

AL-TA'LIM JOURNAL 22 (2), 2015, (119-128)

(Print ISSN 1410-7546 Online ISSN 2355-7893) Available online at http://journal.tarbiyahiainib.ac.id/index.php/attalim



Improving Students Skills in Translations by Using Students-Teams Achievement Division (STAD) Technique

Syarwan Ahmad

English Department of Faculty of Islamic Education and Teacher Training (UIN) Ar-Raniry Banda Aceh, Indonesia

> e-mail: syarwan2007ahmad@yahoo.com DOI: <u>http://dx.doi.org/10.15548/jt.v22i2.121</u>

Received: 10th February 2015; Revised: 20th June 2015; Accepted: 24th July 2015

Abstract: This classroom action rresearch was aimed at improving students' skills in translating at the English Department of the State Islamic University (UIN) Ar-Rarniry Banda Aceh by using the Student-Teams Achievement Division (STAD) Technique. Throughout the entire cycles, students worked in groups of 4-5 persons to plan and write their translations. The study showed that the average score of pre- test (66) increased dramatically to reach 86, and moved up a little higher (87) after the second cycle. It is recommended that STAD Cooperative Technique be implemented in teaching translation courses.

Key words: Teaching translation; STAD; UIN Aceh

A. INTRODUCTION

Translation subject is one of the major courses of the English department of any tertiary educations including that of Faculty of Islamic Education and Teacher Training UIN Ar-Raniry. The improvement of the teaching and learning process and the result of the process are urgent to be realized.

In this globalization era, the international relation in every sector of life is becoming increasingly significant. Good translation products of various fields are highly needed. To fulfill such needs, the linguists and translators play the most important role in producing reliable translation works in a fastest way (Rogi, 2009)

Many reports convinced that foreign language students, especially those who major in English had difficulties with *equivalence* and *variance*. *Equivalence* is associated with the problems with matching the word of a source language and that of a target language that represents an accurate concept. Students commonly get into a real trouble with searching the most appropriate word in the target language. While *variance* refers to the problems of differences in language aspects which are not solely related to vocabulary, but also the idea of producing system and the way of thinking of in the source language. Except for this, students also had difficulties with grammatical, cultural aspects and idiomatic expressions in translating the texts (Ahmad, 2009).

Based on the current observation, student-centered teaching-learning process has been difficult to set up. At the begining of the class the students were asked to prepare themselves at home before entering the class. It did not work, however. In this class, the students were randomly asked to translate the texts of the book entitled: *The Life of Prophet Muhammad, S.A.W. and His Moral Teachings* written by Iljas Ismail. This material was presented for most of the meetings.

Most of them got into a real trouble when asked to do the translation. However, they did not refuse when they were instructed to translate the texts of the book, but it indicated that some of them did not understand what they were translating. They were unable to create an equivalent meaning in the target language (TL), Bahasa that accurately represents the meaning of the source language (SL), English. Even some of them got embarrassed.

In fact, all of them had prior knowledge on the materials presented in the book, because the book contained biography of Prophet Muhammad. As students of an Islamic University they should have had prior knowledge regarding the materials presented.

They brought a variety of dictionaries into the classroom. Unfortunately, most of them were not complete enough to translate such texts. Most of them preferred to use electronic dictionaries. However, an electronic dictionary is not exhaustive enough to have the equivalent words being searched.

The students were neither active in the classroom, nor did they discuss the problems with their classmates. Had they worked together, the classroom atmosphere would have been better. They seldom raised their hands to ask questions. In a session, just one or two students at most asked the questions. They commonly asked questions on idiomatic expressions. In fact, they could figure out themselves by searching in a dictionary or discussing the problems with their classmates. To avoid being embarrassed from random "shooting" by the lecturer, some of them worked individually which is not recommended current learning by the philosophy, constructivism. One of the characteristics of the learning philosophy is that the student works cooperatively and collaboratively (Ormrod, 2011). In this way, the strong would help the weak and the weak would learn from the strong.

Another wrong habit of the students is that they tend to seek just one meaning of the word which they have no idea of, the first meaning, in the dictionary. Some of them proved themselves to be poor in Bahasa. They were confused and misused the word. As a result, they had serious problem matching or finding an appropriate word of the target language referring to the probelm of the students equivalence. Had worked cooperatively, most of the translation problems would have been resolved.

Several of them are quite good students. However, if just good students were asked to take turn, the rest of the class had no opportunity to engage in the task. In fact, if the strong ones had shared in a cooperative engagement, the learning process would have been very interesting, and the weak would have learned much from the strong, and a cooperative learning climate would have been existed.

