Improving Student Learning Outcomes Using Beach Ball Method

Tia Ramda Sari¹, Marwan²
¹Universitas Negeri Padang, Padang, Indonesia, tiaramdasari21@gmail.com
²Universitas Negeri Padang, Padang, Indonesia, marwan@fe.unp.ac.id

Abstract
This study aims to find out the effect of Edutainment learning using Beach Ball Method to the learning achievement of students in the economic subject at SMA Negeri 2 Indralaya Utara. The study is experimental research which uses pre experiment design with One Group Pretest-Postest Design. The population of this study is all the students of class X in SMA Negeri 2 Indralaya Utara. The sample used is cluster random sampling. In this case, there are 26 students of X IPS 2 selected. The data collection techniques used is test and observation. Parametris statistic hypothesis used is t-test, The result of the study is t-value = 31.69 where t-value > t-table = 31.69 > 1.68. Ho hypothesis is rejected and Ha hypothesis is accepted. It shows that there is effect of Edutainment learning using Beach Ball Method to the learning achievement of the students in the economic subject at SMA Negeri 2 Indralaya Utara.

Keywords: edutainment learning, beach ball method, achievement

Introduction
Education is the key to the development progress of a nation. Education is a very important thing because it become the need of all human beings in national development and it is one of the determinants of the progress of a country. Education is the most effective means to improve the welfare of life, prosperity of society, and can lead the nation to progress. In addition, it is realized that the higher the quality of education, the bigger opportunity to align with other countries. In order to educate the life of the nation, the Institute of Education seeks some ways to create qualified graduates to anticipate the increasingly difficult changes and challenges in this modern era. To improve the quality of education, there are various ways and serious efforts to find solutions to the problems that will be faced. Efforts to improve the quality of education are important in order to respond to the challenges of globalization. Education becomes one of the important things and must be strived in improving the living standard of our nation so we are not to be left behind with other nations, in various aspects that education is the main factor. Such improvements must be made with various efforts through innovation in education. It is in accordance with Supartono's statement (in Nurhayati, et al, 2009: 379), "The world of education requires various innovations in its development". One of the innovation efforts in education is creative and innovative learning for all subjects conducted in classroom learning. Therefore, the government seeks to improve the quality of education through improvements of the educational facilities and infrastructure to support learning activities in schools. However, innovative learning is still a big problem in education.

For example, economic learning in almost all senior high schools is still using conventional methods. Conventional in other word is fro example using teacher-centered learning, in this case very often teaching and learning process is done by using lecturing method. Thus it can be revealed that the teacher determines the success of the learning process. The learning process will take place well if the teacher has two main competencies namely competence in mastering teaching materials and competence in applying learning methodology, Shoimatul (2013: 64). Usually teachers use conventional learning models and lecturing methods in the delivery of teaching materials in the learning.

The learners often felt bored in learning in the classroom and the score results in the economic subjects is still very low, teachers must have a method so that students can learn effectively, efficiently and the objective
of learning based on the expected goals. One step to having that method, the teacher must master the methods of teaching presentation. A professional teacher will surely be able to provide learning materials, so that learners can be interested in the material to be delivered. One way to keep learners active in studying is to use learning methods. This study was previously studied by Nurhidayanti (2015) from Muhammadiyah University of Surakarta entitled the Application of Edutainment Humanizing the Classroom Method using Moving Class on Students' Learning achievement in Economics Subjects at Secondary School Muhammadiyah 2 Surakarta. In her research, Nurhidayanti concluded that students' learning achievement have improved with the application of Edutainment Humanizing The Classroom method using Moving Class on economic subjects at SMA Muhammadiyah 2 Surakarta because students become more understanding about learning materials. However, this study differs from previous studies. In previous study the researcher used the moving class strategy; however in this study the writer will use beach ball technique. The writer chose edutainment learning using beach ball technique because edutainment learning is a method that can make the learning atmosphere becomes more interesting and entertaining. While the technique of beach ball is one of the methods in learning that can make students play an active role in the classroom so that learning is not boring and train students in appreciating other opinions. In the application of methods that have been designed to involve learners directly into the learning and to awaken the attention or interests of learners, among the learning methods, the writer will try to apply a method that includes innovative learning, it the beach ball method.

Edutainment learning derived from the word education means education and entertainment which means entertaining or fun. In this case the writer choses the beach ball method in the application of edutainment learning. While in terms of terminology edutainment is a learning process designed in such a way that the educational and entertainment content can be combined in harmony, so that learning processes in such enjoyable atmosphere. Through the application of learning edutainment using beach ball method is expected to learn economic subject in schools more qualified. Based on the above description, the writer will conduct research entitled "The Effect of Edutainment Learning using Beach Ball Method toward Student Learning Achievement in Economics Subjects at SMA Negeri 2 Indralaya Utara". The problem in the study is to find out whether there is a significance effect of edutainment learning using the beach ball method to the learners’ learning achievement on economic subjects at SMA Negeri 2 Indralaya Utara. The purpose of this study is to prove the effect of edutainment learning using beach ball method to the students’ learning achievement in economic subjects at SMA Negeri 2 Indralaya Utara. The significant study results are expected to be useful for development in edutainment learning, especially in the beach ball method, expected that the learners have better understand in the economics subject and can improve their learning achievement on economics subjects, Information in developing teachers’ teaching skills by using edutainment learning using beach ball method on economic subjects, as the referential information for teachers in schools to provide innovation in solving learning problems and to improve the quality of learning on economic subjects, and as the provision for writer to become educators.

