

Implementation of Student Teams Achievement Divisions in Financial Management Course to Increase Students' Enjoyment and Students' Academic Achievement

Laurentius Saptono¹, Budi Eko Soetjipto²

¹Lecturer at Accounting Education Study Program, Sanata Dharma University, Indonesia
And Graduate Student at Universitas Negeri Malang, Indonesia

²Lecturer at Faculty of Economics, Universitas Negeri Malang, Indonesia

Abstract: *This research was aimed to find out the implementation effect of Student Teams Achievement Divisions (STAD) method on financial management course to students' enjoyment and achievement. This research was quasi experimental research. The research was conducted in Accounting Education Study Program of Sanata Dharma University at even semester on academic year 2015/2016. The participants were divided into two classes. The first class was the class that got the treatment, while the second class was the control class. The result of the study showed that there was an increment of students' enjoyment level and student's achievement in the class which implemented STAD method.*

Keywords: *Quasi experimental research, Students' enjoyment level, Students' achievement*

I. Introduction

A lecturer has a definite responsibility to conduct some educational activities. These activities are namely conducting effective teaching, auditing and developing curriculum, creating pedagogical innovations and its applications in class, developing learning materials, conducting research, etc. (Rover, 2007). Speaking of these activities, creating pedagogical innovation seems difficult to do by lecturers. However, lecturers need to leave behind their old assumptions and beliefs and bring them to the new circumstances which may be significantly different as they previously assume and believe. Changing mindset of learning and at the same time demanding lecturers to learn more how to carry out learning activities in the classroom are highly required to overcome this situation.

Some of pedagogical innovations possibly done by lecturers are developing various learning techniques, monitoring continuously students' development, and creating learning circumstances that allow students to improve themselves (Rover, 2007). While developing learning techniques, shall lecturers direct to the active learning for students in the classroom. Students are granted by many opportunities to actively involve in their own learning instead of only attentively listen to the lecture. To actualize this, therefore, lecturers need to create new circumstances that allow students to take part to their own education by having a number of activities to do (Felder and Brent, 2003).

In doing some learning innovations, lecturers do not need to be pessimistic. According to Schug et al. (1984), generally students want to take part in their lecturers' learning strategies and be actively involved in their learning process. Several education theories also believe that non-traditional learning strategies are perceived to be more useful for students. There are some forms of non-traditional method, such as cooperative learning which it is not only directing students to be more interested in the learning subject, but also helping them to develop social aspects and be more challenged to be positively contributed to the society (Dawood, 2006).

Cooperative learning has been popular nowadays to discuss and has become the most utilized learning strategy for more than three decades. Cooperative learning has often becomes research topic in education (Adams, 2013). Theoretically, this learning model, cited by Hwang et al. (2005), was originally based on Vygotsky's view which stated that at the beginning a man learns from person-to-person or in a social interaction, and then internalizes all the knowledge he has. Its basic premise is in the real world, people will work hand-in-hand with others or in teams/groups to solve the problems. Therefore, instructional design in cooperative learning is performed structurally and systematically in which every person will cooperate in small groups in order to achieve the same goals (Davidson and O'Leary, 1990). According to Arronson and Goode (1980), the pioneers of cooperative learning technique development, by learning cooperatively individuals will have interpersonal relationship and social creativity which they really need in the workplace. In cooperative learning, all group members are able to learn together through person-to-person interactions and it eventually gives impacts for them to perform better as individuals (Johnson et al., 1991).

Cooperative learning has some characteristics and strategies of its implementation in the classroom, namely: positive interdependence, face-to-face interaction, individual accountability/individual and group responsibility, social skills (leadership, decision-making, trust-building, communication, and conflict management skills), and group processing (Slavin, 1980; Slavin, 1987; Cohen, et al., 2004; Adams, 2013; Yeung, 2015). In practice, students are divided into small groups with various members to learn the given information and solve the problems or a series of common goals together (Slavin, 1991). Supporters of this strategy believe that when cooperative learning is well-conducted, it has potentials as well as alternatives to tracking, a means to mainstreaming, a means of improving race relations, a solution to the problems of students at risk, a means of developing pro-social behaviour, and a method for increasing achievement (Guyton, 1991). Empirical evidence revealed that a student who was engaged in cooperative learning showed there was a decrease in long-term retention and improve critical thinking skills (Guyton, 1991). Besides, it affected to better students' behaviour towards school and learning materials, improving students' self-esteem and students' ability to cooperate with others (Slavin, 1990).

