

---

---

## The Effectiveness of Team Assisted Individualization in Teaching Vocabulary Viewed from Students' Motivation

**Sulaiman**

IKIP-PGRI Pontianak, Jalan Ampera No. 88, Pontianak, Indonesia

Corresponding e-mail: [sulaiman\\_0987@yahoo.com](mailto:sulaiman_0987@yahoo.com)

**Abstract:** This research reveals an experimental study about the effectiveness Team Assisted Individualization in teaching vocabulary at private university in Pontianak. The population of this research was the first semester students of university in Pontianak. The sample was two classes consisting of 60 students taken by using cluster random. The data analysis was done by applying descriptive and inferential statistic (ANOVA and Tukey Test) to test the research hypothesis. Based on the results of the analysis, the findings of this research are: (1) the students who are taught by using Team Assisted Individualization have better vocabulary mastery than those who are taught Peer tutoring. In other word, the use of Team Assisted Individualization is more effective than Peer Tutoring in teaching Vocabulary; (2) the students having high motivation have better vocabulary mastery than those having low motivation; and (3) there is interaction between teaching method and motivation toward students' vocabulary mastery. Based on research findings, it can be concluded that Team Assisted Individualization is an effective teaching method to teach vocabulary for the first semester students of university in Pontianak. The effectiveness of the method is influenced by the students' level of motivation.

**Keywords:** Team Assisted Individualization, Vocabulary, Motivation.

### 1. INTRODUCTION

For the most part, however, people communicate in phrases and sentences, which also have meaning. Vocabulary, as stated by Hatch (1995: 1), is a list or set of words for a particular language or a list or set of words that individual speaker of language might use. Whute (1986: 337) states that vocabulary is the words used in language. They are elements that are combined to make sentences or discourses. The more vocabulary will be needed in order to have accurate word choice, so it will effectively convey thought and idea. Besides most vocabulary mastery is also tested, some students still have difficulty to learn vocabulary. They get confused when they have the vocabulary test. Vocabulary mastery is needed in English. Students must understand vocabulary well because all of English skills involve vocabulary. Practically, many students still find the difficulties to master vocabulary. Based on the interview to the students and the teacher, the students were looked confused in using word in context, spelling, word meaning and also how to pronounce the word correctly. They still made mistake when doing the exercises. They had not understood about the meaning. Some of them understood when the

lecturer was explaining, but they forgot again when they were doing the exercises.

In fact, some English teachers confess that it is hard to implement an effective vocabulary, especially to the class where the students have different characteristics. They come from different genders, learning styles, and abilities in understanding a lesson from the teacher. As English teachers, they face an extremely difficult task. Many students become passive when facing a reading text although it is a simple text because they do not mastery the vocabulary. These students need appropriate method to arise their understanding in vocabulary. The teacher sometimes asks unfamiliar words in the text and then asks them to open the dictionary. The teacher discusses the text by translating word by word. These activities make the students get bored and do not have motivation in the next activities in the class. Methods that are used by the teacher especially in teaching vocabulary have an important role to improve the students' ability in learning the material.

The researcher took this study on vocabulary mastery by using Team Assisted Individualization (TAI). TAI was designed by Slavin and his associate in the early 1980s (Slavin, Leavey, & Steven, 1989: 22). TAI is

designed primarily for grades 3-6, but it has been used at higher grades levels (up to the community college level). TAI was developed for several reasons. First, TAI would provide a means of combining the motivational power and peer assistance of cooperative learning with an individualized instructional program-one that would provide all students with materials appropriate to their levels of skill and allow them to proceed through these materials at their own rates. Second, TAI was developed to apply cooperative learning method to solve many of the problems of individualized instruction. Third, TAI was developed as a means of producing the well-documented social effects characteristic of cooperative learning while meeting diverse needs. There are eight principle components of TAI by Slavin (2008: 186) as follows: (1) Placement test. At the beginning of the program, students are pretested on vocabulary mastery. They are placed at the appropriate point in the individualized program based on their performance on the placement test.(2) Teams. Students are assigned to four-to five- member teams. Each team has a mix of high, average, and achiever, boys and girls, and students of any ethnic groups in the class. Every eight weeks, students are assigned to new teams.(3)Curriculum material. The students work in their teams on self-instructional curriculum materials covering main idea, reference, lexical meaning, meaning based on the context, detail information, and parts of the text.(4) Teaching group. Every day, the teacher teaches lesson to small groups of students (drawn from the heterogeneous teams) who are at the same point in the curriculum (5)Team study method. Following the placement test, the students are given a starting place in the sequence of vocabulary skills. (6)Team scores and team unit recognition. At the end of each week, the teacher computes a team score. This score is based on the average number of units covered by each team member and the accuracy of the unit tests. Criteria are established for team performance. A high criterion is set for a team to be a “super team”, a moderate criterion is set for a team to be a “great team”, and a minimum criterion is set for a team to be a “good team”. The teams meeting the “super team” and “great team”

