundayana (2016) and Rijal and Bachtiar (2015).

The selection of appropriate learning strategies is needed and must be adapted to the independence of learning, because learning the teaching material of the Evaluation Course Learning is quite dense and requires learning independence in finding other sources. Therefore, the independence of learning is one component that must be considered carefully by educators in identifying the abilities possessed by their students who will help in determining the material, strategies, methods and the right media to use. This needs to be done so that the learning delivered can attract attention and every second that takes place in the learning activities carried out will be meaningful and not boring.

LITERAURE REVIEW

Learning outcomes are obtained from an inseparable assessment of the overall implementation of education. The basic assumption is that the optimal teaching process enables optimal learning outcomes. The greater the effort to create the conditions of the teaching process, the higher the results or products of the teaching. Djamarah and Zain (2002) explain that learning outcomes are students' mastery of the material / subject matter that has been given when the teaching process takes place.

Gagne and Briggs in Sudjana (2002) suggest that learning outcomes can be grouped into five categories, namely intellectual skills, cognitive strategies, verbal information, motor skills and attitudes. in this case the learning outcomes are obtained in the form of knowledge and skills. Rohani and Ahmadi (2005) say that the assessment of learning outcomes aims to see the learning progress of students in terms of mastering

the teaching material that has been studied in accordance with the objectives set. The goal is the target or object to be achieved.

The goal or object of evaluating learning outcomes is a change in behaviour that includes the fields of cognitive, affective and psychomotor in a balanced manner. These aspects should be expressed through the assessment. Thus, it can be known which behaviour has been mastered and which behaviour has not been mastered. Learning outcomes are achievements achieved due to the conscious effort made to get change, both in the form of knowledge, skills and attitudes.

Seels and Richey (1994) explain that learning strategies are specifications for selecting and sequencing events and learning activities. Learning activities include presenting material, giving examples, giving training, and giving feedback. In order for learning objectives to be achieved optimally, all activities must be regulated by considering the characteristics of students, the media, and the situation around the learning process.

Gagne and Briggs (1979) say that learning systems are a set of events that affect students so that the learning process occurs. A set of events may be carried out by the instructor so that it is called learning, it may also be done by the students themselves by using books, pictures, television programs or a combination of various media, both by the teacher and by the students themselves, the activity must be systematically planned to be called learning activities.

Dick, Carey and Carey (2005) say that learning strategies contain five main components, namely: (1) preliminary learning activities, (2) delivery of information, (3) student participation, (4) tests, and (5) follow-up activities. Suparman (2012) defines learning strategies as a combination of (1) the sequence of instructional activities, (2) instructional methods, (3) instructional media, and (4) time spent in the learning process. The two definitions above in principle emphasize more on the component aspects and learning procedures.

The learning strategies studied in this study are collaborative learning strategies and competitive learning strategies. Jonassen (1996) defines collaborative learning as a small group learning in which students work together to maximize their own learning outcomes and the learning outcomes of other group members. The collaborative learning process is not just working together in a group but the emphasis is more on a learning

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process that involves the process of communication as a whole and fairly in the classroom.

Gunawan (2004) states that there are five important elements that must be present in collaborative learning, namely: (1) Positive interdependence namely (feeling of togetherness, (2) Face-to-face or face-to-face interactions that are mutually supportive (mutual help, mutual respect, congratulations and celebrating mutual success, (3) Individual and group responsibility for learning success, (4) Interpersonal communication skills and communication in a small group (communication, trust, leadership, decision making and management and conflict resolution), and (5) Processing in groups (reflecting on their function and ability to work together as a group and how to be able to perform better).

Davis (1993) states that the main characteristics of collaborative learning are: (1) Students work in teams to master subject matter, (2) Teams or groups are formed varying from students who have high, medium, and low academic performance (3) The team consists of members that vary in terms of gender, and race, and (4) Reward systems are group oriented, not individual.

Gunawan (2004) describes the steps of collaborative learning, namely: (1) Initiation and apperception that aim to invite and focus students' attention, (2) Formation of study groups, (3) Completion of tasks in groups, and (4) Exposure or percentage of assignments.