Such this ineffective class condition needs a solution. If the situation were not settled, the teaching-learning process and the result would not be improved. The teachingleaning process was not as productive as hoped and most students would fail this class.

STAD was tried for this action research due to its superiority compared to other conventional techniques. It has also been effectively used for all levels of education from second grade of primary school to high school to college (Omoshehin, 2004).

Related to the previous statements, the problems of the current study were formulated as follows:

- 1. Will the implementation of STAD (Students-Teams Achievement Division) cooperative technique improve the process of teaching Translation I to the English Department Students of the FIE-TT UIN Ar-Rraniry Banda Aceh?
- 2. Will the implementation of STAD (Students-Teams Achievement Division) cooperative technique improve the result of

teaching Translation I to the English Department Students of FIE_TT UIN Ar-Raniry Banda Aceh)?

STAD is a cooperative technique of teaching developed by Slavin in 1998. In STAD, students are assigned to four-or fivemember learning teams. The teams comprise high, average, and low performing students, and boys and girls of different racial or ethnic backgrounds. Thus, each team is a microcosm of the entire class. There are five main steps a teacher should follow when STAD is implemented. The steps will be presented in this section later (Tariq, 2010). It is alleged that the steps of STAD would solve the problems of translation.

As commonly known, problems of translation are *equivalence*, *variance*, *ambiguity* and *idiomatic expressions*. According to Yunus () the problems of translation is divided into two main categories, linguistics and non-linguistics problems. The problems are as the followings:

- 1. Linguistics problems. It is related to the structure and the rule of certain languages consisting of:
 - a. Phonological problems

The problems of phonology are categorized into two parts: the problems of writing system (graphology) and the problems of spelling system (orthography)

b. Morphological problems

Each language has its own unique way in the formation of its words. For example, Bahasa has its own ways of derivation which is the process of adding affixes to the stems in order to extend the accumulation of words. In Bahasa, one word can be resulted in some words.

For example, the word "serah" may produce derivatives such as "serahi," "serahkan," "diserahi," "diserahkan," "penyerahan," and "menyerahkan." In English it is known as inflection which is the process of varying forms of words based on meanings and uses. (Yunus, 1992). One of the examples is the inflectional endings such as –ed,-ing, andes, which are placed at the last syllable of certain words.

c. Syntactical problems

Syntax is the study of the rule for sentence building (Hornby, 1994). English, for example, has quite different syntactical systems than those of Bahasa. It has a variance of using tenses which are quite different from those of Bahasa.

d. Lexical problems

Lexical problems refer to those about variety of the meaning of the words. One of the examples is "get" in English which has so many meanings.

- 2. Non-Linguistic problems
 - a. Problems of material culture

Different countries have different cultures. Different cultures make different kinds of material and things. The word "market," for instance, is translated as "pasar" into Bahasa. However, "market" and "pasar" is a quite different concept. This example creates problems in translation. In this case, it is hard to find the equivalent terms.

b. Problems of social culture

There are a lot of social culture terms in a source language which is untranslatable into a target language. They have no equivalence in a target language. For example, English words "Halloween," "thanksgiving," "April Mob" etc. They have no perfect counterparts in Bahasa. In Bahasa, there are also terms that has no equivalence in English such as "gotong Royong," "turun tanah," etc. Apart from the abovementioned problems, there are also religious culture terms such as "mesjid," "surau," "langgar," "meunasah," and so on, and ecological problems such as the names of plants and animals and most of which are impossible to translate (Yunus, 1992).

STAD will be implemented in the following steps:

- 1. Class Presentation. The teacher presents the material in front of the class in the classical style that focuses on the concepts of matter to be discussed.
- 2. Formation of Study Groups. Students are organized into groups whose members are heterogeneous (both academic ability and gender).
- 3. Provision of test or quiz (quizzes) to see individual ability without peer support.
- 4. Individual test (Individual Improvement Score) to see the result of a cooperative activity, peer support. This is done to measure the improvement achieved individually due to cooperative effort and peer support as a result of group work and the results are compared to previous ones including those of using conventional method.
- 5. Awards group (Team Recognition) award is given to the group to give a gift in appreciation of the efforts that have been made during the study. (Slavin, 1995 in Prilatama, 2008)

STAD cooperative Technique has some advantages as stated by Slavin quoted by Yusuf. At least STAD has 5 advantages:

1. Students work together in achieving their objectives by upholding the norms of the group.

- 2. Actively assist and motivate students to succeed a shared passion (emotion).
- 3. Active role as peer tutor to further enhance the success of the group, helping one another.
- 4. Interaction among students with increasing their ability to argue.
- 5. In addition to group success individual student also has chance to be individually tested after gaining support from peers (Yusuf, 2010).