criteria receive attractive certificates. (7) Fact test. Twice each week, the students are given three-minutes facts (usually functional text test facts) the students are given fact sheets to study at home to prepare for these tests.(8)Whole-class units. Every three weeks, the teacher stops the individualized program and spends a week teaching lessons to the entire class and make reflection with the students. Some advantages of TAI for both teacher and students (Slavin, 2008: 190) are as follows:(1)It can minimize teacher’s involvement in correcting and scoring answer.(2)The teacher will spend the time to teach the small group.(3)The students will be motivated to study the material quickly and accurately.(4)The students working in learning teams toward a cooperative goal could help one another study, provide instant feedback to one another, and encourage one another to proceed rapidly and accurately through the material.

Nunan (1984: 534) states that Peer Tutoring is small-group sessions that consists of one-to-one or one-to-few. The one-to-one instruction allows greater adaptation to an individual’s need. Teachers take into account differences in ability to understand instruction by organizing their teaching of the same part of curriculum in various way. Small-group sessions, alternative textbook, workbook, programmed instruction, games, and, of course, the one-to-one interaction with tutors may help a particular student comprehend what to do and learn.

It is supported by Yan Zhang (2010:1) *Cooperative Learning and Foreign Language Learning and Teaching*, Journal of Language Teaching and Research. The focus of this paper is cooperative learning has positive effects on foreign language learning and teaching. This paper compared cooperative learning with traditional language teaching. The paper reveals cooperative learning benefits for language learning and teaching. The comparison between cooperative learning and traditional language teaching can be identified by process activities in the class. In cooperative learning the students become active participator and contribute their idea in group

work. It can build interaction and communication among the student. Meanwhile, traditional language teaching places the students in a passive receiver. Teaching learning process is focus on teachers' explanation. Therefore, by using cooperative learning the students are able to encourage communication with others. Furthermore, the students can create a positive interdependence, individual accountability, interpersonal and social skill within groups.

Another important thing that needs to be considered in teaching vocabulary as second or foreign language is the students' individual differences. One of them is motivation. Motivation represents psychological processes that emerge volunteer activities to achieve a certain objective (Winarno, 2002: 1). It can be concluded that motivation is subjective experiences or internal states that arouses to an action, pushes us in particular direction, especially willing to engage in lesson and learning activity that is an energy of change within the person to do something for the sake of a certain goal and a way how individuals get interested, react to events that get their attention and engage in certain specified behaviours particularly in the learning process. Motivated individuals will involve whole-heartedly in the teaching-learning process and they will have an intention to learn more.

## 2. RESEARCH METHOD

This research was conducted at an English Education Department IKIP PGRI Pontianak, West Kalimantan. The research was conducted from April 2014 to September 2014 beginning from writing the research proposal, conducting the research, and writing the research report. Experimental study was employed in conducting this research. The purpose is to determine cause-and-effect relationship. Through experimentations, cause and effect relationship can be identified. Because of this ability to identify caution, the experimental approach has come to represent the prototype of scientific method for solving problems

