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THE EFFECTS OF INQUIRY- BASED LEARNING ON STUDENTS' INSTITUTIONAL TOEFL SCORE AT ENGLISH DEPARTMENT OF IAIN PALANGKA RAYA

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Abstract

The study is aimed at measuring the effect of Inquiry based learning on the students' institutional TOEFL score, before, during, and after the treatment. The study belongs to an experimental study using repeated measures design. It is carried out at the sixth semester of English Department at IAIN Palangka Raya 2015/ 2016 academic years. The subjects are 23 students. The One Way ANOVA Repeated measure is applied in this study. Before testing the hypotheses, a number of pre-required tests is conducted, such as normality, homogeneity and Sphericity tests. The result of Shapiro- Wilk test for testing normality was that ($p= 0.832 > 0.05$), the Levene test for testing homogeneity ($p= 0.276 > 0.05$); and Mauchly test for testing Sphericity ($p=0.000<0.05$). The One Way ANOVA Repeated measures test found that the value of Wilk's Lamda= 0.139, F= 64.78, the value of Sig. 0.000 or $p< 0. 005$, the value of eta squared= 0.861. It could be interpreted that there was a significant statistical difference on the students' TOEFL scores before the treatment (means 436), during (means 490) and after the implementation of Inquiry Based Learning (means 511).

Keywords: *Effect, Inquiry Based Learning, institutional TOEFL Scores*

A. Background of The Study

Some academicians have conducted the study focusing on Inquiry Based Learning. First, Ali Abdi (2014) found that the students who were instructed through inquiry-based learning were achieved higher score than the ones which were instructed through the traditional method. Next, Sever and Güven's study (2014) on Effect of Inquiry-based Learning Approach on Student Resistance in a Science and Technology Course. They found that there was a significant difference between the pre-test and post-test mean scores of both the control and experiment groups; however, the mean scores of the experimental groups showed a greater increase than those of the control group. While the findings derived from the follow-up forms and the analysis of teacher interviews showed that the experimental process changed the resistance behaviors of students in a positive way, this change was not permanent at the end of the experimental process. As a result, it was found that students can have a variety of resistant behaviors and these behaviors can be affected positively by different teaching methods that are accepted as effective in that discipline.

In addition, there are other studies on TOEFL. One of them is the study conducted by Dwi Poejiastutie, et.al., in 1996, entitled: *A Study on Students' score on TOEFL at English Department of Muhammadiyah University of Malang*. They found that the students' ability on TOEFL was fair, and the most difficult aspect was reading comprehension and vocabulary. The second study is conducted by Nisan Susan in 1996 entitled: *An Analysis of*

Factors Affecting the Difficulty of Dialogue Items in TOEFL Listening Comprehension. The results of the analyses indicate that, of the features studied, five were significant: (1) the presence of infrequent oral vocabulary; (2) the sentence pattern of the utterances in the stimulus; (3) the presence of negatives in the stimulus; (4) the necessity of making an inference to answer the item; and (5) the roles of the speakers in the stimulus. The third study is conducted by Hale, Gordon A. entitled: Multiple-Choice Cloze Items and the Test of English as a Foreign Language. This study found that from a practical standpoint, TOEFL performance can be adequately described by two factors relating to listening comprehension and then to all other parts of the test. Examination of the MC cloze test showed that the total score was relatively reliable, and that it was possible to estimate item response theory parameters for the MC cloze items with reasonable accuracy. However, there was no strong empirical evidence that the items types within the MC cloze test reflected distinct skills. It appeared that skills associated with grammar, vocabulary, and reading comprehension are highly interrelated as assessed by the TOEFL and the MC cloze test.

The fourth study is conducted by Swinton, Spencer S. and Powers, Donald E. entitled: *Factor Analysis of the Test of English as a Foreign Language for Several Language Groups.* The study found that three major factors underlie performance on the TOEFL and that these factors are relatively unambiguous in their interpretation. A factor underlying the listening comprehension section was noted for each language group; however, there were differences among the language groups in the interpretation of two of the factors. The African, Arabic, Chinese, and Japanese groups were generally similar on a factor underlying performance on structure, written expression, and reading comprehension items; and on another separate factor underlying vocabulary items. The Spanish and Germanic groups were also similar on each of two other factors, which correspond to the TOEFL sub scores (structure/written expression and reading comprehension/vocabulary).