So far the researcher has not found any pieces of research on Teaching Translation using STAD yet. However, STAD has been very successful in terms of improving student achievement. А motivation and study conducted by Micheal M van Wyk in 2012 on the use of STAD for teaching economics compared education, STAD to direct instruction promotes positive attitudes, shows better achievements and motivates students to learn (Wyk, 2012). For teaching English, Conversation Class for example, it was found experienced that students had learning motivation to listen and speak, interpersonal relation, and collaborative work to go toward a common goal (Wang, 2009). STAD is also effective for teaching Reading Course. A research carried out by Hidayat at SMK1 Kota Bima NTB, Indonesia from April to May 2009, it was found that (1) STAD is more effective than Conventional method; (2) students have better reading competence because they have high motivation; (3) there is an interaction effect between methods and student motivation (Hidayat, 2009).

B. METHOD

A Cyclical system characterizes data gathering technique for a Classroom Action as a series of four cyclical activities. They are *planning, action, observation,* and *reflection* (Suharyono, 2009). The cyclical system could be drawn as the diagram below:



Instruments

- 1. Lesson Plan
- 2. Observation Sheet
- 3. Evaluation Instrument
- 4. Others

The subject of this research was all the current students of Translation I Unit 2 of the English Department of FIE_TT UIN Ar-Raniry Banda Aceh, Indonesia.

most Classroom Research, As the researcher uses his own journal or diary to reflect specific changes or ideas that would inform his practice of teaching in addition to using observation sheets. The researcher's analysis is informal and addresses his specific classroom problems. So, the researcher reflected on his years as a translation course lecturer and on his days of teaching translation class to draw conclusions for improving the process and the result of teaching. Surely, previous and current test scores were listed and compared. The researcher also triangulated the results with other translation course lecturers and the Head of the English Department (Creswell, 2005).

C. FINDINGS

Cycle I

Observation

Each group was instructed to translate one section, a topic, of the book entitled: The Life of Prophet Muhammad, S.A.W. and His Moral Teachings written by Iljas Ismail. The students enjoyed learning Translation Course with STAD. They did not keep silent but were working happily. Most of them were cheerfully engaged in translating activities. They did not work individually but really cooperated in doing the task assigned. They were working in a very relaxing manner. The class situation was extremely different from that of using conventional method. They were busy with learning activities. Some of them were opening dictionaries searching the equivalent or accurate meaning of the words in Bahasa and some were discussing how to write a good sentence of Bahasa that transfers the accurate meaning of the sentence of the source language, English.

In working in groups, at first, some groups divided the task by trying to get one member to translate one paragraph. Then, I told them not to work in that way, but in a cooperative way instead. Then, they changed their working style in such a way that they were all actively involved in group activities, translating the passage assigned. They were sharing and helping one another. I ensured all groups' members work cooperatively. At the end of group activities, one of them was selected to be a representative of the group as a speaker to tell the result of their work to the class. In this way, it worked very well.

Some of them asked the researcher questions on *idiomatic* expressions. The researcher elicited the answer from the groups and then he confirmed the response. Most of them had problems with variance. However, because they helped each other, in this way, they solved the problems without lecturer's frequent interventions. The book used contains religious expressions which many were relatively difficult for them to translate. However, since the group's members were heterogeneous, consisting of the weak and the strong, the weak learned from the strong and the strong assisted the weak. They helped one

another and sought for the solution to the problems. They also had problem with *ambiguity*. Thanks to their cooperative learning style, they handled the problem of *ambiguity* easily too.

Different from the classroom situation of twenty years ago when students just used print dictionaries. students used a variety of dictionaries. They used two formats of dictionary, print and electronic ones. Print ones such as John M. Echols and Hassan Shadily's dictionary, Kamus Inggris Indonesia, English-English Dictionary Oxford English Dictionary and other print dictionaries. In regard to electronic dictionary they used so many kinds of dictionaries such as tablet equipped with dictionary downloaded from Internet, mobile phone which was also equipped with dictionary downloaded from Internet, IPAD, Smartphone dictionary, and other kinds.