Cooperative learning research has identified the jigsaw, learning together, student teams achievement divisions (STAD), teams-games-tournaments, academic controversy, and the most commonly utilized cooperative learning strategies (Adams, 2013). Among those cooperative learning models, STAD stands out due to three main reasons as follow (Yeung, 2015): first, this strategy is cohesively embedded on basic theories of psychology, political science, sociology, economics, anthropology, and social science (Slavin, 1980; Slavin, 1987; Cohen, et al., 2004); second, this learning strategy is widely conducted and compared to other strategies, the most result showed that STAD is more prominent and advantageous in terms of generalization, immensity, and application (Armstrong and Palmer, 1998; Ghaith, 2002); third, most educators, even the researcher who is an educator, consider STAD as a learning method that is highly applicable, handy, and consistent in philosophies and teaching practices (Hertz-Lazarowitz and Miller, 1995). In other words, STAD is grounded on theory, research-driven, pragmatic, and compatible with the existing learning practices.

STAD is a cooperative learning strategy in which groups of four works within their groups to master a lesson presented by the teacher. Students take individualized quizzes, which are compared to past performances, and then team scores are put together based on the extent to which the students in the group meet or surpass past performance (Slavin, 1995). Teams that meet the appropriate criteria may earn some kind of reward from the teacher (Adams, 2013). Therefore, STAD has some advantages (Slavin, 2008), such as: a) students work together towards the same objectives by upholding group's norms; b) students help and motivate each other to succeed together; c) every student actively acts their role as pair tutor to enhance the success of the group; d) students' interactions will improve in line with the improvement of students' abilities to argue or discuss. Nevertheless, there are some STAD disadvantages, such as: a) students need more time so that it is difficult to catch up with curriculum target; b) lecturers need more time so that it is burdensome to apply it in the classroom; c) it requires lecturers' certain skills so that not all lecturers are willing to conduct cooperative learning; and d) it requires students' certain behaviours, e.g. cooperative nature of behaviour.

Slavin recognized through his research an increase in mean scores through the use of STAD (Adams, 2013). Research studies in the use of STAD as a teaching technique was applied with great success in various research projects (Vaughan 2002; Slavin, 1980; van Wyk, 2010). Previous research on the application of STAD reported significant increases in participants' knowledge about life skills and perception of their competence to achieve the goals they have set (Zenginobuz and Meral 2008; Bernaus and Gardner 2008). Nichols (1998) has also reported significant changes in social responsibility, goal knowledge and social interest, as a result of implementing an abbreviated version of IOWA Test of Basic Skills. This study replicated and extended these results to include students' performance in team-learning (demonstrations/role play) skills that are very popular among students and are widely used in Geometry. Van Wyk (2010) in his paper reported the impact of a STAD on students' performances in economic literacy. The students who participated in the experimental group demonstrated better knowledge about economic literacy compared to the control group of this study. In Indonesia, many empirical research findings revealed the effectiveness of STAD in classroom learning. For instance, it improved the liveliness of learning on Geography course of high school students (Putro, 2011) and students' learning outcomes (Utomo, 2012), improved mathematical concepts of vocational high school students (Wahyuli, 2011), improved learning outcomes on Accounting course of high school students (Wati, 2011; Yulaika, 2011) and students' activities in Accounting learning process (Yulaika, 2012), improved students' soft skills and hard skills (Sinarwati, 2014).