Competitive learning strategies are a type of learning strategy in which students learn and complete their tasks individually or independently. This type of learning is actually a type of learning that is usually done in the teacher so far. It is said to be competitive because of its emphasis on individual reward systems. The learning background is the class and the students are given direction, explanation and assignment by the teacher then they do it individually without any direct interaction with their classmates.

Psychologically, competitive learning takes place in the classroom as a reflection of the principle of individuality. Rohani and Ahmadi (2005) explain the principle of individuality in the context of learning as follows: each individual has different traits, talents and abilities, each individual has a way of learning in his own way, each individual has a different special interest, each individual has a background (family) is

different, each individual needs special guidance in accepting lessons taught by the teacher according to individual differences and each individual has a different rhythm of growth and development.

Nasution (2000) explains how to adjust individual learning where competitive nuances take place, namely, students receive assignments that are completed according to each other's pace, students are given additional assignments, students do things according to their interests and abilities. The goal of competitive learning as revealed by Johnson and Johnson (1997) is to maximize the academic performance of each student in order to achieve the highest possible achievement that can only be achieved by one or several students only. Schmuck & Schmuck (2000) stated that in order to achieve that goal, students were encouraged to compete with the assumption that their classmates were rivals who had to be defeated. Opportunities to compete individually can provide incentives and excitement for classroom activities, whether competition is to get prizes and praise or for mere satisfaction.

Regarding the implementation of competitive strategies, Johnson and Johnson (1997) state that the application of competitive strategies in schools is based on several myth-like assumptions, namely: (1) Our society currently lives in a very competitive situation and students must be educated to compete so that they can survive in competitive situations, (2) achievement, outstanding performance, the emergence of great leaders, encouragement, ambition, and motivation are very dependent on how far someone competes with others, (3) competition can build strong character and strengthen life in the real world, (4) Students prefer the atmosphere of competition, and (5) Competition can increase self-confidence and self-esteem.

Johnson and Johnson (1997) explain the steps of competitive learning, namely: (1) Submission of teaching materials, (2) Provision of individual assignments, (3) Completion of tasks, (4) Examination of task results.

Independence of learning is a unity of concepts namely independence and learning. Independence is a situation where a person has a competing desire to advance for the good of himself, is able to take decisions and initiatives to overcome the problems faced, has confidence in doing his tasks, and is responsible for what he does (Egok, 2016).

Independence is a state of being able to stand alone without relying on other people, able to socialize, be able to carry out activities on their own, can make their own decisions in their actions, can empathize with others. Furthermore, Seifert and

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Hoffnung, as quoted by Egok (2016), that independence or autonomy is the ability to control and regulate one's own thoughts, feelings and actions freely and try to overcome feelings of shame and doubt.

Independence of learning is a process in which students control their own learning process and the purpose of the learning. Independence of learning is the activity of awareness of students to want to learn without coercion from the surrounding environment in order to realize accountability as a student in facing learning difficulties. Learning independence is related to ongoing learning activities driven more by self-will, self-choice and own responsibility of learning, learning independence is also related to the driving force of intensive, directed and creative learning activities.

METHODOLOGY

This research was carried out in the Islamic Religious Education Study Program at the Faculty of Tarbiyah and Teacher Training at UIN SU Medan. The method used is a quasi-experimental method with a 2 x 2 factorial design. The population of the study was all students of Semester V Academic Year 2018-2019 which were spread in 6 classes. The sampling technique is used cluster random sampling. This technique was chosen because what was sampled from the population was the number of classes not the number of students in the population. Instruments and data collection techniques in research are tests and questionnaires. The test is conducted to collect learning outcomes data while the questionnaire is to capture data on learning independence. Hypothesis testing is done by two-way analysis of variance (ANAVA).