The improvement of the teachinglearning process could also be seen in the following tables/observation sheets

Observation Sheet for STAD Cooperative Technique

Group	I

noup i		
No. Aspects observed	Measurement	
No. Aspects observed	1 2 3 4	
1 The group members were working cooperatively $$		
2 They were sharing and discussing $$		
3 They were helping one another $$		
4 They were learning happily $$		
5 They were searching in more than one dictionaries $$		
6 They enjoyed learning in STAD $$		
7 They developed their tolerance $$		

Explanation:

- 1. Not implemented yet
- 2. Implemented but not perfect yet
- 3. Almost perfectly implemented
- 4. Perfectly implemented

Group II

No. Aspects observed

Measurement

1 2 3 4
1 The group members were working cooperatively $$
2 They were sharing and discussing $$
3 They were helping one another $$
4 They were learning happily $$
5 They were searching in more than one dictionaries $$
6 They enjoyed learning in STAD $$
7 They developed their tolerance $$

Group III

No. Aspects observed	Measurement	
No. Aspects observed	1 2 3 4	
1 The group members were working cooperatively $$		
2 They were sharing and discussing	\checkmark	
3 They were helping one another $$		
4 They were learning happily $$		
5 They were searching in more than one dictionaries $$		
6 They enjoyed learning in STAD		
7 They developed their tolerance $$		

Group IV

No. Aspects observed	Measurement	
No. Aspects observed	1 2 3 4	
1 The group members were working cooperatively $$		
2 They were sharing and discussing		
3 They were helping one another		
4 They were learning happily $$		
5 They were searching in more than one dictionaries $$		
6 They enjoyed learning in STAD		
7 They developed their tolerance		

Group V

No. Aspects observed	Measurement 1 2 3 4	
1 The group members were working cooperatively $$		
2 They were sharing and discussing $$		
3 They were helping one another $$		
4 They were learning happily $$		
5 They were searching in more than one dictionaries $$		
6 They enjoyed learning in STAD		
7 They developed their tolerance	l l	

From the aspects observed it can be clearly seen that the group members were working cooperatively. They were sharing and discussing the task. More importantly, they helped one another. To certain extent, they also used inquiry learning here by searching the meaning of the words in more than one dictionary. All them enjoyed learning in STAD. Last but not least, as far as the researcher could observe and judge, although not perfect yet the group members also developed their tolerance.

Since this research was to investigate the improvement of the process and the result of teaching by using STAD, the result was evaluated by using test. The test material was also taken from the book: *The Life of Prophet Muhammad, S.A.W. and His Moral Teachings.* The student, one by one, was asked to translate orally several different paragraphs of the book.

Test Results

1. Grades of Individual Student, Similar Test Materials, before Implementing STAD Technique

No	Students' name	Previous Grade
1	Siti Hajar	76
2	Lithia Hanum	66
3	Muhammad Rizqi	60
4	Nadial Fajri	65
5	Rizkiana Putri	75
6	Zaitun Muna	66
7	Farah Dina	75
8	Larsa Kasvia	66
9	Zaki Saputra Husda	60
10	Muhammad Zikri	70
11	Almi Nurvita	67
12	M. Ona Irawan	60
13	Maulana Rizki	67
14	Yuni Sari	69
15	Agung Pratama	68
16	Nadia Ulfiana	60
17	Dian Fitya Z	70
18	Lisa Faradilla	70
19	Syarifah Munfiza Fazha	76
20	Zacky Muthahhar	60
21	Mutia Soraya	50
22	Ikhwan Rahmatika Latif	61
23	Affied Alfayed	75
	Total	1532
	Average	66.6

2. Grades of Individual Student after Implementing STAD Technique, Cycle I.

No	Students' name	Cycle I
		grade
1	Siti Hajar	96
2	Lithia Hanum	85
3	Muhammad Rizqi	81
4	Nadial Fajri	80
5	Rizkiana Putri	94
6	Zaitun Muna	87
7	Farah Dina	94
8	Larsa Kasvia	85
9	Zaki Saputra Husda	81
10	Muhammad Zikri	91
11	Almi Nurvita	88
12	M. Ona Irawan	77
13	Maulana Rizki	76
14	Yuni Sari	89
15	Agung Pratama	88
16	Nadia Ulfiana	81
17	Dian Fitya Z	90
18	Lisa Faradilla	91
19	Syarifah Munfiza Fazha	95
20	Zacky Muthahhar	81
21	Mutia Soraya	76
22	Ikhwan Rahmatika Latif	80
23	Affied Alfayed	96
	Total	1982
	Average	86

Reflection

Based on the result of observation carried out the following points of reflection could be seen:

- 1. STAD (Student Team Achievement Division) is a cooperative technique that puts emphasis on the importance of interaction among the students and, unfortunately, some group members still tried to work individually/divide the task to be accomplished. Therefore, it is crucial to instill in students the awareness of this aspect of this cooperative technique, accomplishing the task in a cooperative mode.
- 2. Students are sharing and discussing the problems they faced. However, they need to

be made aware that tolerance is important in democratic world.