Methods

Variable in this study consist of independent variable that is edutainment learning using beach ball method while dependent variable is the result of learning. Population in this research is all class X IPS SMA Negeri 2 Indralaya Utara. The sample in this study was taken using Cluster Random Sampling technique, which is to do a lottery to determine the experimental class. Then obtained sample class X IPS 2 as many as 26 students as experiment class. This study is an experimental research using pre-experimental design with one group pretest posttest design. This study was conducted 5 times meeting with details of first meeting of pretest, second meeting until fourth meeting was the application of edutainment learning using beach ball method of fifth meeting followed by giving Posttest. The data collection techniques in this study were test and observation. The test was used to obtain data about the learning achievement of learners to be given at the beginning and end of the learning process. The test was for validity and reliability. The observation was
conducted to find the activities undertaken by the writer based on beach ball method syntax. Observations were made by economics subject teachers as observers. Observer gives a sign (✓) on the column of checklist of category of values based on the activity of the writer.

Analysis of learning achievements data obtained from pre-test and post-test to find out the categories of learning achievement of the learners. Pre-test was performed before the treatment by the writer and post-test was conducted after the treatment with edutainment learning using beach ball method. The test was conducted by asking multiple-choice questions to measure the understanding and ability of learners to absorb learning. The test was realized with a range of numbers 0-100, before the first test to measure the validity and reliability of the instrument. Observation was conducted to see the activity conducted by writer based on edutainment method syntax using beach ball method. Observations were conducted by economics subject teachers and fellow researchers as observers. In analyzing the observation data carried out the following steps: (a) Calculating the score of each indicator, score 1 if the descriptor is visible and score 0 if the descriptor is not visible in the learning. (b) Calculating the results obtained from the observation. (c) After being scored, then the criteria are given.

Results and Discussion

<table>
<thead>
<tr>
<th>Data</th>
<th>Highest Result</th>
<th>Lowest Result</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>72</td>
<td>32</td>
<td>50</td>
</tr>
<tr>
<td>Posttest</td>
<td>96</td>
<td>68</td>
<td>81.54</td>
</tr>
</tbody>
</table>

Source: Researcher’s data, processed February 2018

Based on the data above, to find out the differences in learning outcomes of students before and after being treated Edutainment learning method beach ball, that is, to the highest pretest score 72 and the lowest value of 32 with an average value of 50.00 while for the highest value postes 96 and the lowest value of 68 with an average of 81.54. Before and after being treated there was increase of 24 on the highest value and the increase of 36 on the lowest value. The average value also increased by 31.54, from 50.00 into 81.54. Based on the data above, to find out the differences in learning outcomes of students before and after being treated can be seen in the following Figure:

Figure 1 The Difference of Student Learning Outcomes
Based on the test results in the experimental class obtained the mean value of pre-test 50 with the highest value was 72 and the lowest value was 32. While for the post-test mean value was 81.54 with the highest value was 96 and the lowest value was 68 so that it was concluded that the average learning achievement of the learners on the post-test score was greater 31.54 than the learners learn on the value of pre-test.

Observations relating to the syntax of learning models in the experimental class conducted by the writer during the learning process took place with the teacher as an observer. The mean score at the second meeting was 87.5%, at the third meeting was 100% and the fourth meeting was 100%. It proved that the writer had applied in accordance with the syntax of Edutainment learning model. Based on the results of normality test data with a significant level of 5% or α = 0.05 dk = k - 1, then obtained value $X_2^{table} = 11.070$. To test the normality of pre-test data in the experimental class obtained was $X_2^{value} \leq X_2^{table}$ or 10.766 ≤ 11,070 and posttest $X_2^{value} \leq X_2^{table}$ or 0.592 ≤ 11,070. So it can be concluded that the data on the experimental class was normal distribution. The result of analysis of product moment correlation data was Generative assisted model of Wordpress Blog media for experimental class was obtained $r^{value} = 0.833$ which means very strong correlation. Based on the analysis of product moment correlation data also obtained contribution of learning model of Edutainment to the result of learners learn 69.388% and the rest 30.612% influenced by other factor.

This study entitled the effect of Edutainment Learning model using beach ball method toward students' learning achievement in SMA Negeri 1 Indralaya Utara. This study aims to determine whether there is significant effect of edutainment learning model using beach ball method toward the students’ learning achievement at SMA Negeri 1 Indralaya Utara. The learning process in this research applies this model to the experimental class. The learning process was conducted 5 times with 1 pretest, 3 times and 1 posttest at the end of the learning process. This research uses data collecting tool in the form of test and observation. The test given to the learner was the experimental class X IPS 2 both pretest and posttest. The test was in the form of multiple choice questions with 25 question items. While the observation was used to see the syntactic compatibility in applying edutainment learning with beach ball method.