The present study is different from the above studies. The study will focus on the effects of inquiry- based learning on students' institutional TOEFL score at the sixth semester English Department of Palangka Raya State Islamic Institute. The study belongs to an experimental study using repeated measures design. It is carried out at the sixth semester of English Department at IAIN Palangka Raya 2015/ 2016 academic years. The subjects are 23 students. The One Way ANOVA Repeated measures.

B. Inquiry Based Learning

Inquiry-based learning is primarily a pedagogical method, developed during the discovery learning movement of the 1960s as a response to traditional forms of instruction - where people were required to memorize information from instructional materials. Trowbridge & Bybee (1986) stated "*Inquiry is the process of defining and investigating problems, formulating hypotheses, designing experiments, gathering data, and drawing conclussion about problems*". According to them, inquiry is a process of defining, observing problems, formulating hypothesis, designing experiment, collecting data, and drawing conclusion Furthermore, the essence of inquiry based learning is creating the learning atmosphere focusing on students' activity and giving appropriate guidance in finding concepts and scientific principles (Lebih lanjut, dikemukakan bahwa esensi dari pengajaran inkuiri adalah menata lingkungan atau suasana belajar yang berfokus pada siswa dengan memberikan

bimbingan secukupnya dalam menemukan konsep-konsep dan prinsip-prinsip ilmiah (Widowati, 2007; 21).

According Douglas Liewellyn (2016) inquiry is a learning activity in which students are involved in the process of searching and formulating and solving problems. Inquiry is a various process covering observation activities, formulating relevant questions, evaluating books and other sources, investigating and reviewing, analyzing, and interpreting data, making a prediction and communicating the results . *(Depdikbud, 1997; NRC, 2000).*

In this case, Piaget (in Mulyasa, 2004; 108) stated that inquiry is a technique preparing learners to conduct a self experiment largely. The Inquiry based learning was developed in the year of 1960 as a response to the traditional learning. In Indonesia, the Inquiry based learning has been introduced since 1980 (Rustaman, 2005). The Inquiry based learning was firstly introduced by Neil Postman dan Charles Weingartner (Postman, 1969).

The philosophy of inquiry based learning finds its antecedents in constructivist learning theories, such as the work of Piaget, Dewey, Vygotsky, and Freire among others, and can be considered a constructivist philosophy. Generating information and making meaning of it based on personal or societal experience is referred to as constructivism. Dewey's experiential learning pedagogy (that is, learning through experiences) comprises the learner actively participating in personal or authentic experiences to make meaning from it. Inquiry can be conducted through experiential learning because inquiry values the same concepts, which include engaging with the content/material in questioning, as well as investigating and collaborating to make meaning. Vygotsky approached constructivism as learning from an experience that is influenced by society and the facilitator. The meaning constructed from an experience can be concluded as an individual or within a group. Inquiry-based learning starts by posing questions, problems or scenarios—rather than simply presenting established facts or portraying a smooth path to knowledge. The process is often assisted by a facilitator. Inquirers will identify and research issues and questions to develop their knowledge or solutions. Inquiry-based learning includes problem-based learning, and is generally used in small scale investigations and projects, as well as research.

An important aspect of inquiry-based learning is the use of open learning, as evidence suggests that only utilizing lower level inquiry is not enough to develop critical and scientific thinking to the full potential. Open learning has no prescribed target or result that people have to achieve. There is an emphasis on the individual manipulating information and creating meaning from a set of given materials or circumstances. In many conventional and structured learning environments, people are told what the outcome is expected to be, and then they are simply expected to 'confirm' or show evidence that this is the case. Open learning has many benefits. It means students do not simply perform experiments in a routine like fashion, but actually think about the results they collect and what they mean. With traditional non-open lessons there is a tendency for students to say that the experiment 'went wrong' when they collect results contrary to what they are told to expect. In open learning there are no wrong results, and students have to evaluate the strengths and weaknesses of the results they collect themselves and decide their value.

Importance of Inquiry

Memorizing facts and information is not the most important skill in today's world. Facts change, and information is readily available -- what's needed is an understanding of how to get and make sense of the mass of data. Educators must understand that schools need to go beyond data and information accumulation and move toward the generation of useful and applicable knowledge . . . a process supported by inquiry learning. In the past, our country's success depended on our supply of natural resources. Today, it depends upon a workforce that "works smarter." Through the process of inquiry, individuals construct much of their understanding of the natural and human-designed worlds. Inquiry implies a "need or want to know" premise. Inquiry is not so much seeking the right answer -- because often there is none -- but rather seeking appropriate resolutions to questions and issues. For educators, inquiry implies emphasis on the development of inquiry skills and the nurturing of inquiring attitudes or habits of mind that will enable individuals to continue the quest for knowledge throughout life.

