Collaborating Field-Based Task and Peer Tutoring in "Introduction to Accounting CourseI"to Improve Students' Learning Achievement at the Economics EducationDepartment of State University of Malang

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Abstract

The course on Introduction to Accounting Iis one of the compulsory courses for students to take at the Faculty of Economics. Many students find the materials in this course difficult. Field-based task and peer tutoring are used in this course in order to improve students' learning achievement. The study employed a quasi-experimental method, under the Pre-Test and Post-Test Design. The population consisted of nine classes, and three of them were chosen as the sample through a purposive sampling method. Two classes were treated as the experimental groups, while one class was chosen as the control group. Collaborating field-based task and peer tutoring turns out to be effective in improving students' learning achievement on Introduction to Accounting Course I. The strategy requires students to be more responsible with their individual as well as group tasks, and this helps to accelerate the development and the independence of the students. In addition, the strategy also improves collaboration and cooperation among students, which is helping each other in improving their skills.

Keywords: Introduction to Accounting Course I, quasi-experimental design, improving responsibility, independence, and collaboration

1. INTRODUCTION

Introduction to Accounting Course I is one of the compulsory subjects students have to take at the Faculty of Economics. This course teaches students the basic theories on accounting. Students also learn how to convert a transaction in a certain organization or company into financial statements—since financial statements are obliged to any organizations and companies—in this course.

However, students often find the course difficult. Most of the students did not take social science classes or economics classes when they were in senior high school or vocational school. Many of the students came from science classes in senior high school, or took a technique or engineering department when they were in vocational school. Thus, a strategy is needed as to help these students achieve better in the course.

1.1. Accounting Learning

Accounting Introduction Material I discusses how to comprehend accounting cycles of Services Company. Accounting of Services Company includes stages of recording, summarizing, and preparing financial statements of a company whose main activities are generating intangible products to aim for profit (Alam S, 2007). In this case, basic competencies mastered by students are to describe accounting as information system, to interpret accounting equation, to record transactions based on debit and credit mechanism, to record transaction/documents into general journal, to do posting from general journal into ledger, to make a summary of accounting cycles, and to prepare financial reports of services company.

There are many strategies which can be implemented in order to increase students' learning achievement in Introduction to Accounting Course I.

1.2. Peer-Teaching Assistance Method

Supriyadi (2002) proposes that a peer-teacher is an individual or several students who are appointed and assigned to assist (another) student who experiences learning difficulties, with various criteria. Those criteria are: [a] having more cleverness than other students, and good reasoning ability, [b] having high conscience to assist, and being able to motivate others to advance, [c] being acceptable by the group, and able to cooperate among group members, [d] being humble and able to receive others' opinion, [e] having adequate creative ability to provide guidance by explaining lessons to others. Based on the aforementioned elaboration, it can be concluded that a peer-teacher is a friend or several students who are appointed by a teacher/lecturer (in line with the criteria of a peer-teacher) and are assigned to support students having learning difficulties. Peer-teaching is a teaching-learning activity by promoting a classmate who has more ability to help others in performing an activity or in comprehending a concept. The peer-teacher model means how to optimize excellent students in a class to teach or share with their underachieving peers so that they can overcome their study lag. The application of peer-teaching method in teaching-learning can be effectively and efficiently performed when a lecturer notices and carries out certain steps of peer-teaching performance, as stated by Supriadi (2002) above. According to Zaini*et al.* (2001), in performing peer-teaching method it is necessary to note that students are divided into small group heterogeneously, and excellent students are spread in every group, and appointed as a tutor. After performing the activity, each group presents its work. The lecturer acts as the main information source and makes correction when

there are different opinions between groups. At the end of activity, a conclusion is made about the discussed material.

Peer-teaching method has advantages and disadvantages. According to Arikunto (1995), there are advantages and disadvantages regarding peer-teaching method. The advantages are:

a. For several students who are anxious or hesitant toward lecturers, this method will provide a better result.
b. For the tutors themselves, this occupation will enhace the concept being discussed.
c. Assisting tutors in self-training by holding a responsbility in performing a task and training patience.
d. Strengthening the relationship among students so that it improves social feeling.

However, the disadvantages in performing peer-teaching method are:

a. Students who are assisted are often less serious because they only deal with their own friends. Thus, the result is less satisfying.
b. Some students who are even embarassed or hesitant to ask because they are afraid that their weakness are discovered by their peers.
c. In particular classes, tutoring are difficult to do because of gender difference between tutor and students under tutoring.
d. Lecturers who find difficulties in appointing the peer-teacher because not all excellent students are able to re-teach their friends.

1.3. Method of Providing Field Task (Recitation)

1.3.1. Concept of Recitation Method

According to SyaifulBahri and Aswan Zain (2006), recitation method (assigning) is a method of presentation in which a lecturer gives particular assignment so that students perform learning activities. Another concept of recitation method is elaborated by Mulyasa (2007) stating that the method of assigning is a way of presenting lesson materials, in which a lecturer gives a set of assignment that must be accomplished by students either in person or in group.

Meanwhile Sagala (2007) states that "Recitation method (giving assignment) is a way of presenting lesson materials in which a lecturer gives particular task in order to make students perform learning activity and then be responsible for it."