(Christensen and Johnson, 2000: 23). The research design used in this research was factorial design 2x2. It allowed a researcher to study the interaction of an independent variable with one or more variables (Tuckman, 1978: 135). The population of the research was the first semester students of the the English Education Department of IKIP PGRI Pontianak. There were three classes. Total of population is 100 students. The sample of this research consist of two classes; class A as experimental group treated by using Team Assisted Individualization and class B as the control group treated by using Peer Tutoring method. Each class consist of 30 students which were divided into two groups based on the students' level of motivation. The sampling technique used was cluster random sampling technique. In this study, the researcher set the experimental and control group using lottery. The data obtained were the result of motivation questionnaire and vocabulary mastery test. Thus, there were two techniques of collecting data; questionnaire and vocabulary mastery test. Questionnaire was used to know the level of students' motivation and vocabulary test was used to know the result of students' vocabulary mastery after the treatment. The data are analyzed using descriptive analysis and inferential analysis. Descriptive analysis was used to know the mean, median, mode and standard deviation of the scores of the vocabulary mastery test. To know the normality and the homogeneity of the data, the writer used normality and homogeneity test. The normality and homogeneity tests were done before testing the hypothesis. Inferential analysis used was multifactor analysis of variance (ANOVA 2x2). It is used to test the hypothesis.  $H_0$  is rejected if  $F_0$  is higher than  $F_t$ . If  $H_0$  is rejected, the analysis is continued to know which group is better using Tukey test.

## 3. FINDINGS AND DISCUSSION

Measuring the normality using Liliefors. The result can be seen on the table 1.

Table 1. Normality Test

All the highest value of  $L_o$  is lower than  $L_t$  or ( $L_o < L_t$ ) at the significance level  $\alpha = 0.05$ , it can be concluded that the data are in normal distribution.

For measuring the homogeneity test, the researcher used Bartlett formula. The result can be seen on the table 2.

Table 2. Homogeneity Test

The result of the calculation,  $\chi^2$  (0.895) is lower than  $\chi^2_{(7.815)}$ . Thus, it can be concluded that the data are homogenous.

No.	Data	( $L_o$ )	( $L_t$ )	( $\alpha$ )	Status
1.	A <sub>1</sub>	0.085	0.161	0.05	Normal
2.	A <sub>2</sub>	0.136	0.161	0.05	Normal
3.	B <sub>1</sub>	0.087	0.161	0.05	Normal
4.	B <sub>2</sub>	0.128	0.161	0.05	Normal
5.	A <sub>1</sub> B <sub>1</sub>	0.096	0.220	0.05	Normal
6.	A <sub>2</sub> B <sub>1</sub>	0.157	0.220	0.05	Normal
7.	A <sub>1</sub> B <sub>2</sub>	0.139	0.220	0.05	Normal
8.	A <sub>2</sub> B <sub>2</sub>	0.110	0.220	0.05	Normal

The result of mean scores can be seen on table 3.

Table 3. The mean scores of the Cells

sample	df	1/(df)	$s_i^2$	$\log s_i^2$	(df) $\log s_i^2$
1	14	0.071	43.631	1.639	22.957
2	14	0.071	68.631	1.837	25.711
3	14	0.071	68.274	1.834	25.679
4	14	0.071	59.524	1.775	24.846
<b>Sum</b>					99.194

To know whether the hypotheses are rejected or accepted, the researcher measured the data using ANOVA. The result can be seen on the table 4.

Table 4. The Summary of Analysis of Variance 2 x 2.

	A <sub>1</sub>	A <sub>2</sub>	
B <sub>1</sub>	84.67	75.17	79.92
B <sub>2</sub>	72.83	73.33	73.08
	78.75	74.25	

From the table 4, it can be concluded that:  
 a) because  $F_o$  between columns (5.061) is higher than  $F_t(4.000)$  at the level of

significance  $\alpha = 0.05$ ,  $H_o$  is rejected and the difference between columns is significant.

Source of Variance	SS	Df	MS	$F_o$	$F_{t(0.05)}$	$F_{t(0.01)}$
<b>Between columns (The Methods)</b>	303.750	1	303.750	5.061	4.00	7.08
<b>Between rows (Risk-taking)</b>	700.417	1	700.417	11.67	4.00	
<b>Columns by rows (Interaction)</b>	375.000	1	375.000	6.248	4.00	
<b>Between groups</b>	1379.167	3	459.722			
<b>Within groups</b>	3360.833	56	<b>60.015</b>			
<b>Total</b>	4740.000	59				