- 3. The students were helping one another in the Cooperative Technique of STAD. However, it is significant to inform them that help here means assisting the weak on how to learn, not just help that make the helped dependent on the help of others.
- 4. The grades of students after STAD implementation have been tremendously increased compared to those prior to the implementation of the STAD.

Cycle II

Cycle I had been successfully done when Cycle II started. Based on the diary and observation sheet of cycle I, it reveals that the implementation STAD for teaching translation improves the learning process. It makes students more active, happier and more enjoyable for them. Students worked together in a cooperative mode. They helped each other. They shared and discussed the translation problems they faced. On lecturer side in this cooperative technique a lecturer does not spoon-feed the students, by just lecturing, a teaching style which is not recommended by current educational psychologists. In STAD cooperative technique indeed learners construct knowledge through a cooperative manners and inquiry learning. More importantly, in this technique the students showed a relatively great tolerance, which is very important for their future life.

Concerning the result of the teaching learning by using STAD, the improvement could be clearly seen by scrutinizing the grades of the tests prior to the implementation of STAD and those after the implementation of STAD. The average score of the students prior to the implementation of STAD is 66 while that after the STAD implementation is 86. The average score significantly increases to 20 points.

Observation

The results of Cycle II observation and notes do not show significant differences. The ones that could be recorded is that group members become more confident in expressing their ideas. The class became more vivid or lively. It was noisy because almost all of the students were speaking and bravely expressing their ideas. The students became more situation looked enthusiastic. The more relaxing. Sometimes one of them asked the researcher a question on how to translate idiomatic expressions or on choice of a proper word in Bahasa. No more quiet student. One of them asked the researcher as to how to use "word attack skill" which means guessing the meaning of the difficult word that could not be found in a dictionary.

Test Results

1. Grades of Individual Student after Implementing Cooperative STAD Technique in Cycle II

No	Students' name	Cycle II grade
1	Siti Hajar	97
2	Lithia Hanum	86
3	Muhammad Rizqi	84
4	Nadial Fajri	83
5	Rizkiana Putri	94
6	Zaitun Muna	87
7	Farah Dina	94
8	Larsa Kasvia	86
9	Zaki Saputra Husda	84
10	Muhammad Zikri	91
11	Almi Nurvita	88
12	M. Ona Irawan	77
13	Maulana Rizki	77
14	Yuni Sari	89
15	Agung Pratama	88
16	Nadia Ulfiana	85
17	Dian Fitya Z	90
18	Lisa Faradilla	93
19	Syarifah Munfiza Fazha	95
20	Zacky Muthahhar	84
21	Mutia Soraya	77

22	Ikhwan Rahmatika Latif	85
23	Affied Alfayed	96
	Total	2010
	Average	87

The table above indicates that the average score of the test in Cycle II also slightly increases, 1 point.

Reflection

After the teaching learning process and the observation was conducted in Cycle II, the reflection was also carried out. The points of reflections are as the following:

- 1. The teaching learning process using STAD was going better in Cycle II. However, the lecturer should walk around in the classroom to monitor the students because some of them may deviate from learning indicators.
- 2. The students helped one another. However, lecturer should be aware that some of the weak may be dependent on the help of other or survive on a ride
- 3. Almost all of the students were sharing and expressing themselves. Still, the lecturer should ensure that some students do not dominate or undermine the others.
- 4. They worked in cooperation and collaboration. It should also be kept in mind that in STAD an individual member of the group has to be responsible for the success of the individual himself and the group.
- 5. In addition to teaching translation, cooperative STAD technique is very good for teaching difficult materials, because one of the characteristics of this cooperative technique is that group members are heterogeneous consisting of the weak and the strong. Therefore, they could learn from one another and support each other.