Based on the aforementioned opinions, it can be deduced that recitation method is essentially the same as giving assignment in which students get assignment from a lecturer to

accomplish; then, they are responsible for it so that they are able to understand materials related to the assignment.

Recitation method is administered since lesson materials are overload within the limited time. It means the available lesson materials are not equal with the time allotment. Therefore, this method is applied by lecturers as a solution in order to finish lesson materials within the deadline.

Roestiyah (2008) mentions that one of objectives in recitation learning method is to generate students who have superior learning result because they do exercises during the task performance; hence, their experience can be more integrated when learning something. In addition, Sagala (2007) states that the recitation method (providing task) benefits students in giving an opportunity to support their development and courage in taking initiatives, to be responsible and independent, as well as to motivate students in learning due to various methods which prevent boredom. Through this method, students can freely learn with responsibility, experience, and know various difficulties.

1.3.2. Steps of Recitation Method

According to SyaifulBahri and Aswan Zain (2006), steps must be taken in applying task method or recitation, namely phases of providing task, performing task, and justifying task.

Besides, there are steps of recitation method described by Mulyasa (2007) who states that in order to create an effective assignment method, a lecturer needs to perceive some steps specifically: the task must be arranged clearly and systematically-- mainly the objective and the way of performing, and it must be understandable by students. The lecturer must monitor the process of accomplishing the task and give proportional assessment.

Through recitation method, it can assist students to be more active and independent in teaching-learning process, improve individual's competence to support the improvement of academic achievement. To perfectly apply the method, Sagala (2007) conveys several ways. They are: 1). A task for students should be clear so that they understand what to do. 2). A task for students should present individual distinction. 3). Time should be sufficient. 4) Systematic controlling and monitoring for the given task encourage students to earnestly study.

1.4. Academic Achievement

Academic achievement is the main goal in learning to accomplish. According to Sunartono,(2009), it is an evidence of successful learning or student's ability to perform an activity in learning based on the complete credit. It is the maximum result achieved by an individual after performing efforts in learning. Furthermore, Nasution (in Sunartono, 2009) states that academic achievement is an excellence of thinking, perceiving, and performing which is attained by an individual. It is considered excellent when fulfilling three characteristics namely cognitive, affective, and psychomotor aspects. On the contrary, it is considered less satisfying when one has been unable to meet the target of those three criteria.

Academic achievement can be measured via a test often known as academic achievement test. Sunartono, (2009) says that the objective of test is to reveal one's success in learning. The test is arranged according to a plan to show a subject's maximum performance in mastering materials which have been taught. In formal education activity, it can be in the forms of pre-test and post-test, daily test, formative test, summative test, even national final examination and higher education entrance test.

Arifin (2011) exposes several functions of academic achievement as follows:

a. They are the indicators of quality and quantity of knowledge mastered by students.
b. They are symbols of curiosity fulfillment.
c. They are materials of information and innovation in education because they can encourage students to improve education quality.
d. They are internal and external indicators of education institution because they reflect productivity level and students' success.
e. They can be student absorbency in teaching-learning activity as the curriculum program.

Academic achievement is the attained result of an effort in pursuing education or particular training in which the result can be determined by giving a test in the end of education. The position of students in a class can be recognized through academic achievement whether students are smart, average, or lacking. It has significant function as an indicator of success in learning particular subjects and can be beneficial as the evaluation of performing teaching-learning process as well.

This study employs a collaboration between field-based task strategy and peer tutoring strategy to improve students' achievement. The field-based task strategy was chosen as to make students get involved in the real practice of accounting. Through the strategy, students learn not only accounting theories, but also, and importantly, the practice of accounting in the real world. Students practiced the theories in the field (organizations or companies) for two to three days a week for two months. Students were free to choose the organizations or companies where they would do their internship. This field-based task strategy has several advantages, such as (1) it can motivate students to develop their own learning habit, both individually and in group; (2) students can learn independently without lecturers present; (3) students can develop their discipline and responsibility; and (4) it helps students to develop their creativity (Zain, 2006). This strategy was be chosen in order to lessen students' dependency to the lecturers; it helps students to be more responsible with their own learning because they have to help themselves to implement the theories they have learned in class independently.

Peer tutoring strategy was also employed in the study. Peer tutors refer to the more-able students; these students are assigned to help their classmates to learn. In this study, the teacher chose some more-able students to act as the tutors for their classmates. The criteria of the tutors are as follows: (1) students who are academically more able than others in class; (2) students who can understand lessons better and faster than others in class; (3) students who are willing to help others; (4) students who are capable to work with others; (5) students who have high motivation and are able to motivate others to be better; (6) students who are accepted well and get along with others; and (7) students who are humble and low-profile.

The study aims at examining whether the implementation of field-based task and peer tutoring could increase students' learning achievement in Introduction to Accounting Course I.

2. RESEARCH METHOD

The study employed a quasi-experimental method, under the Pre-Test and Post-Test Design. Sample was taken not randomly, and this was the reason for the researcher to employ the Pre-Test and Post-Test Design. Treatment would be given to the students in the experimental groups by giving a pre-test and post-test. The summary of the research design can be seen in Table 2.1 and Table 2.2.