There is a significant difference between the students who are taught by using Team Assisted Individualization and those who are taught by using Peer Tutoring method in their vocabulary mastery. The mean score of the students who are taught by using Team Assisted Individualization (78.74) is higher than the mean score of students who are taught by using Peer Tutoring method (74.25). It can be concluded that Team Assisted Individualization is more effective than Peer Tutoring method to teach vocabulary; (b) Because  $F_o$  between rows (11.671) is higher than  $F_t$  (4.00) at the level of significance  $\alpha = 0.05$ ,  $H_o$  is rejected and the difference between rows is significant. The students with high level of motivation and those with low level of motivation are significantly different in their vocabulary mastery. The mean score of the students with high level of motivation (79.92) is higher than those with low level of motivation (73.08). It can be concluded that the students with high level of motivation have better vocabulary mastery than those with low level of motivation; (3) because  $F_o$  columns by rows (6.248) is higher than  $F_t$  (4.00) at the level of significance  $\alpha = 0.05$ ,  $H_o$  is rejected and there is an interaction between teaching methods and students' motivation to teach vocabulary. Thus, it can be concluded that the effect of teaching methods on vocabulary depends on the level of students' motivation.

The researcher used Tukey test to know the significant difference of each mean. The result can be seen on the table 5.

Table 5. The Summary of Tukey Test

Data	Sample	$q_0$	$q_t$		Status
A <sub>1</sub> and A <sub>2</sub>	60	3.181	2.830	0.05	Significant
B <sub>1</sub> and B <sub>2</sub>	60	4.836	2.830	0.05	Significant
A <sub>1</sub> B <sub>1</sub> and A <sub>2</sub> B <sub>1</sub>	30	4.749	2.890	0.05	Significant
A <sub>1</sub> B <sub>2</sub> and A <sub>2</sub> B <sub>2</sub>	30	0.249	2.890	0.05	Not Significant

From the table 5, it can be known that: (a) the score of  $q_0$  between columns is 3.181 and the score of  $q_t$  of Tukey's table at the level of significance = 0.05 is 2.830. Because  $q_0 > q_t$  or  $q_0$  (3.181) is higher than  $q_t$  (2.830), it can be concluded that there is a significant difference on the students' vocabulary mastery between those who are taught using Team Assisted Individualization and those who are taught using Peer Tutoring method. Meanwhile, based on the calculation result, the mean of the students who are taught Team Assisted Individualization (78.75) is higher than that of those who are taught using Peer Tutoring method (74.25), it can be concluded that Team Assisted Individualization is more effective than Peer Tutoring method to teach vocabulary; (b) the score of  $q_0$  between rows is 4.836 and the score of  $q_t$  of Tukey's table at the level of significance = 0.05 is 2.830. Because  $q_0 > q_t$  or  $q_0$  (4.836) is higher than  $q_t$  (2.83), it can be concluded that there is a significant difference on the students' vocabulary mastery between those who have high motivation and those who have low motivation. Based on the calculation result, the mean of the students who have high motivation (79.92) is higher than that of those who have low motivation (73.08), it can be concluded that the students who have high motivation have better vocabulary mastery than those who have low motivation; (c) the score of  $q_0$  between columns A<sub>1</sub>B<sub>1</sub> and A<sub>2</sub>B<sub>1</sub> is 4.749 and the score of  $q_t$  of Tukey's table at the level of significance = 0.05 is 2.890. Because  $q_0 > q_t$  or  $q_0$  (4.749) is higher than  $q_t$  (2.89), it can be concluded that there is a significant difference on the students' vocabulary mastery of the students having high motivation between those who are taught using Team Assisted Individualization and those who are taught

using Peer Tutoring method. Meanwhile, the mean score of A<sub>1</sub>B<sub>1</sub> (84.67) is higher than A<sub>2</sub>B<sub>1</sub> (75.17), it can be concluded that Team Assisted Individualization is more effective than Peer Tutoring method to teach vocabulary for the students who have high motivation; (d) the score of  $q_0$  between columns A<sub>1</sub>B<sub>2</sub> and A<sub>2</sub>B<sub>2</sub> is 0.249 and the score of  $q_t$  of Tukey's table at the level of significance = 0.05 is 2.890. Because  $q_0 < q_t$  or  $q_0$  (0.249) is lower than  $q_t$  (2.890), it can be concluded that there is no significant difference on the students' vocabulary mastery of the students having low motivation between those who are taught using Team Assisted Individualization and those who are taught using Peer Tutoring method. Whereas, the mean score of A<sub>1</sub>B<sub>2</sub> (72.83) is lower than A<sub>2</sub>B<sub>2</sub> (73.33). The difference between them is only 0.5 so it can be concluded that Peer Tutoring method does not differ significantly from Team Assisted Individualization to teach vocabulary for the students who have low motivation.