This research was aimed to find out the implementation effects of learning model STAD in order to improve students' enjoyment and students' achievement on financial management course with the concepts of long-term investment valuation as the material. This material is considered important mastered by students since long-term investment required substantial funds and takes a long time to return the invested funds. The fallacy of long-term investment will result to huge impacts on the investor both in short term and long term. Principally, long-term investment shall provide present value from cash inflows which is greater than initial

investment/outlay. For researcher, conducting this research is considered essential since it gives new insights on whether non-traditional lecturing strategy, such as STAD, is contributively to improve more on students' enjoyment and students' achievement compared to traditional lecturing strategy. This research is a form of researcher's effort to conduct lecturing task which is expected to create enjoyment for students in class and challenge students to develop both their academic and social aspects.

II. Research Method

Research design

The design used in this study was the quasi experimental research. The study involved two groups. One group (class A) was taught in a more traditional manner using lectures and note taking as its main teaching strategy while the other group (class B) was taught in a more non-traditional way using STAD as its focus. Test scores and survey results were taken from both groups and the findings were recorded.

Population and sample group

The population of the study was all the students studying Financial Management in Accounting Education Study Program, Faculty of Teachers Training and Education, Sanata Dharma University. 82 students who took Financial Management at even semester on academic year 2015/2016 were taken as a sample study. They were distributed into two classes evenly (A and B), class A consisted of 42 students and class B consisted of 40 students. These students were divided into two groups one was called control group and the other was experimental group based on purposive sampling techniques. Generally, both classes had almost same characteristics. Therefore, researcher decided to choose class B as the class that got the treatment and class A as the control class. The implementation of STAD method was on materials of valuation concept of long-term investment that they usually learned in chapters partially. This research is expected to give many benefits to the students' enjoyment level and students' understanding on financial management lecturing.

Data collection and data analysis technique

Data collection was done by using two methods: tests and questionnaires. Tests were done at the beginning and the end of the lecturing activity in the forms of pre-test and post-test in both classes (treatment class and control class). Meanwhile, questionnaires were given also at the beginning and the end of the lecturing activity. Questionnaires of this research adapted from Dawood (2006) were used to discover students' enjoyment level. The test scores and questionnaires' answers from both classes were compared later. Data analysis techniques used was independent sample t-test.

III. Research Findings

Data collection for students' enjoyment and students' achievement were done at the beginning and the end of the learning, both class which got the treatment and control class. The collected data at the end of the lecturing activities was aimed to investigate the research findings of both classes and specifically used as an evaluation tool to compare the implementation effectiveness of learning model on treatment and control class. The findings at the beginning and the end of learning activities are presented below.

3.1. Description of student's enjoyment and students' achievement

3.1.1. Initial conditions

Table 1: Descriptive statistics of students' enjoyment level

Class	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Class A	42	13.00	20.00	33.00	24.3095	3.67250	13.487
Class B	40	16.00	16.00	32.00	22.9500	3.76863	14.203
Valid N (list wise)	40						

Table 2: Independent samples test of students' enjoyment level

Independent samples test											
		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Students' Enjoyment	Equal variances assumed	.002	.969	1.654	80	.102	1.35952	.82178	-.27588	2.99492	
	Equal variances not assumed			1.653	79.550	.102	1.35952	.82231	-.27706	2.99611	

Table 1 and Table 2 show that the level of enjoyment of students in financial management course was low (mean = 24.3095 for class A, and mean = 22.9500 for class B of the measurement scale 10 to 40). Both classes also showed that there was no difference in the level of enjoyment of students in financial management course (sig. (2-tailed) = .102).