Content of disciplines is very important, but as a means to an end, not as an end in itself. The knowledge base for disciplines is constantly expanding and changing. No one can ever learn everything, but everyone can better develop their skills and nurture the inquiring attitudes necessary to continue the generation and examination of knowledge throughout their lives. For modern education, the skills and the ability to continue learning should be the most important outcomes.

Inquiry is important in the generation and transmission of knowledge. It is also an essential for education, because the fund of knowledge is constantly increasing. The figure below illustrates why trying to transmit "what we know," even if it were possible, is counterproductive in the long run. This is why schools must change from a focus on "what we know" to an emphasis on "how we come to know."

The Application of Inquiry

While much thought and research has been spent on the role of inquiry in science education, inquiry learning can be applied to all disciplines. Individuals need many perspectives for viewing the world. Such views could include artistic, scientific, historic, economic, and other perspectives. While disciplines should interrelate, inquiry learning includes the application of certain specific "ground rules" that insure the integrity of the various disciplines and their world views.

Outcomes of Inquiry

An important outcome of inquiry should be useful knowledge about the natural and human-designed worlds. How are these worlds organized? How do they change? How do they interrelate? And how do we communicate about, within, and across these worlds? These broad concepts contain important issues and questions that individuals will face throughout their lives. Also, these concepts can help organize the content of the school curriculum to provide a relevant and cumulative framework for effective learning. An appropriate education should provide individuals with different ways of viewing the world, communicating about it, and successfully coping with the questions and issues of daily living. While questioning and searching for answers are extremely important parts of inquiry, effectively generating knowledge from this questioning and searching is greatly aided by a conceptual context for

learning. Just as students should not be focused only on content as the ultimate outcome of learning, neither should they be asking questions and searching for answers about minutiae. Well-designed inquiry-learning activities and interactions should be set in a conceptual context so as to help students accumulate knowledge as they progress from grade to grade. Inquiry in education should be about a greater understanding of the world in which they live, learn, communicate, and work.

C. TOEFL

One of the standardized tests in English ability for non-native speakers is TOEFL. The TOEFL is the test of English as a foreign language (Pamela, 2007; 10). It is a test to measure the level of proficiency of nonnative speakers of English (Phillips, 1999; xiii). The Test of English as a Foreign Language evaluates the ability of an individual to use and understand English in an academic setting. Sometimes it is an admission requirement for non-native English speakers at many English-speaking colleges and universities. Additionally, institutions such as government agencies, licensing bodies, businesses, or scholarship programs may require this test. TOEFL is the most often used examination in the admissions process of foreign students to colleges and universities in the United State (Pyle, 2002; 4). The Test of English as a Foreign Language is one of English examination used to measure the students' TOEFL ability who do not used English as their language (non native speaker), generally TOEFL used as a requirement to continue their study to the other countries, especially in the countries where English is spoken as a first language.

The TOEFL test measures a student's ability to use and understand English at the university level by evaluating how well a student combines his or her listening, reading, speaking and writing skills to perform academic tasks. The TOEFL test also measures the ability of nonnative speakers of English to use and understand English as it is spoken, written, and heard in college and university settings. If someone is applying to a college or university where English is the language of instruction, the TOEFL score will help admission staff determine if his/her skills in English are adequate for enrollment into the program of study (Educational Testing Service, 2006).

In Palangka Raya State Islamic Institute, the institutional TOEFL score is required as one of the requirements for all students who will join the thesis seminar. For non-English Department students, they are required to have the institutional TOEFL score not less than 400. Meanwhile, for English Department students, they are required to have the institutional TOEFL score at least 500. Based on facts above, the researcher is interested in conducting a study on The Effects of Inquiry- Based Learning on Students' Institutional TOEFL Score at the Sixth Semester English Department of Palangka Raya State Islamic Institute. There are a number of reasons to choose the topic of the study. First, based on the previous studies, inquiry- based learning has been succeeding to improve students' achievement in EFL classes. Second, the institutional TOEFL is essential for English Department students of Palangka Raya State Islamic Institute as a measurement of English ability. Third, both teachers and English Study Program students of Tarbiyah and Teacher Training Faculty of the Palangka Raya State Islamic Institute should know their English ability in order to improve the quality of teaching English in EFL classes. Fourth, knowing the students' progress on TOEFL score using inquiry- based learning is important in order to see the

effect of the teaching method applied in the EFL class and to see the more appropriate learning method.