After knowing the findings of the study, a discussion is presented as follows:

**1. Team Assisted Individualization is more effective than Peer Tutoring method**

Since TAI method is an effective teaching method to teach vocabulary, English teachers can implement this teaching method in teaching and learning vocabulary to improve students' vocabulary mastery. To be able to implement this teaching method effectively, teachers should follow some preparation. First, teachers should understand the concept as well as the strengths and the weaknesses of this teaching method. It enables them to know the right procedure of this teaching method and avoid from the obstacles which may appear in the process of teaching and learning process. One of the problems in implementing this teaching method is time consuming. It usually appears in the steps of discussing. It takes quite longer time than other steps because students usually need time to gather and discuss about vocabulary. Second, teachers also have to analyze the syllabus in order to be able to design lesson plans covering the appropriate materials and evaluations. It helps them to select appropriate standard competence, basic competence and indicators, which can be achieved through the implementation of this

teaching method. Designing lesson plan also facilitate them to select materials and types of evaluation which are appropriate with the level of students' competence and the complexity in implementing this teaching method. Thus, to be able to follow all the preparations before implementing this teaching method, teachers should read and learn about this teaching method from any sources like books, journal article, seminars, workshop etc. In order to achieve a good result, it must be applied properly in the teaching-learning process. Students are motivated to work seriously in order to be able to do share and give contributions to others. TAI method is process of learning which put the students as a center (student center style) that encourages students to be active in teaching learning process. It is line with expert's statement; Elliot (1999: 404) defines TAI method is a term for teaching that permits students to be active partners in the search for knowledge, thus enhancing the meaning of what they learn.

## **2. Interaction between teaching methods and students' motivation in teaching vocabulary.**

In teaching vocabulary, teachers should be able to select the most appropriate teaching method based on the students' condition. Students' motivation becomes one of the important considerations in teaching vocabulary because students are able to learn the vocabulary material and do some tasks well if they have belief that they can do it. Thus, teachers should understand whether the selected teaching method can facilitate the students having high and low motivation to learn vocabulary. It is better for teachers to use students-centered learning to teach students having high motivation while teacher-centered learning to teach students having low motivation.

Since motivation regarded as one of the psychological aspects to have a good vocabulary mastery and any other subjects, school as the official institution for education should pay more attention on students' motivation level. In this case, school should involve actively testing the students' motivation level. The motivation questionnaire instrument can be designed by capable teachers or psychologists. It can be conducted before

the process of teaching and learning vocabulary done in the classroom. By taking a look at the result of students' motivation level, school can decide what kinds of teaching method which is appropriate to teach vocabulary. In addition, Brown (2000: 7) considers high motivation as a positive characteristic which could enhance learning language. Therefore, the students having high motivation would like to take part enthusiastically when the teacher offers them to involve actively in learning process.

The result of this research which shows the interaction between teaching methods and students' motivation can be as an additional reference for other researchers who want to do further research related to the application of teaching vocabulary. In addition, this research can be useful to explain more description on the process and the procedure of conducting the same kinds of research. It also beneficial for other researchers who may plan to have the similar research viewed from any different psychological point of view besides motivation which may have correlation with students' vocabulary like intelligence, personality, self-esteem, etc.

The result of ANOVA test shows that  $F_o$  is higher than  $F_t$  which means that Team Assisted Individualization differs significantly from Peer Tutoring method for the students having high motivation. However, the result of tukey test shows that Team Assisted Individualization does not differ significantly from Peer Tutoring method for students having low motivation because  $q_o$  is lower than  $q_t$ . Although, the mean score of students having low motivation who were taught Peer Tutoring method is better than the mean score of students having low motivation who were taught Team Assisted Individualization but it is not significant because the difference score is only 0.5. The students said that there were some questions that they did not answer because they were afraid to make mistakes. This action is a character of students who have low motivation. It is difficult for them to try to answer when they are doubt. So, it impacts to their score result.