Table 3.1 The Research Design Employing the Pre-test and Post-test Group Design

Groups	Pre-test	Treatment	Post-test
Experimental group I	Y_1	X_1	Y_4
Experimental group II	Y_2	X_2	Y_5
Control group	Y_3	X_3	Y_6

(Source: Arikunto, 2010:125)

Notes:
Y_1 = the learning achievement of students in experimental group I before treatment
Y_2 = the learning achievement of students in experimental group II before treatment
Y_3 = the learning achievement of students in control group before treatment
Y_4 = the learning achievement of students in experimental group I after treatment
Y_4 = the learning achievement of students in experimental group II after treatment
Y_5 = the learning achievement of students in control group after treatment
X_1 = treatment in form of field-based task
X_2 = treatment in form of peer-tutoring
X_3 = treatment in form of conventional learning method

Table 3.2 Learning Achievement Test Scheme on Introduction to Accounting Course I

Stage	Experimental Group I	Experimental Group II	Control Group
Initial	Pre-test	Pre-test	Pre-test
Treatment	X	x	x
Final	Post-test	Post-test	Post-test

Notes:
Initial stage: Students in experimental group I, experimental group II, and control group were given a test on all materials to know students' initial baseline
Treatment stage: Students in experimental group I, experimental group II, and control group were given treatment in form of field-based tasks, peer tutoring, and conventional learning method
Final stage: Students in experimental group I, experimental group II, and control group were given a test on all materials to know students' learning achievement after treatment

2.1. Population and Sample

The population of this present study was all students from the Economy Development Department batch 2012 of the Faculty of Economics, State Uinversity of Malang. These students were divided into nine classes.

Sample was taken through a purposive sampling method. Students in those nine classes were given a test on materials for Introduction to Accounting Course I. From the test results, three classes with

the lowest and similar average test score were chosen. These three classes were Class A, Class C, and Class D.

These two classes (classes C /D and class A) were then given different treatment. Class C (experimental group I)and Class D (experimental group II) learned the subject through collaboratingfield-based task and learned peer tutoring method, while Class A learned through conventional learning method (control group).

2.2. Research Instruments

There were two instruments employed in the study; the first instrument was used in examining the treatment given, and the second instrument was used for measuring students' learning achievement. These two instruments went through expert validation, in which the validation involved three expert lecturers. Revision was done according to the suggestions given by the experts. The revised instruments were then used in data collection stage. These two instruments are elaborated in the following sub-sections.

2.2.1. Treatment Instrument

The treatment instrument in this study was the Lesson Plans used in the three classes. The treatment was 1)Lesson Plans on field-based task for experimental group I and 2) Lesson Plans on peer tutoring experimental group II, and 3) Lesson Plans on conventional teaching-learning method for control group.

2.2.2. Learning Achievement Measurement Instrument

The instrument was in a form of a test, which was a multiple choice test consisting of 25 test items, each having five alternatives. This test was used for measuring students' learning achievement. The test was in form of objective written test. The learning achievement in this study referred to cognitive domain. The criteria used for measuring the achievement is describe in Table 2.3.

Table 2.3 The Criteria for Students' Learning Achievement

No	Interval	Category
1	85-100	A
2	80-84	A-
3	75-79	B+
4	70-74	B
5	65-69	B-
6	60-64	C+
7	55-59	C
8	40-54	D
9	0-39	E

(Source: Academic Guidance Book, State University of Malang)

Here are the reasons for the researcher to choose the test format:

1) The test can cover quite large amount of the materials learned.
2) Students' answers can be easily checked using the answer key.
3) The scoring is objective, so there is only two possibility: right answer or wrong answer.

The experts validated this instrument. After the validation, the instrument was used in the study to test students' learning achievement. An analysis on the feasibility of the test items was also done. The analysis consisted of analysis on (a) level of difficulty of test items, (b) discriminating powers of test items, (c) validity, and (d) reliability. Instruments were tried out in State University of Malang.

2.3. Data Collection Technique

Data collected in the study was quantitative data. Data was collected by giving a pre-test to know students' initial baseline. The test was given to the experimental group I and II, as well as to the control group. After the pre-test, the classes were given the treatment in eight meetings. Post-test was done after the eight meetings finished. The post-test was done to know the students' achievement after being given the treatment.

2.4. Data Analysis Technique

Before the data analysis, which was in form of hypothesis testing, some prerequisite tests were conducted. These prerequisite tests consisted of normality and homogeneity test.

Hypothesis testing was done to find out whether difference in learning achievement occurred between the groups treated with the field-based task and peer tutoring with the control group learning through the conventional method.

The hypothesis testing was done employing One-Way ANOVA. This kind of analysis is done in the study involving several groups of sample. In this present study, there were three groups namely experimental group I, experimental group II, and control group.