Table 3: Descriptive statistics of pre-test scores

Class	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Class A	42	15.00	39.00	54.00	47.7381	3.77449	14.247
Class B	40	19.00	35.00	54.00	46.2250	3.83297	14.692
Valid N (list wise)	40						

Table 4: Independent samples test of pre-test scores

Independent samples test											
		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper	
Pre-test Scores	Equal variances assumed	.132	.718	1.801	80	.075	1.51310	.84022	-.15899	3.18518	
	Equal variances not assumed			1.800	79.666	.076	1.51310	.84054	-.15973	3.18592	

Table 3 and Table 4 show that the pre-test scores were very low (mean = 47.7381 for class A, and the mean = 46.2250 for class B, in the measurement scale of 0 to 100). Both class showed that there was no difference in the level of students' ability in financial management course. (sig. (2-tailed) = .075). Based on the data of statistical tests, it appears that both in students' enjoyment level and comprehension in financial management course had no significant difference.

3.1.2. The research final conditions

After lecturer implemented the learning activities based on STAD method, the research findings are showed as follow:

Table 5: Descriptive statistics of students' enjoyment level

Class	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Class A	42	22.00	16.00	38.00	30.8095	5.27413	27.816
Class B	40	14.00	26.00	40.00	34.2250	3.68982	13.615
Valid N (list wise)	40						

Table 6: Descriptive statistics of students' achievement

Class	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Class A	42	18.00	53.00	71.00	63.0952	4.74115	22.479
Class B	40	20.00	59.00	79.00	70.7500	4.35448	18.962
Valid N (list wise)	40						

Table 5 and Table 6 show the descriptive results of this research. Level of students' enjoyment of class A, in financial management course was showed good (mean = 30.8095), whereas in class B was very good (mean = 34.2250) on the measurement scale 10 to 40. Viewed from the side of the average level of enjoyment, in class B, the students has increased an average level of enjoyment of 22.9500 (before the study) to 34.2250 (after the study). Meanwhile, in class A, despite of in lower level, the average level of students' enjoyment was also increasing; which was from 24.3095 (before the study) to 30.8095 (after the study). This indicates that the treatment given to class (class B) had increased the level of enjoyment which was better than the control class (class A). Meanwhile, students' test achievement in financial management course show that the results of learning in class A was sufficient (mean = 63.0952), while for class B the results indicated good (mean = 70.7500) in the measurement scale of 0 to 100. Seen from the average of the results of learning, in class B, the students experienced an average increase test scores from 46.2250 (pre-test) to 70.7500 (post-test), while in class A, the students' score also increased but in a lower average learning results, which is from 47.7381 (pre-test) became 63.0952 (post-test). Thus, it indicated that the treatment given to class (class B) had increased a better average learning result than the control class (class A).

3.2. Hypothesis testing

The hypothesis confirmation was done in this research in order to prove the initial allegations. This hypothesis confirmation was on the data collected in the treatment class and the control class before and after the learning. Hypothesis confirmation shows the following condition.

Table 7: Comparison of the mean level of students’ enjoyment before and after the learning

Independent samples test										
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Aft-Bfr A – Aft-Bfr B	Equal variances assumed	6.334	.014	-2.511	80	.014	-3.20000	1.27463	-5.73660	-.66340
	Equal variances not assumed	6.334	.014	-2.511	80	.014	-3.20000	1.27463	-5.73660	-.66340

Table 7 shows that there is a difference in the level of students’ enjoyment before and after the research on the class which implemented STAD method than the control class (sig. (2-tailed) = .014). In the class which implemented STAD (class B), the level of students’ enjoyment in financial management class was better than the control class (class A).

Meanwhile, the hypothesis confirmation II about the results in students’ achievement is showed in the following table:

Table 8: Comparison of the students’ test scores level before and after the learning

Independent samples test										
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Aft-Bfr A – Aft-Bfr B	Equal variances assumed	3.379	.070	-12.586	80	.000	-9.16786	.72840	-10.61742	-7.71829
	Equal variances not assumed			-12.522	75.135	.000	-9.16786	.73212	-10.62627	-7.70944

Table 8 shows that there is a difference in the students’ test scores before and after the research on the class which implemented STAD method than the control class (sig. (2-tailed) = .000). In the class which implemented STAD (class B), the students’ achievement in financial management class was better than the control class (class A).