FINDINGS AND DISCUSSION

The results of the study show: (1) the average learning outcomes of the Learning Evaluation course taught with collaborative learning strategies are 28; mode = 29.76; median = 28.5; variance = 16.52; standard deviation = 4.06; highest score = 36; and the lowest score = 20, (2) the average learning outcomes of the Evaluation Learning subject taught with competitive learning strategies obtained the average price is 26.92; mode = 26.3; median = 26.81; variance = 15.02; standard deviation = 3.87; highest score = 34; and the lowest score = 19, (3) the average learning outcomes of the Evaluation Learning subject with high learning independence taught by collaborative learning strategies and

competitive learning strategies are = 29.93; mode = 30.15; median = 30; variance = 10.15; standard deviation = 3.18; highest score = 36; and the lowest score = 23, (4) the average learning outcomes of the evaluation learning subject with low learning independence is 26; mode = 25.73; median = 25.82; variance = 13.02; standard deviation = 3.60; highest score = 34; and the lowest score = 19, (5) the average learning outcomes of the evaluation learning subject taught with collaborative learning strategies and high learning independence is 32.36; mode = 31.5; median = 32.25; variance = 6.55; standard deviation = 2.55; highest score = 36; and the lowest score = 28, (6) the average learning outcomes of the Evaluation Learning subject taught with a collaborative learning strategy and low learning independence is = 26; mode = 25.5; median = 25.66; variance = 8.02; standard deviation = 2.83; highest score = 31; and the lowest score = 20, (7) the average learning outcomes of the Evaluation Learning subject taught with competitive learning strategies and high learning independence are 28; mode = 28.5; median = 28.25; variance = 8.47; standard deviation = 2.91; highest score = 34; and the lowest score = 23, and (8) the average learning outcomes of the Evaluation Learning course taught with competitive learning strategies and low learning independence are 26.04; mode = 25.63; median = 25.79; variance = 16.75; standard deviation = 4.09; highest score = 34; and the lowest score = 19.

Testing the first hypothesis is the learning outcomes of the Evaluation course learning that is taught with collaborative learning strategies is higher than competitive learning strategies proven empirically. This is based on the factorial ANAVA 2 x 2 calculation obtained F_{count} = 29.57 while the F_{table} value = 3.96 for dk (1.76) and the real level α = 0.05. It turns out that the value of F_{count} = 29.57> F_{table} = 3.96 so that the hypothesis testing rejects Ho.

Testing the second hypothesis is the learning outcomes of the Evaluation course. Learning with high learning independence is higher than students with low learning independence proven empirically. This is based on the factorial ANAVA 2 x 2 calculation obtained F_{count} = 4.43 while the F_{table} value = 3.96 for dk (1.76) and the real level α = 0.05. It turns out that the value of F_{count} = 4.43> F_{table} = 3.96 so that the hypothesis testing rejects Ho.

Testing the third hypothesis is that there is an interaction between learning strategies and learning independence in influencing the learning outcomes of the Evaluation Learning Subject of students is empirically proven. This is based on the