The following sub-sections explain the procedure in doing One-Way ANOVA.

a. Test of Homogeneity of Variance

The basic assumption underlying ANOVA is that all groups must have the same variance. To test this basic assumption, we can see at the results of the test of homogeneity of variance, done employing the Levene Statistic. The hypotheses in this test of homogeneity of variance are:

Ho: the population variances are equal

Ha: the population variances are not equal

The bases in decision-making are:

- If the probability level > 0.05, Ho must be accepted
- If the probability level < 0.05, Ho must be rejected

b. ANOVA (F test)

The statistical test used for null hypothesis testing stating that all groups having same population means is the F test. For calculating F test value, we first find the mean of two given observations and then calculate their variance. F test value is expressed as the ratio of variances of two observations. The comparison between the variances of two sets of data can lead to many predictions. The hypotheses in ANOVA are:

Ho: the means of the groups (experimental group I, II, and control group) are equal

Ha:the means of the groups (experimental group I, II, and control group) are not equal

The bases in decision-making are:

- If the probability level > 0.05, Ho must be accepted
- If the probability level < 0.05, Ho must be rejected

OR

- $H_o$must be accepted if $F_{calc} < F_{table}$
- $H_o$must be rejected if $F_{calc} > F_{table}$

c. Post Hoc Test

From the results of ANOVA test (F test), it was found out that the means of the groups (experimental group I, II, and control group) were not equal. To reveal more on the difference

among these groups, Post Hoc test must be done employing one of the Tukey's functions. The hypotheses in this test are:

Ho: the means of the two groups are equal

Ha: the means of the two groups are not equal

The bases in decision-making are:

- If the probability level > 0.05, Ho must be accepted
- If the probability level < 0.05, Ho must be rejected