IV. Discussion

The first research finding showed that STAD increased the level of students’ enjoyment on the treatment class compared to the control class. During the implementation of STAD learning, every student in groups was contributively to finish the task given. They worked together. Students who understood more were willing to help other students who found it difficult to understand the given material. For students who academically less performing felt more comfortable to ask and learn together with their peers in group. They felt having more space and being more courageous to share the difficulties to their peers instead of to lecturer. On the other hand, higher performing students felt more comfortable to explain what they understood to those who needed help in the group. Meanwhile, they took it as opportunities to improve their social creativity and to foster their confidence. This research finding was in line with Piaget (1951), Richmond (1975) and Hootstein (1995) in Dawood (2006), and Hootstein (1995)’s findings. Piaget (1951), for example, found that when cooperative learning or play-like activities were used in learning, they made learning much more interesting. It also improved their cognitive thinking because it gave students more control over their learning. Richmond (1975) and Hootstein (1995) believe that using games and simulations is much more beneficial to students than traditional education. The atmosphere and surroundings in the classroom are geared towards the students' enjoyment by using a more comfortable setting. This puts the focus more on the students and less on the teacher. In arranging the seating, the desks are usually arranged in a way that facilitates communication among the students and teacher, such as a circle or facing rows. Therefore, by making the students comfortable and

interested in learning, it will spark a continued desire for further knowledge. Hootstein's research (1995) which found that when a group of social studies students were surveyed about which type of instructional method motivated them the most, role-playing characters in simulations, and group discussions were favoured by them and ranked at the top.

The second research finding revealed that STAD increased students' achievement on the treatment class compared to the control class. This finding was in line with van Wyk (2010)'s finding which stated that STAD is a more effective teaching technique compared to the traditional lecture method in economic literacy. STAD had a significant impact on the achievement of the experimental group. Slavin (1980) also showed that cooperative learning was found to be more effective than other methods on students' academic achievement (Slavin, 1980; Tarim and Akdeniz, 2008), positive relationships among different ethnic groups, students' mutual relations and students' self-esteem (Slavin, 1980). In Indonesia, this finding was in line with some empirical findings, such as Putro (2011) and Utomo (2012) for STAD implementation on Geography course, Wahyuli (2011) for STAD implementation on Mathematics course in Vocational High School, Wati (2011) and Yulaika (2012) for STAD implementation on accounting course. In implementing STAD learning strategy in class, students worked together towards the same objectives and motivated each other to success. The interaction among students affected their improvement of academic abilities and communication skills. Furthermore, in STAD learning strategy, students discussed more freely with their peers and asked lecturer when he assisted their group compared to in traditional learning strategy. The results indicated that cooperation seems to be much more powerful in producing achievement than the other interaction patterns and the results hold for several subject areas (Williamson and Rowe, 2002).

V. Conclusions and Recommendations

The result of the research showed that STAD implementation in learning financial management could improve learning process. In this research, it was found that STAD implementation in a learning process could increase students' enjoyment level and students' achievement. Students were more positive about the subject areas, friends, and lectures when they were structured to work cooperatively compared to when they learn in traditional setting. Students with cooperative experiences were more able to take the perspective of others, were more positive about taking part in controversy, had better developed interaction skills, and had a more positive expectation about working with others than students from competitive or individualistic settings. The efforts to enhance financial management learning quality need henceforth to be done. By using true or quasi experimental research, there are many learning methods to be implemented on various materials of financial management. Nevertheless, it is essential to choose the most appropriate strategy for appropriate material so that the true or quasi experimental research can attain its goals properly.