D. Research Problem and Objective of the Study

Based on the facts above, the problem of the study can be formulated as follows: Is there any significance difference on the students' TOEFL score before, during, and after the implementation of inquiry- based learning at the Sixth Semester English Department of Palangka Raya State Islamic Institute? The study is aimed at measuring significance difference on the students' TOEFL score before, during, and after the implementation of inquiry- based learning at the Sixth Semester English Department of Palangka Raya State Islamic Institute.

E. Significance of the Study

The study has theoretical and practical significance. Theoretically, the result of the study can be used as a study of the implementation of inquiry- based learning in EFL class. The result of the study can also affirm the principles of theory of Inquiry Based Learning. In terms of theory, this study is expected to support the theory of inquiry- based learning especially in the TOEFL class in English language learning. The result of the study is expected to describe the steps teaching TOEFL using inquiry- based learning. In addition, the result of this study may provide new insights in researching inquiry- based learning, especially in TOEFL class. It is expected that the result of the study can give significant contribution to the EFL teachers.

Practically, the result of the study can give empirical data on the EFL class, especially in TOEFL class, about the difference students' score on the institutional TOEFL before, during, and after the implementation of inquiry- based learning. Moreover, the result study can be used to classify the students based on their institutional TOEFL performance. The result study can also be used by English study program as a parameter of the students' quality to improve the quality of teaching at English study program at Palangka Raya State Islamic Institute.

Practically, the study is also expected to provide information on trends in EFL class. This information can be used as learning materials to enhance the students' problem in TOEFL. It can also be a fed back to the lecturers in order to improve the EFL teaching quality. Moreover, the study can also help the students to solve their problems in solving TOEFL test. Through this research, both teachers and students get information about the EFL teaching method in preparing the course syllabus or in a broader scope, the EFL curriculum development.

F. Research Methodology

The design was the researcher's plan for the study, which includes the method to be used, what data would be gathered, where, how and whom (Ary, 2010; 32). It was a total plan for carrying out an investigation. Research design started with an initial interest, idea or theoretical expectation and proceeded through a series of interrelated steps to narrow the focus of the study so that concepts, methods and procedures are well defined (James, 2003; 148). The study belonged to experiment research using times series design or repeated

measures design, since it attempted to measure the difference means with three series times of test on the students' TOEFL score before, during, and after the implementation of inquiry-based learning. Here, the One Way ANOVA Repeated Measures was applied to test the hypotheses.

One way ANOVA Repeated Measured was used to compare three or more group means where the participants were the same in each group. This usually occurred in two situations: (1) when participants were measured multiple times to see changes to an intervention; or (2) when participants were subjected to more than one condition/trial and the response to each of these conditions wants to be compared. In the present study, the subjects' TOEFL scores are measured three times: before, during, and after the implementation of inquiry based- learning to see changes to an intervention. In the present study, the subject of the study was all the A class students of the sixth semester English department of Palangka Raya State Islamic Institute of 2015/ 2016 academic year. The number of the subject was 23 students. The study was aimed at measuring whether there is a significant difference or not on the students' TOEFL score progress: before, during, and after the implementation of inquiry based-learning. There was only one instrument developed in conducting the study, the TOEFL test.

Test instrument was a measuring device built as a series of tasks to which a person is to respond. When scored, the test gives a quantification of the characteristic that the test is designed to measure (Hopkins, 1980; 464). A good test had to concern about some basic characteristics: validity, reliability, objectivity, usability, and discrimination (Callahan, 1988; 346). Validity referred to whether the test measures what it was supposed to measure. Reliability referred to the consistency of results. Objectivity referred to freedom from subjective judgments for both the teacher and student. Usability referred to the practical aspects of time and resources required for the test. Discrimination referred to the ability of a test to separate pupils on the basis of how well they perform on the test. In this study, test was the main instrument to collect the data about the students' institutional TOEFL score. In the present study, a standardized test was applied. The standardized test was a prepared test for which content had been selected and checked empirically. Administration and scoring procedures were the same for all test takers (Hopkins, 1980; 463). Standardized tests were useful for assessing such qualities as students' intellectual abilities, academic achievement, attitudes, interests, and aptitudes (Callahan, 1988; 344). In the present study, the type of the test was multiple choice tests consisting of 140 test items covering 50 test items of Listening Comprehension, 40 test items of Structure and Written Expression, and 50 test items of Reading Comprehension. The study used the three models of TOEFL test compiled by Unit of Language Development at IAIN Palangka Raya. Three models of TOEFL test were selected since they represent the model of standardized TOEFL test; the TOEFL books of the similar model were easily to get; the TOEFL reference books were provided at the college library, and the students were familiar with such kind of TOEFL references. Since it was a standardized test, the test had fulfilled the requirement of validity and reliability of the test. The subjects had to take 120 minutes to complete the institutional TOEFL test for each test.