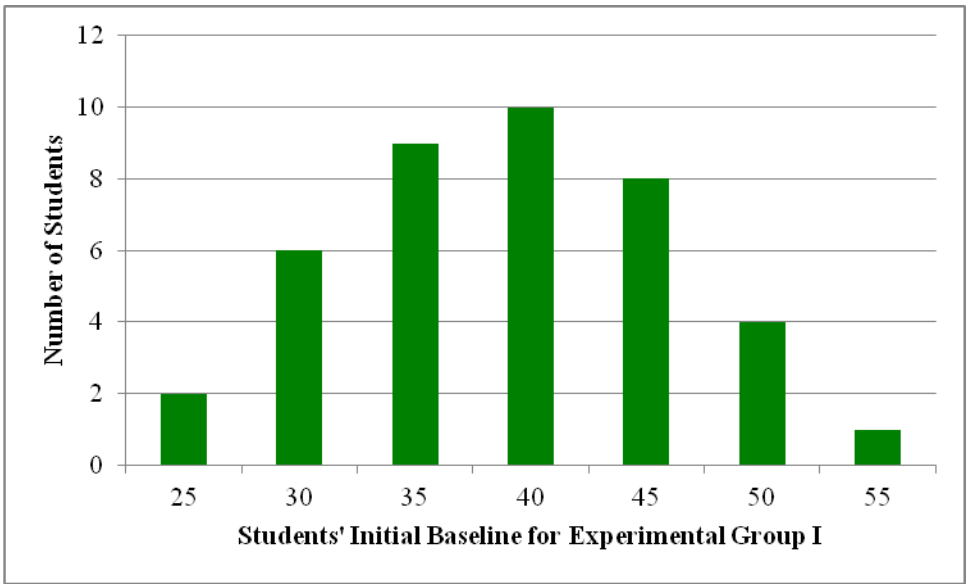
3. RESULTS

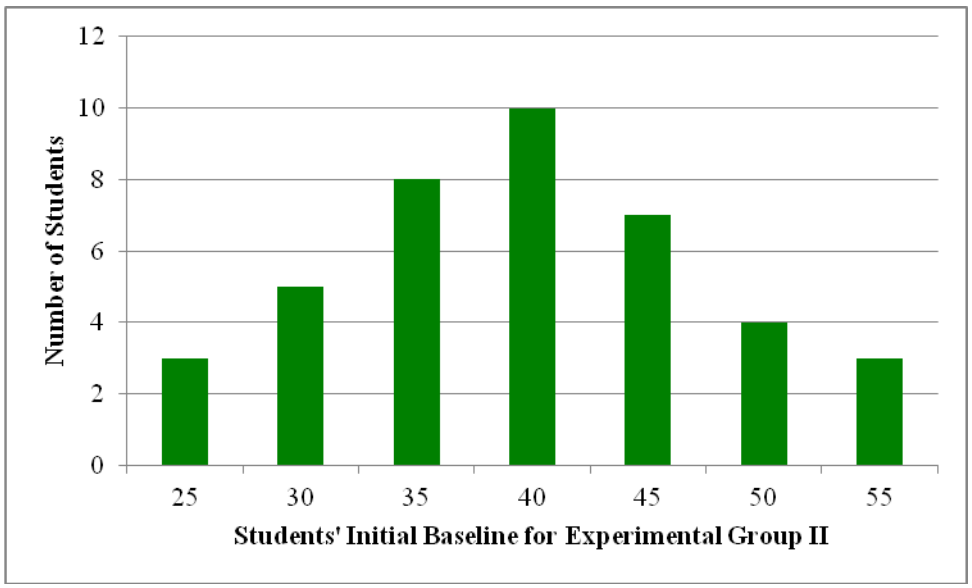
3.1. Data Description

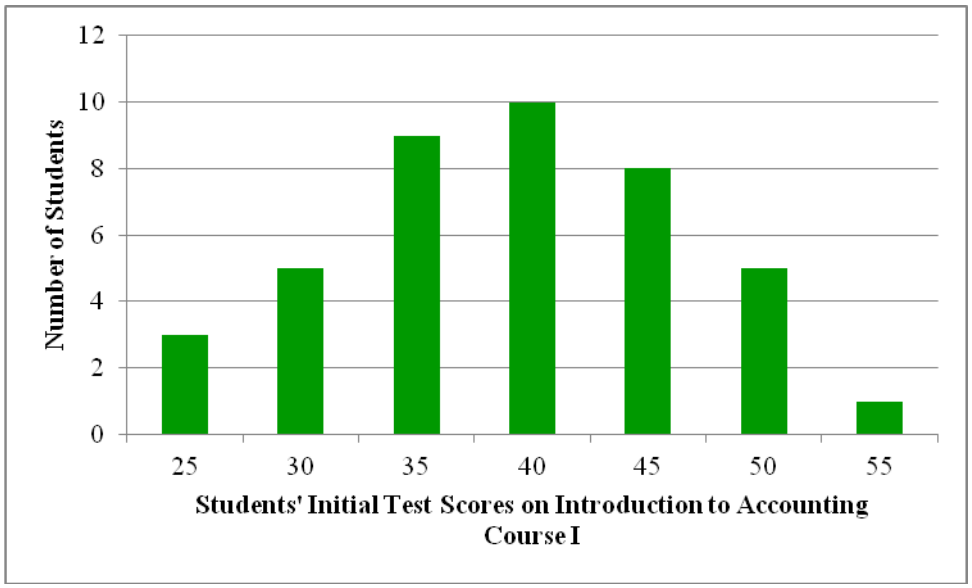
The data in this study consisted of data on the implementation of the strategies (the field-based task and peer tutoring), and data on students' learning achievement for experimental group I and II, as well as for the control group.

The data on the implementation of the strategies (the field-based task and peer tutoring) show that the strategies were well implemented. In the first meeting, the degree of success of the implementation was 93.33%, in the third meeting was 90%, and in the fourth meeting was 95.53% for the experimental group I. Similar results were also found in the experimental group II. The degree of success of the implementation was 93.20%, in the second meeting was 94.40%, and in the third meeting was 95% for the experimental group II. The implementation of the conventional teaching and learning method was also successful in the control group, in which in the first meeting the suitability of the plan and the implementation was 93.80%, in the second meeting was 94.20%, and in the third meeting was 95.10%.

The data on students' learning achievement on Introduction to Accounting Course I for the experimental group I and II as well as the control group shows similar average grade, that was grade E. The initial data of each class can be seen in Figure 3.1.







After the ANOVA test was done to the data, it was found out that students' learning achievement from the three classes was not significantly different. The results of the ANOVA test can be seen in the following Table 3.1. and Table 3.2.

Table 3.1 The Results of the ANOVA Test on Students' Initial Baseline on Introduction to Accounting Course I

	df	Significance	Conclusion
Pre-test Between Groups	2	0.930	No significant difference

Table 3.2 The Results of the ANOVA Test on Students' Initial Baseline on Introduction to Accounting Course I

Class (i)	Class (J)	Significance	Conclusion
Control	Experiment I	0.996	No significant difference
	Experiment II	0.958	No significant difference
Experiment I	Control	0.996	No significant difference
	Experiment II	0.930	No significant difference
Experiment II	Control	0.958	No significant difference
	Experiment I	0.930	No significant difference

3.2. The Results of the Hypothesis Testing

Based on the normality test, the pre-test and post-test data from the experimental group I, experimental group II, and control group was found to be normally distributed. Thus, the parametric statistical test needed to be conducted, and that was the One-Way ANOVA test.

The bases in decision-making of the hypothesis testing are (1) if the Asymp Sig or the significance level of the post-test is smaller than 0.05, then the learning achievement of the students learned through the field-based task and peer tutoring is significantly different from the learning achievement of students learned through the conventional method; and (2) if the Asymp Sig or the significance level of the post-test is bigger than 0.05, then the learning achievement of students learned through the field-based task and peer tutoring is not significantly different from the learning achievement of students learned through the conventional method. The results of the hypothesis testing can be seen in the Appendix on Hypothesis Testing Results. The summary of the hypothesis testing results (Table 3.3).

Table 3.3 The Results of the Hypothesis Testing on Students' Learning Achievement on Introduction to Accounting Course I

	Significance	**Conclusion**
Post-test Equal variances assumed	0.000	Significant difference exists

The significance level of the students' learning achievement (based on the results of the post-test) was 0.000. This value is smaller than 0.05, thus Ho must be rejected. This means that the learning achievement of the students learned through the field-based task and peer tutoring is significantly different from the learning achievement of students learned through the conventional method. The results of ANOVA test show the comparison of the three classes, which were experimental group I, experimental group II, and control group. These results are elaborated more in Table 3.4.