References

- [1] Rover, Diane T. (2007). Effective Teaching. *Journal of Engineering Education*. 96, 2: ProQuest Science Journals, p. 167
- [2] Felder, R.M., Brent, R. (2003). Learning By Doing. *Chem. Engr. Education*, Vol. 37 (4), 282-283.
- [3] Schug, M., Todd, R., Berry, R. (1984). Why Kids Don't Like Social Studies. *Social Education*. Vol. 48, p. 382-387.
- [4] Dawood, Ray. (2006). Using Instructional Games to Increase Student Learning and Enjoyment in a High School Government Class. *A Masters Project for ED 7999*. Submitted to the Office of Graduate Studies, Graduate Division of Wayne State University, and Detroit, Michigan in fulfilment of the requirements for the degree of Master of Arts in Teaching.
- [5] Adams, Anthony R. (2013). Cooperative Learning Effects on the Classroom. *Submitted in Partial Fulfilment of The Requirements for The Degree of Master of Arts in Education at Northern Michigan University*.
- [6] Hwang, Nen-Chen Richard; Lui, Gladie; Jen Wu Tong, Marian Yew. (2005). An Empirical Test of Cooperative Learning in a Passive Learning Environment. *Issues in Accounting Education*. May 1, 2005.
- [7] Davidson, N., P. O'Leary. (1990). *Cooperative Learning in Mathematics: A Handbook for Teachers*. Menlo Park, CA: Addison Wesley
- [8] Aronson, E.N., E. Goode. 1980. Training Teachers to Implement Jigsaw Learning: A Manual for Teachers. In *Cooperation in Education* edited by P. Hare, C.D. Webb and R. Hertz-Lazarowitz. UT: Brigham Young University Press.
- [9] Johnson, D.W., R.T. Johnson, K.A. Smith. (1991) Cooperative Learning: Increasing College Faculty Instructional Productivity. *ASHE-ERIC Higher Education Report No. 4*. Washington, DC: The George Washington University, ERIC Clearinghouse on Higher Education.
- [10] Slavin, R. E. (1980). Cooperative learning. *Review of educational research*, 50 (2), 315-342. <http://dx.doi.org/10.3102/00346543050002315>
- [11] Slavin, R. E. (1987). *Cooperative learning: Student teams. What research says to the teacher*: ERIC.
- [12] Cohen, E. G., Brody, C. M., Sapon-Shevin, M. (2004). *Teaching cooperative learning: The challenge for teacher education*: Suny Press.
- [13] Yeung, Hastings Chim Ho. (2015). Literature Review of the Cooperative Learning Strategy – Student Team Achievement Division (STAD). *International Journal of Education*. Vol. 7, No. 1. p. 29-43
- [14] Slavin, R. E. (1991). *Student Team Learning: A Practical Guide to Cooperative Learning (3rd Edition)*. National Education Association Washington DC.
- [15] Guyton, E. (1991). Cooperatives Learning and Elementary Social Studies. *Social Education*. Vol. 55. p: 313-315.
- [16] Slavin, R. E. (1990). Research on Cooperative Learning: Consensus and Controversy. *Educational Leadership*, 47, 52-55.
- [17] Armstrong, S., Palmer, J. (1998). Student Teams Achievement Divisions (STAD) in a twelfth grade classroom: Effect on student achievement and attitude. *Journal of Social Studies Research*. Vol. 22, p. 3-6.