To answer the research problem, the researcher did the following steps. First, the researcher gave the TOEFL test to the subject before the implementation of inquiry based-learning in teaching TOEFL materials. This was done in order to know the early ability before the implementation. Then, during the implementation of inquiry based- learning in teaching TOEFL materials, the subjects were given another TOEFL test. This was done in

order to know the students' TOEFL score progress during the implementation. Then, after the implementation of inquiry based- learning in teaching TOEFL materials, the subjects were given the other TOEFL test. This was done in order to know the students' TOEFL score progress after the implementation of inquiry based- learning.

Second, the researcher formulated the hypotheses being tested. In the present study, there were two hypotheses. The alternative hypothesis (Ha): There was statistically significance difference on the students' TOEFL score before, during, and after the implementation of inquiry- based learning at the Sixth Semester English Department of Palangka Raya State Islamic Institute. The null hypothesis (Ho): There was no statistically significance difference on the students' TOEFL score before, during, and after the implementation of inquiry- based learning at the Sixth Semester English Department of Palangka Raya State Islamic Institute.

Third, the researcher determined the variables of the study. There were three variables in the study: one independent variable and three dependent variables. The independent variables was inquiry- based learning. Meanwhile, the dependent variables were the scores of the students' TOEFL test before the implementation of inquiry- based learning ; the scores of the students' TOEFL test during the implementation of inquiry- based learning; and the scores of the students' TOEFL test after the implementation of inquiry- based learning.

Fourth, the researcher measured pre-required tests before testing the hypothesis, such as normality test using Shapiro- Wilk test, homogeneity using the Levene test and Sphericity using Mauchly test

Fourth, the researcher analysed the collected data and tested the hypothesis using SPSS program of one way ANOVA Repeated Measured in order to measure whether there was statistically difference or not on the students' TOEFL scores, before, during and after the implementation of inquiry- based learning. Here, the three different scores were compared and analyzed using One Way ANOVA Repeated Measures. To find the F value, the SPSS 16.0 program was applied. Then, the F value was compared with F table at 1% and 5% significant levels. If the F value was higher than F table, ha was accepted and ho was rejected. It meant that there was statistically significance difference on the students' TOEFL score before, during, and after the implementation of inquiry- based learning at the Sixth Semester English Department of Palangka Raya State Islamic Institute at 1% and 5% significant levels. On the contrary, if the F value was smaller than F table, ha was rejected and ho was accepted. It meant that there was no statistically significance difference on the students' TOEFL score before, during, and after the implementation of inquiry- based learning at the Sixth Semester English Department of Palangka Raya State Islamic Institute at 1% and 5% significant levels. Finally, the discussion was made to clarify the research findings.

G. Research Findings

After given three times for TOEFL tests, the result showed that there was a significant improvement: before, during, and after the treatment, as described in Table 1.

Tabel 1 The Comparison of TOEFL Scores: before, during, and after the treatment

No	Subjects	TOEFL Scores			Improvement
		before	during	after	
1	Apr	416	466	513	97
2	Asm	433	463	490	57
3	Her	390	400	430	40
4	Liz	440	473	510	70
5	Tak	406	480	496	90
6	Nin	526	530	550	24
7	Tum	520	526	543	23
8	Yul	443	503	516	73
9	Rif	536	543	560	24
10	Mar	473	506	526	53
11	Ann	470	486	506	36
12	Sus	460	470	483	23
13	Ade	433	460	483	50
14	Put	456	473	503	47
15	Nur	446	496	520	74
16	Mud	500	506	526	26
17	Ikh	456	493	500	44
18	Rin	473	476	513	40
19	Rat	503	520	533	30
20	Suk	480	503	506	26
21	Dwi	456	460	476	20
22	Tri	503	536	550	47
23	Dia	436	510	526	90