Table 3.4 The Results of the ANOVA Test on Students' Learning Achievement on Introduction to Accounting Course I

Class (i)	Class (J)	Significance	Conclusion
Control	Experiment I	0.000	There was a significant difference
	Experiment II	0.000	There was a significant difference
Experiment I	Control	0.000	There was a significant difference
	Experiment II	0.314	There was a significant difference
Experiment II	Control	0.000	There was a significant difference
	Experiment I	0.314	There was a significant difference

Based on Table 3.4.the significance levels of all the groups were 0.000, which was smaller than 0.05. Thus, it means that Ho must be rejected and that there is a significant difference on the learning achievement of the students learned through the field-based task and peer tutoring with the learning achievement of students learned through the conventional method. The results of the students' learning achievement are presented in the Figure 3.2

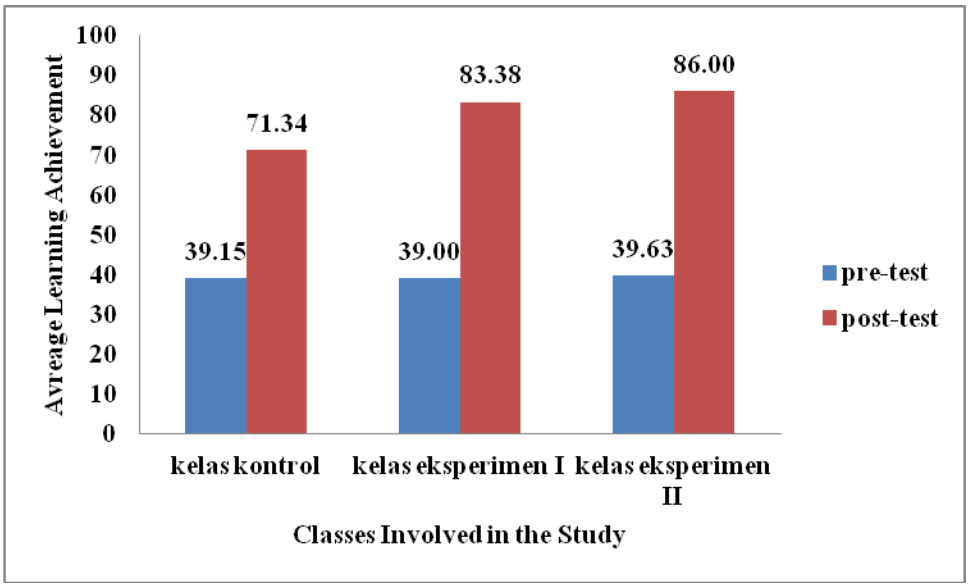


Figure 3.2 The Pre-Test and Post-Test Scores of the Students in the Experimental Group I, Experimental Group II, and Control Group

Based on Figure 3.2., the field-based task and peer tutoring strategy has been empirically proven to positively influence students' learning achievement in Introduction to Accounting Course I. On other words, the two strategies can better improve students' learning achievement compared to the conventional method.

4. DISCUSSION

4.1. The Implementation of the Field-Based Task Strategy

Based on the data written on the observation sheet about the implementationcollaborating thefield-based task strategy andthe peer tutoring strategy in the experimental group I and group II , it was found out that the strategy was well implemented. This means that the strategy was used as it was supposed to in the teaching and learning process in the experimental group I and group II.

The strategy was well implemented for several reasons, one of which was the fact that the students were all punctual—meaning that nobody came late to class—so the plans for the lesson could all be done without any problems. The teacher implemented the lesson plan very well and this also supported the implementation of the strategy.

Based on the data written on the observation sheet about the implementation of conventional teaching learning strategy in the control group, it was found out that the strategy was well implemented. The conventional teaching and learning activities went well, the same with the implementation of the field-based task and the peer tutoring strategy in experimental group I and II. There were students who kept talking to their classmates when the teacher was explaining the lesson, yet it did not affect the lesson much. The teacher knew very well how to handle the problem so that the lesson went well in accordance with the plans.

4.2. The Effect of Field-Based Task Strategy and Peer Tutoring Strategy toward Students' Learning Achievement on Introduction to Accounting Course I

As explained previously, the field-based task strategy and peer tutoring has been able to help improving students' learning achievement, which means that the students learned through these two strategies achieved higher than the students learned through the conventional strategy

did. Therefore, it can be concluded that the field-based task strategy and peer tutoring strategy work well in improving students' learning achievement.

This result is relevant with a statement by Karmidi (2003) stating that "the implementation of the field-based task affects students' learning achievement, in which students who learn through this strategy achieve better than those who do not learn through the field-based task strategy".

In addition, Roestiyah(1989) explains that through the tasks they have to finish, the students learn actively and are motivated to learn better, to exercise their skills, to have initiative, and to be more responsible. Students have to do many tasks, and this will make students realize the importance of being disciplined and the necessity to spend their time with doing useful and constructive activities.

This is supported by the results of the hypothesis testing, in which Ho was rejected and Ha was accepted, which means that students learned through collaborating the field-based task strategy and the peer tutoring strategy achieved better in Introduction to Accounting Course I than those learned through the conventional teaching learning strategy.

The field-based task has helped students to be more active and independent in solving problems related to the course. In addition, the strategy also offers more freedom to the students in choosing ways to solve their problems related to the course. Therefore, students learned through the field-based task achieved better in Introduction to Accounting Course I than those learned through the conventional teaching learning strategy. This result is in line with Hayati's statement (1998) asserting, "Field-based task strategy through practice is more effective to improve students' learning achievement in Introduction to Accounting Course I than the conventional learning strategy, and this means that the strategy is more effective to support students' progress".

Peer tutoring also helps students to understand materials more easily because students will find peer language simpler and more easily grasped than the more formal language their teachers may use in explaining materials.