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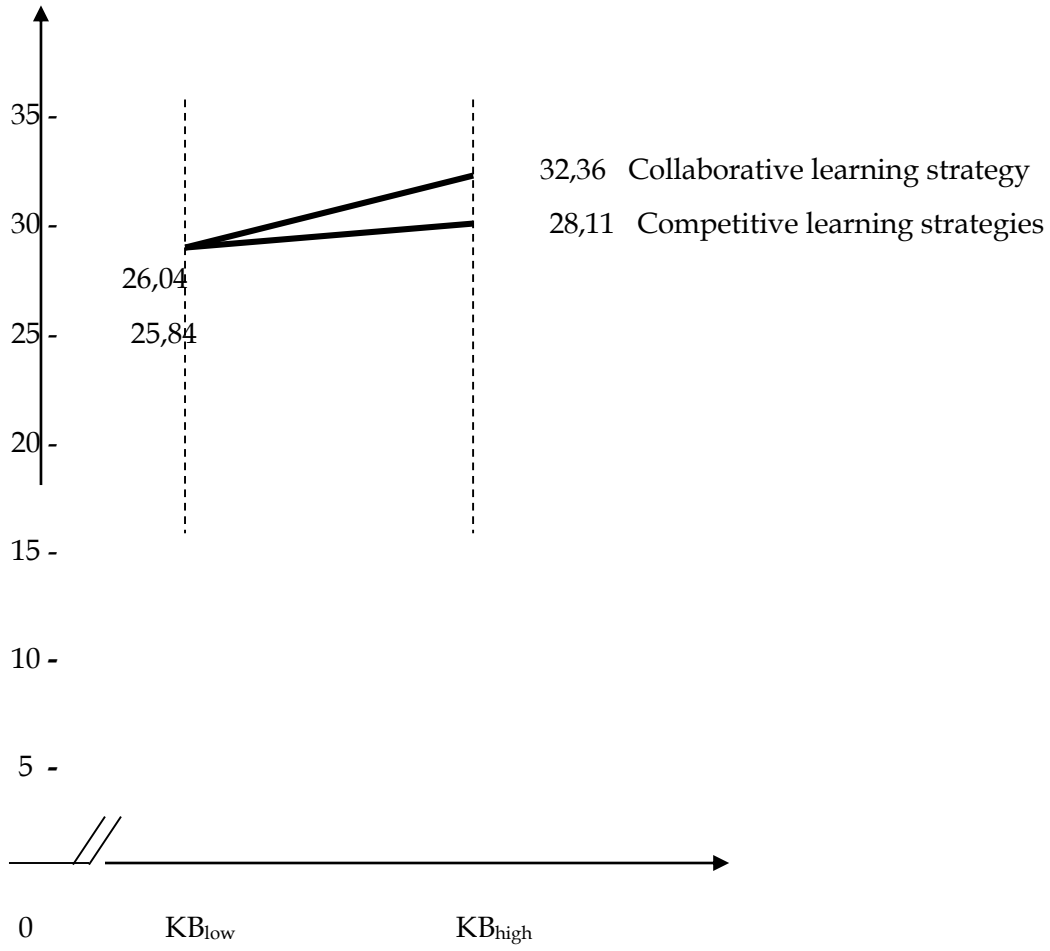
factorial ANAVA 2 x 2 calculation obtained F_{count} = 7.18, while the F_{table} value = 3.96 for dk (1.76) and the real level α = 0.05.

The interaction between learning strategies and learning independence in influencing learning outcomes can be seen in Figure 1 below:



Picture 1. Interaction of Learning Strategies and Learning Independence

Overall the average learning outcomes of the Evaluation Learning course taught with collaborative learning strategies ($\overline{X}$ = 28.15) are higher than those taught with competitive learning strategies ($\overline{X}$ = 26.92). This shows that collaborative learning strategies are proven to be able to effectively improve overall learning outcomes for groups of students with high learning independence and low learning independence.

These findings indicate that collaborative learning strategies are a strategy in learning in the form of study groups that work together. Therefore in collaborative learning interactions, cooperation and mutual need occur among the members of the study group. The measure of success is determined based on the extent to which the learning group reaches the target. In this activity, collaboration, personal responsibility and mutual support are needed because the success of the group is determined by the success of the individuals involved in it.

Meanwhile, competitive learning strategies emphasize personal effort to achieve predetermined goals. The interaction between friends is very lacking and each individual is oriented towards achieving maximum results. The scoring and reward system is a reference to determine one's winning loss in achieving the set target.

If it is noted further that in collaborative learning strategies the average learning outcomes with high learning independence ($\overline{X}$ = 32.36) are higher than those of students with low learning independence ($\overline{X}$ =25.84). Whereas in competitive learning strategies, the average student learning outcomes with high learning independence ($\overline{X}$ = 28.11) are higher than the learning outcomes of students with low learning independence ($\overline{X}$ = 26.04).

These findings indicate that learning independence is significant enough to differentiate student learning outcomes, where student learning outcomes with high learning independence are taught both by collaborative learning strategies and competitive learning strategies better than student learning outcomes with low learning independence. The role of learning independence with the success of students in learning is very close and inseparable. The higher the independence of learning of a student, the greater the effort he will make to achieve successful learning

CONCLUSION

The conclusions of the research results are as follows: (1) there are differences in learning outcomes Evaluation subjects learning between those taught with collaborative learning strategies with competitive learning strategies, (2) there are differences in learning outcomes Evaluation Learning subjects with different learning independence,

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and (3) interaction between learning and independence learning strategies for learning outcomes Learning Evaluation subjects.