D. DISCUSSION

After the research was conducted, it could be claimed that using STAD (Student

Team Achievement Division) Cooperative Technique improves the process and the results of learning English Translation. The learners construct knowledge through sharing their ideas, discussing and searching the meaning of the words in more than one dictionaries or even by using "word attack skill," which is using intelligent guess to grasp the meaning of the words which are not found in dictionary. They confident become more in expressing themselves in groups. Even though it could not be precisely predicted, the students might become more tolerant in their future life, due to learning with STAD Cooperative Technique.

Concerning the improvement of the learning result, the results of the three tests held show that using STAD significantly improves the results of learning. The average score of the test prior to the implementation of STAD was just 66 while that after the **STAD** implementation of Cycle I was 86, which increases 20 points. The average score of the test in Cycle II also slightly increases, 87. Therefore, it is safe to claim that the use of STAD Cooperative Technique improves the process and the results of the English Translation Class learning

E. CONCLUSION

The current learning philosophy recommended by a majority of learning or educational psychologists is constructivism. The constructivist theory puts emphasis on the importance of cooperation and collaboration in learning. We educate young generations to equip them with good character, knowledge and skills to live in a changing society. Nowadays, in real life people mostly work in cooperation and collaboration. The ability to cooperate and collaborate is badly needed. Being tolerant to differences is also crucial for their future adjustment to society. Every teacher should be aware of these needs. STAD Cooperative Technique is a good teaching technique for fulfilling those needs. Teachers should use this technique especially for teaching Translation Course in particular and other English courses in general.

REFERENCES

- Ahmad, S. (2009). Research report entitled: The Impact of prior knowledge of the English Department Students of the Tarbiyah Faculty IAIN Ar-Raniry on their translation class performance. *Jurnal Pendidikan*, 6(3), 125-145.
- American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.
- Belyayev, B.F. (1964). *The Psychology of Teaching Foreign Language*. New York: Pergamon Press.
- Catford, J. C. (1965). A Linguistic Theory of Translation. London: Oxford University Press.
- Creswell, J.W. (2005). Educational research: Planning, Conducting, and Evaluating, Quantitative and Qualitative Research. New Jersey: Prentice Hall.
- Finlay, I. (1974). *Translating*. Edinburgh: English Universities Press.
- Hidayat. (2009). The Effectiveness of Student Teams Achievement Divisions (STAD) method to Teach Reading Viewed from Students Motivation. Graduate School, Sebelas Maret University of Surakarta. Thesis.
- Hornby, A.S. 1994. Oxford Advanced Learner's Dictionary of Current English. US: Oxford University Press.
- Majoka, M.I., Dad, M.H. & Mahmood, T. (2010). Student Teams Achievement Division (STAD) as an active learning strategy: Empirical evidence from mathematics classroom. *Journal of Education and Sociology*. (4).
- Nida, A.E. (1996). *The Theory and Practice of Translation*. Leiden: E.J. Brill.

- Omoshehin, M.F. (2004). Effects of a training programme in cooperative learning of pre-service teachers' classroom practice and pupils learning outcomes in social studies. Dept. of Teacher Education, University of Ibadan. Ph.D. Thesis.
- Ormrod, J.E. (2011). Educational *psychology: Developing learner*. Boston: Pearson.
- Rogi, S. (2009). Beberapa masalah dalam Penerjemahan. *Paper presented at the Seminar held by* Department of Germany, Faculty of Literature, Sam Ratulangi University, Menado.
- Sayogie, F. (2014). *Teori & pratek* penerjemahan. Tangerang Selatan.
- Suharjono. (2009). Penelitian Tindakan Kelas dan Penelitian Tindakan Sekolah. Indonesia: Cakrawala.
- Suryawinata, Z. (1989). Terjemahan: Pengantar Teori & Praktek. Jakarta: Departemen Pendidikan dan Kebudayaan Direktorat Jenderal Pendidikan Tinggi, Projek Pengembangan Lembaga Kependidikan.
- Wang, T. (2009). Applying Slavin's cooperative learning techniques to a college EFL conversation class. *Journal* of Human Resource and Adult Learning, 5(1), 112-120
- Wyk, M.V. (2012). The effects of the STADcooperative learning method on student achievement, attitude and motivation in economics education. *Journal of Social Science*, 33(2): 261-270
- Yunus, B. (1992). Beberapa Aspek dan Pedoman Pokok Penerjemahan. Banda Aceh: Universitas Syiah Kuala.
- Yusuf, Karmawati. (n.d). Keunggulan *dan kekurangan pembelajaran kooperatif tipe STAD*. Retrieved at http://karmawatiyusuf.blogspot.co.id/2009/01/pembelajar an-matematika-dengan.html