In peer tutoring, the more able students are assigned to help their classmates. These more able students learn faster and have good communication skills, so they can help their classmates to learn better. Students will not feel shy or afraid to ask questions when their friends give the explanation, and this will help them learn faster (Hamsa, 2009).

This also in line with a statement by Djamarah (2002), stating that students tend to find their classmates' explanation as simpler and easier to understand. Thus, peer tutoring helps students to achieve better than the conventional learning strategy.

Both the peer tutoring strategy and the field-based task have been proven to help increasing students' learning achievement. The students learned through these two strategies achieved higher than the students learned through the conventional strategy did.

These two learning strategies offer new variations on the teaching and learning process, especially for Introduction to Accounting Course I. Most of the teachers teaching the course still use lecturing, demonstration, and group discussion in the teaching and learning process. These two strategies offer chances for students to be more active and more engaged with the subject they learn as they are challenge to construct their own knowledge and concepts. Referring to the results of the study,it is expected that teachers teaching the course can implement the strategies in addition to the conventional strategy they have long used. Variations in learning strategies will motivate students to be more engaged with the course they are taking.

5. CONCLUSION

This study was conducted to see the effect of field based-task and peer tutoring methods on the students learning achievement of the Introduction of Accounting I course. The initial pre-test result showed that all three classes (Class A, C and D) have the lowest learning achievement between the nine classes that received the course. Those three classes were chosen to be the subject for this study, because the initial pre-test result was not significantly different ($P > 0.05$) between those classes. After the implementation of the learning strategies, student that received either both field based-task (Class C) or peer tutoring method (Class D) showed a significant ($P < 0.05$) higher learning achievement compared to the students with conventional learning method (Class A). Students in class C and D were more active in learning the course, and have the more freedom to solve their problems in the course. The implementation of these two strategies believed to help the students to understand the course better and sharpen their knowledge.

References

Alam.S (2007). *Dasar-dasarEvaluasiPendidikan*. Jakarta : BumiAksara

Arifin (2009). *Model –Model Pembelajaran*, Jakarta: Remaja Rosdakarya

Arikunto (2009). *Dasar-dasar Evaluasi Pendidikan*. Jakarta : BumiAksara

Dedi.S (2002). *Strategi Belajar Mengajar*. Jakarta: RinekaCipta

Djamarah,S.B.,& Aswan Z. (2006). *Strategi Belajar Mengajar*. Jakarta: RinekaCipta

Zaini, H, Bermawy Munthe & Sekar Ayu Aryani (2008). *Strategi Pembelajaran Aktif*. Yogyakarta: Pustaka Insan Madani

Mulyasa, E. (2007). *Kurikulum Tingkat Satuan Pendidikan.* Bandung: Remaja Rosda Raya. Peraturan Menteri Pendidikan Nasional

Roestiyah (2008). *Strategi Belajar Mengajar*. Jakarta : RinekaCipta

Sagala, S. (2007). *Konsep dan Makna Pembelajaran: Untuk Membantu Memecahkan Problematika Belajar dan Mengajar*. Bandung: Alfabeta

Sunartono. (2009). *Model –Model Pembelajaran*, Jakarta: Remaja Rosdakarya

Annexure

Table 2.1. The Research Design Employing the Pre-test and Post-test Group Design

Groups	Pre-test	Treatment	Post-test
Experimental group I	Y_1	X_1	Y_4
Experimental group II	Y_2	X_2	Y_5
Control group	Y_3	X_3	Y_6

(Source: Arikunto, 2010:125)

Notes:

Y_1 = the learning achievement of students in experimental group I before treatment

Y_2 = the learning achievement of students in experimental group II before treatment

Y_3 = the learning achievement of students in control group before treatment

Y_4 = the learning achievement of students in experimental group I after treatment

Y_4 = the learning achievement of students in experimental group II after treatment

Y_5 = the learning achievement of students in control group after treatment

X_1 = treatment in form of field-based task

X_2 = treatment in form of peer-tutoring

X_3 = treatment in form of conventional learning method

Table 2.2. Learning Achievement Test Scheme on Introduction to Accounting Course I

Stage	Experimental Group I	Experimental Group II	Control Group
Initial	Pre-test	Pre-test	Pre-test
Treatment	X	x	X
Final	Post-test	Post-test	Post-test

Notes:

Initial stage: Students in experimental group I, experimental group II, and control group were given a test on all materials to know students' initial baseline

Treatment stage: Students in experimental group I, experimental group II, and control group were given treatment in form of field-based tasks, peer tutoring, and conventional learning method

Final stage: Students in experimental group I, experimental group II, and control group were given a test on all materials to know students' learning achievement after treatment

Table 2.3. The Criteria for Students' Learning Achievement

No	Interval	Category
1	85-100	A
2	80-84	A-
3	75-79	B+
4	70-74	B
5	65-69	B-
6	60-64	C+
7	55-59	C
8	40-54	D
9	0-39	E

(Source: Academic Guidance Book, State University of Malang)

Table 3.1. The Results of the ANOVA Test on Students' Initial Baseline on Introduction to Accounting Course I

	df	Significance	Conclusion
Pre-test			
Between Groups	2	0.930	No significant difference

Table 3.2. The Results of the ANOVA Test on Students' Initial Baseline on Introduction to Accounting Course I