From the above research findings, the result of ANOVA test is used to conclude. So, there is an interaction between teaching methods and

motivation toward students' vocabulary mastery.

#### 4. CONCLUSION

Based on the description of the data analysis, some findings of the research are: (1) Team Assisted Individualization is more effective than Peer Tutoring method to teach vocabulary for the first semester students of the English Education Department of IKIP PGRI Pontianak; (2) the students with high level of motivation have better vocabulary mastery than those with low level of motivation for the first semester students of the English Education Department of IKIP PGRI Pontianak; (3) there is an interaction between teaching methods and the students' motivation to teach vocabulary for the first semester students of the the English Education Department of IKIP PGRI Pontianak.

It can be concluded that Team Assisted Individualization is an effective method to teach vocabulary for the first semester students of the the English Education Department of IKIP PGRI Pontianak. The effectiveness of the method is influenced by the students' level of motivation.

Team Assisted Individualization is proved as an effective method to teach vocabulary. In order to achieve a good result, it must be applied properly in the teaching-learning process.

The researcher would like to give some suggestions as follows: (1) teachers can apply Team Assisted Individualization to teach vocabulary; (2) teachers have to consider that motivation is one of factors that may affect the students' vocabulary mastery, pay more attention to the students with low level of motivation, find out factors influencing the students' motivation, and encourage them to be high motivation students; (3) students are expected to be more active in the teaching and learning process in order to develop their vocabulary mastery; (4) it is suggested for students with low level of motivation to encourage themselves to be high motivation students in learning language; (5) the next researchers can use the result of this research as the starting point for conducting the next investigation with different students' condition and skill; (6) the next researchers can also develop teaching methods used in this research

as a way of making revision to the weaknesses of this research.

#### 5. REFERENCES

- Brown, Douglas. 2007. *Principles of Language and Teaching, Fifth Edition*. New York: Pearson Education, Inc.
- \_\_\_\_\_. 2004. *Language Assesment: Principles and Classroom Practice*. San Francisco State: Longman.
- \_\_\_\_\_. 2000. *Principles of Language Learning and Teaching*. New York: Addison Wesley Longman, Inc.
- Cohen, L., Manion, L., & Morrison, K.R.B. 2000. *Research Methods in Education (fifth edition)*. London: Routledge Falmer.
- Christensen, Larry and Burke Johnson. 2000. *Educational Research (Quantitative and Qualitative Approach)*. Boston: Allyn and Bacon.
- Elliot, Stephen. N. Et al. 1999. *Educational Psychology. Effective Teaching Effective Learning*. Singapore: Brown and Bechmark Publisher.
- Harmer, Jeremy. 1999. *How to Teach vocabulary*. London: Longman.
- \_\_\_\_\_. 1998. *The Practice of English Language Teaching*. London: Longman.
- Hatch, Evelyn and Cheryl, Brown. 1995. *Vocabulary, Semantics, and Language Educatation*. Cambridge University Press
- Nunan, David. 2005. *Practical English Language Teaching: Grammar*. New York: McGraw-Hill Companies, Inc. 12221 avenue of the Americas.
- Richards, J.C. & Schmidt R.W. 1983. *Language and Communication*. New York: Longman Group limited.
- Skinner, Paul H and Shelton, Ralph. 1985. *Speech, Language, and Hearing*. John Wiley and Sons Inc: Canada
- Slavin, R.E. (1989). *Cooperative Learning Method*. New York: Allyn and Bacon.
- Thornbury, Scott. 2009. *How to Teach Vocabulary*. London: Longman
- Tuckman, Bruce W. 1978. *Conducting Education Research*. New York: Harcourt Brace Jovanovich Inc.
- Ur, Penny. 2009. *Grammar Practice Activities: A Practical Guide for Teachers*. Cambridge: CUP.
- Whute. 1986. *The Teaching of English Vocabulary Language*. London: Glasgow
- Winarno Surakhmad. 1994. *Pengantar Penelitian Ilmiah Dasar dan Metode Teknik*. Bandung: Tarsito
- Zhang, Y. (2010). Cooperative Language Learning and Foreign Language Learning and Teaching. *Journal of Language Teaching and Research*. Vol. 1, No. 1, pp. 81-83. doi: 10.4304/jltr.1.1.81-83.