- [18] Ghaith, G. (2002). The relationship between cooperative learning, perception of social support, and academic achievement. *System. Vol. 30 (3)*, p. 263-273. [http://dx.doi.org/10.1016/S0346-251X\(02\)00014-3](http://dx.doi.org/10.1016/S0346-251X(02)00014-3)
- [19] Hertz-Lazarowitz, R., & Miller, N. (1995). *Interaction in cooperative groups: The theoretical anatomy of group learning*: Cambridge University Press.
- [20] Slavin, R. E. (1995). *Cooperative Learning*. Needham Heights, MA: Simon & Schuster.
- [21] Slavin, Robert E. (2008). *Cooperative Learning Teori Riset dan Praktik*. Bandung: Nusa Media.
- [22] Vaughan, W. (2002). Effects of Cooperative Learning on Achievement and Attitude among Students of Colour. *The Journal of Educational Research*. 95(6). p. 359-364.
- [23] van Wyk, Michael M. (2010). Do Student Teams Achievement Divisions Enhance Economic Literacy? An Quasi-experimental Design. *J Soc Sci*, 23 (2). p. 83-89
- [24] Zenginobuz B, Meral M 2008. The impact of cooperative learning techniques on student academic performance in a high school Geometry class in Turkey. *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications*. p. 2791-2801.
- [25] Bernaus, M., Gardner, RC. (2008). Teacher Motivation Strategies, Student Perceptions, Student Motivation, and English Achievement. *The Modern Language Journal*. Vol. 92. p. 387-401.
- [26] Nichols JD 1998. The effects of cooperative learning on student achievement and motivation in a high school Geometry class. *Contemporary Educational Psychology*. Vol. 70 (4). p. 532-538.
- [27] Putro, Binawan Rasi. 2011. Penerapan Model Pembelajaran Kooperatif STAD untuk Meningkatkan Keaktifan Belajar Geografi Siswa Kelas X9 SMAN 1 Purwosari Kompetensi Dasar Mendeskripsikan Tata Surya dan Jagad Raya. *Skripsi* tidak diterbitkan. Malang: Universitas Negeri Malang.
- [28] Utomo, Wahyu Adi. 2012. Pengaruh Model Pembelajaran Student Team Achievement Division (STAD) Terhadap Hasil Belajar Geografi Di SMA Negeri 1 Purwosari. *Skripsi* tidak diterbitkan. Malang: Universitas Negeri Malang.
- [29] Wahyuli, Endah Bekti. (2011). Penerapan Model Pembelajaran Kooperatif Tipe Student Teams–Achievement Divisions (STAD) Yang Dapat Meningkatkan Pemahaman Konsep Matematika pada Materi Persamaan Dan Pertidaksamaan Kuadrat Pada Peserta Didik Kelas X Teknik Komputer Jaringan (TKJ) di SMK 45 Wonosari. *Skripsi* tidak diterbitkan. Yogyakarta: Universitas Negeri Yogyakarta
- [30] Wati, Anis Eko. 2011. Pengaruh Metode Pembelajaran Kooperatif Tipe STAD (*Student Teams Achievement Divisions*) Terhadap Hasil Belajar Siswa Mata Pelajaran Akuntansi Kelas XI IPS di SMA Negeri 9 Malang. *Skripsi* tidak diterbitkan. Malang: Universitas Negeri Malang.
- [31] Yulaika. 2012. Pengaruh Model Pembelajaran STAD (*Student Teams Achievement Divisions*) Terhadap Aktivitas dan Hasil Belajar Siswa Selama Proses Pembelajaran Akuntansi Kelas XI Program Akuntansi SMK Muhammadiyah 5 Kepanjen. *Skripsi* tidak diterbitkan. Malang: Universitas Negeri Malang.
- [32] Sinarwati, Ni Kadek. (2014). Apakah Pembelajaran Kooperatif Tipe STAD Mampu Meningkatkan Soft Skills dan Hard Skills Mahasiswa? *Jurnal Ilmiah Akuntansi dan Humanika (JINAH)*. Vol. 3, No. 2, hal.1208-1231
- [33] Piaget, J. (1951). *Play, Dreams, and Imitation in Childhood*. New York: Norton.
- [34] Richmond, K. (1975). *Education and Schooling*. Great Britain: Methuen & Co. LTD.
- [35] Hootstein, E. (1995). Motivational Strategies of Middle School Social Studies Teachers. *Social Education*, Vol. 59, p. 23-26.
- [36] Tarim K, Akdeniz F 2008. The effects of cooperative learning on Turkish elementary students' mathematics achievement and attitude towards mathematics using TAI and STAD methods. *Educational Studies in Mathematics*. Vol. 67(1). p. 77-91. <http://www.springerlink.com/content/y52816481542x725/> (Retrieved on December, 10 2009)
- [37] Williamson, V.M., M.W. Rowe. (2002). Group Problem-Solving versus Lecture in College-Level Quantitative Analysis: The Good, the Bad, and the Ugly. *Journal of Chemical Education*. Vol. 79, No.9, p. 1131-1134.