The recommendations given in connection with the findings of the study as following: (1) the instructor as a learning designer is advised to pay attention to the characteristics of students in threatening learning so that the teacher can determine the choice of learning strategies that are more appropriate to implement because the learning strategies and characteristics of students are a component can determine and influence learning outcomes, (2) instructors in learning activities need to implement collaborative learning strategies in learning, because collaborative learning strategies provide higher learning outcomes compared to competitive learning strategies, and (3) other researchers to implement collaborative learning strategies and competitive learning in other fields of study and not only in the cognitive domain.

BIBILIGRAPHY

Davis, A. *Colaborative Learning*. http://www. wcer.wisc.edu/archie/ cli/cl/ doingclk/DCL1.asp. 1993.

Dick, Walter dan Carey, Lou. *The Systematic Design of Instruction. Fouth Edition*. New York: Harper Collin College Publisher, 2005.

Djamarah, Syaidul Bahri dan Zain, Ahmad. *Strategi Belajar Mengajar*. Jakarta: Rineka Cipta, 2002.

Egok, Asep Sukenda. *Kemampuan Berpikir Kritis Dan Kemandirian Belajar Dengan Hasil Belajar Matematika.* Jurnal: Pendidikan Dasar Volume 7 Edisi 2 Desember 2016.

Gagne, Robert .M. dan Briggs, Lislee .J.. *Principles of Instructional Design*. New York: Holt Rinehart and Winston, 1979.

Gunawan, Adi. W. *Genius Learning Strategi*. Jakarta: Grasindo, 2004.

Hill, S. dan Hill, T. *The Collaborative Classroom, A Guide to Cooperative Learning.* Armadale Vic: Eleanor Curtain Publishing, 1996.

Johnson, D. W. dan Johnson, F.P. *Joining Together, Group Theory and Group Skills.* Boston: Allyn and Bacon, 1997.

Nasution, S. *Dikdaktik Asas-Asas Mengajar*. Jakarta: Bumi Aksara, 2000.

Rijal, Syamsu dan Bachtiar, Suhaedir. *Hubungan antara Sikap, Kemandirian Belajar, dan Gaya Belajar dengan Hasil Belajar Kognitif Siswa.* Jurnal: Bioedukatika, Volumen 3 No. 2 Desember 2015.

Rohani, Ahmad dan Ahmadi, Abu. *Pengelolaan Pengajaran*. Jakarta: Rineka Cipta, 2005.

Saefullah, A., Siahaan, P., dan Sari, I. *Hubungan Antara Sikap Kemandirian Belajar Dan Prestasi Belajar Siswa Kelas X Pada Pembelajaran Fisika Berbasis Portofolio.* Jurnal: Wahana Pendidikan Fisika 1 Februari 2013.

Schmuck, R.A. dan Schmuck, P.A. *Group Processes in the Classroom*. Dubuque, Iowa: WM. C. Brown, 2000.

Seels, Barbara B dan Richey, Rita. C. *Instructional Technology; The Definition And Domains of The Field*. Washington: AECT, Alihbahasa: Dewi S. Prawiradilaga, Raphael Rahardji dan Yusufhadi Miarso. Jakarta: Universitas Negeri Jakarta, 1994.

Sudjana, Nana. *Dasar-Dasar Proses Belajar Mengajar.* Jakarta; Sinar Baru Algensindo, 2002.

Sundayana, Rostina. Kaitan antara Gaya Belajar, Kemandirian Belajar, dan Kemampuan Pemecahan Masalah Siswa SMP dalam Pelajaran Matematika, Jurnal: Mosharafa Pendidikan Matematika STKIP Garut Volume 8, Nomor 1, April 2016.

Suparman, M. Atwi. *Desain Instruksional Modern Panduang Para Pengajar Dan Inovator Pendidikan*. Jakarta: Erlangga, 2012.