Based on the table above, it can be seen that the TOEFL score before the treatment as follows: there were 3 of 23 (or 13.03%) got intermediate score; about 15 of 23 students (65.22%) got pre-advanced score; and about 5 of 23 students (21.74%) got advanced score. None of students special advanced, pre intermediate and elementary scores. The lowest score 390 and the highest score was 536. The average score was 436 (pre advanced category). After given the treatment, the students' TOEFL score increased better as follows: there were 1 of 23 (or 4.35%) got special advanced; about 7 students or 65.22% pre-advanced score; and about 15 of 23 students (65.22%) got advanced score. None of students got intermediate, pre intermediate and elementary scores. The lowest score 430 and the highest score was 560. The average score was 511.

In addition, the result of Shapiro- Wilk test for testing normality was that ($p= 0.832 > 0.05$), the Levene test for testing homogeneity ($p= 0.276 > 0.05$); and Mauchly test for testing Sphericity ($p=0.000<0.05$), as described in Table 2.

Table 2. Normality Test

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
VAR00002		Statistic	df	Sig.	Statistic	df	Sig.
VAR00001	1	.099	23	.200*	.976	23	.832
	2	.128	23	.200*	.945	23	.235
	3	.086	23	.200*	.955	23	.364

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Then, the homogeneity test using Levene test as described in Table 3.

Tabel 3. the homogeneity test

Levene Statistic	df1	df2	Sig.
1.313	2	66	.276

Based on Shapiro- Wilk test, it was found that the value of Sig. was 0.832. Since it was greater than 0.05, it was concluded that the data were in normal distribution. Then, for testing the homogeneity, it was found that the value of Sig. for Levene test was 0.276. Since it was greater than 0.05, it was concluded that the data were not violated the homogeneity. Then, Shericity test was done using Mauchly's Test, as described in Table 4.

Table 4. Mauchly's Test of Sphericity[b]

Within Subject s Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[a]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
score	.445	16.995	2	.000	.643	.666	.500

The table showed that the value of Sig. was 0.000. Since, it was smaller than 0.05, it meant the data fulfilled the assumption of Sphericity. Then, the null hypothesis being rejected was formulated. There was no significance difference on the TOEFL score before, during, and after the treatment. Here, a One Way ANOVA Repeated Measures test was applied using Multivariate Tests was applied as in Table 5.

Table 5. Multivariate Tests[b]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
tes	Pillai's Trace	.861	64.783[a]	2.000	21.000	.000	.861
	Wilks' Lambda	.139	64.783[a]	2.000	21.000	.000	.861
	Hotelling's Trace	6.170	64.783[a]	2.000	21.000	.000	.861
	Roy's Largest Root	6.170	64.783[a]	2.000	21.000	.000	.861

a. Exact statistic

Table 5. Multivariate Tests[b]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
tes	Pillai's Trace	.861	64.783[a]	2.000	21.000	.000	.861
	Wilks' Lambda	.139	64.783[a]	2.000	21.000	.000	.861
	Hotelling's Trace	6.170	64.783[a]	2.000	21.000	.000	.861
	Roy's Largest Root	6.170	64.783[a]	2.000	21.000	.000	.861

b. Design: Intercept
Within Subjects Design: tes

Based on multivariate test, it was found that the value of Wilks' Lambda was 0.139 with probability score was Sig. 0.000 (where p< 0.005). Since the score of p was less than 0.05. it could said that there was significance difference on the TOEFL score before, during, and after the treatment. Besides, the value of Partial Eta Squared was 0.861. It could be interpreted that there was a significant statistical difference on the students' TOEFL scores before the treatment (means 436), during (means 490) and after the implementation of Inquiry Based Learning (means 511).

H. Recommendation

Based on the above research findings, it was recommended that the students apply Inquiry Based learning when studying TOEFL by following the steps: (1) trying continuously to solve TOEFL problems, (2) looking for the strategies in solving TOEFL problems, and (3) identifying several TOEFL models from various references. It was also recommended for the teachers apply Inquiry Based learning when teaching TOEFL by following the steps: (1) developing the learners' ability to critically thinking, (3) developing learner's self-study, and (3) developing learners' ability to have positive thinking in learning.

Since this study belonged to experiment research using ANOVA Repeated Measure design, it was recommended that other researchers investigate qualitatively the students' problem in solving TOEFL tests. The other researchers were also recommended to follow up this result by conducting similar topic in different views.

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