Class (i)	Class (J)	Significance	Conclusion
Control	Experiment I	0.996	No significant difference
	Experiment II	0.958	No significant difference
Experiment I	Control	0.996	No significant difference
	Experiment II	0.930	No significant difference
Experiment II	Control	0.958	No significant difference
	Experiment I	0.930	No significant difference

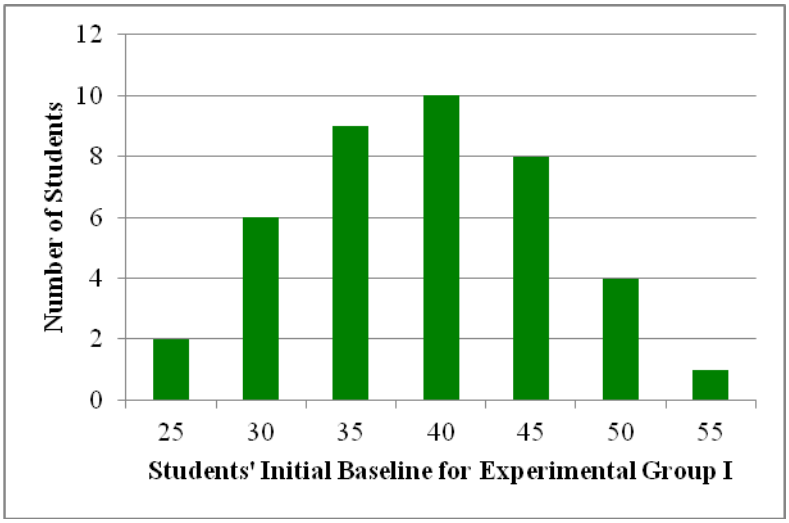
Table 3.3.The Results of the Hypothesis Testing on Students' Learning Achievement on Introduction to Accounting Course I

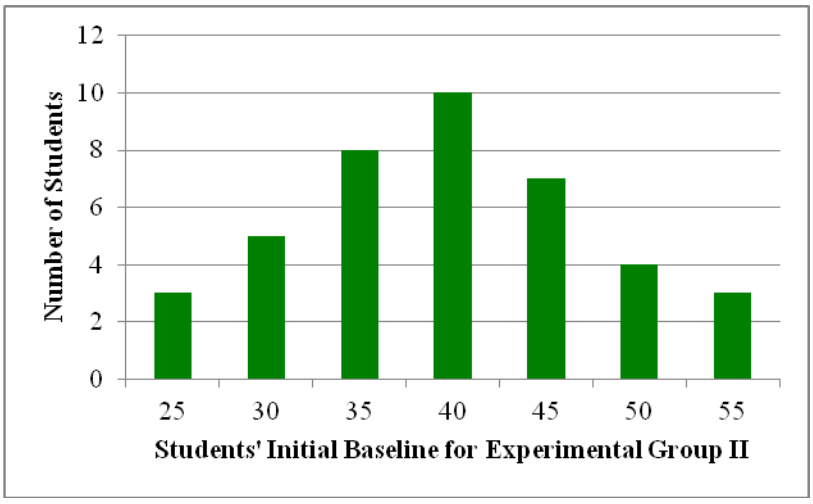
	Significance	Conclusion
Post-test Equal variances assumed	0.000	Significant difference exists

Table 3.4. The Results of the ANOVA Test on Students' Learning Achievement on Introduction to Accounting Course I

Class (i)	Class (J)	Significance	Conclusion
Control	Experiment I	0.000	There was a significant difference
	Experiment II	0.000	There was a significant difference
Experiment I	Control	0.000	There was a significant difference
	Experiment II	0.314	There was a significant difference
Experiment II	Control	0.000	There was a significant difference
	Experiment I	0.314	There was a significant difference

Figure 3.1. Student Initial Baseline





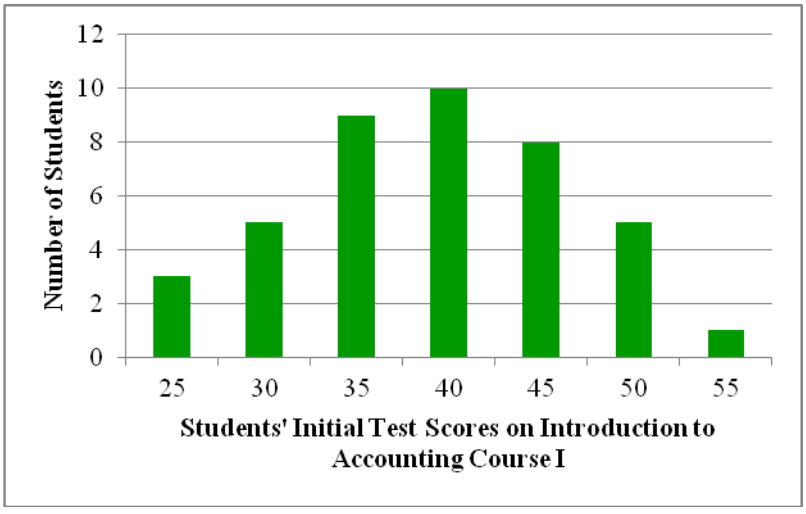


Figure 3.2. The Pre-Test and Post-Test Scores of the Students in theExperimental Group I, Experimental Group II, and Control Group