The learning process is conducted for 3 times meeting, the first stage was the writer explain the material management concept briefly by using the beach ball method. At the first meeting the material described on the understanding of management and elements of management. The next step in this learning method, the writer divided the students into 3 groups, then gave the material on one topic of discussion to learners with the basic competence of management concepts, and gave the ball to one student at random, and who held the ball must express his opinion. The rule was if the other students want to argue he must hold the ball that will be given by the holder. If the person who held the ball cannot express his or her opinion, the learners did not get points and were are told to move forward with the group members to be told to sing, and various other entertainments. At the end of the learning process, the writer provided reinforcement or straightening the student’s answers or opinions and briefly explaining the whole learning material. The goal is that learners can better understand the material being studied.

The writer found that many learners were interested and followed the learning actively after doing the application of methods that have never applied in the school that was the application of beach ball method. Data collection techniques used was tests and observations. Observations made to see the activities of researchers in applying Edutainment Learning with Beach Methods in experimental class conducted during the learning process took place with the teacher as an observer. From the data obtained, that the observation averages at the second meeting was 92.31%, at the third meeting was 100% and the fourth meeting was 100%. It shows that writer had applied in accordance with the syntax of Edutainment Learning with Beach Ball Method. In addition to using data collection through observation methods, researchers also used data through test results. The previous test had been tested in the non-sample class that was 30 items about the matter which then done the validation and reability analysis and got 25 items about the problem used in this research as a tool to get the learners’ learning outcomes. Based on the test results obtained in the experimental class obtained pretest average value of 50.00% with the highest value of 72 and the lowest value of 32. While for the posttest average value was 81.54% with the highest value was 96 and the lowest score were 68 so that it can be
said that the average learning outcomes of learners at posttest value greater 31.54% than the learners learn on
the pretest value. Based on the results of normality test data with a significant level of 5% or \( \alpha = 0.05dk = k - 1 \),
then got the value \( X_{2\text{table}} = 11.07 \). To test the normality of pretest data in the experimental class obtained was
\( X_{2\text{value}} < X_{2\text{table}} \) or 4.44 <11.070 and posttest \( X_{h\text{hitung}} < X_{2\text{table}} \) or 3.95 <11.07. So it can be concluded data of
learners’ learning result in experiment class of normal distribution, so that hypothesis test analysis can be
continued.

Furthermore, after the data normality test continued double regression test using F test with 5% significant
level and dk counted = k - 2 and dk denominator = n - k, obtained \( F_{\text{value}} < F_{\text{table}} \) or 1.55 <2.59. The data
requirement is linearly patterned if \( F_{\text{value}} < F_{\text{table}} \) then from the above calculation, linear patterned experimental
data. Indicator Regression equation \( \hat{Y} = 5.24 + 0.58x \), show that every increasing of one score of variable X
result in increasing of variable Y equal to 0.58%.

The result of analysis of product moment correlation data is Edutainment Learning with Beach Ball
Method for experimental class obtained rvalue = 0.932 then result rvalue consulted with table interpretation
that rvalue mean very strong correlation. Based on the analysis of product moment correlation data also
obtained contribution of influence of Edutainment Learning with Beach Ball Method toward learning
achievement of the students equals to 86.87% and the rest 13.13% influenced by other factors.

After giving the treatment using learning edutainment using beach ball method obtained the test results of
hypothesis test results using t-test obtained tvalue= 31.69 > 1.68 then Ho who states no effect of Edutainment
Learning toward Beach Ball Method on Students’ Learning achievement on Economics Subjects at SMA
Negeri 2 Indralaya Utara rejected, and Ha which states there is influence of Edutainment Learning with Beach
Ball Methods on Students’ Learning achievement on Economics Subjects In SMA Negeri 2 North Inderalaya
accepted, from the calculation of the t-test formula it can be concluded that there was Influence of
Edutainment Learning using Beach Ball Method to the Students’ Learning Achievement on Economics Subject
at SMA Negeri 2 Indralaya Utara. Thus based on the results obtained can be concluded that the learning
outcomes has increased after the implementation of Edutainment Learning using Beach Ball Method.

It is in accordance with Dimyati and Mujiono (2013: 36), stating that learning outcomes are the results
achieved by individual learners after experiencing the learning process which is usually indicated by a value
or number. Implementation of the learning process will determine the results of learning, because the success
or failure of an achievement of learning goals is influenced by how the learning process experienced by
learners. Based on the data analysis above, the results of this study indicated that the advantages obtained
when learning using Edutainment Learning using Beach Ball Method, can train students to think critically,
and it can develop students’ ability to test their own ideas and understanding, and students are less
dependent to the teachers, but an increase the confidence of their own ability to think. By conducting
Edutainment Learning using Beach Ball Method, It can help the writer in explaining the material and more
interesting for the learners to be better understanding from the explanations of the writer and also increase
enthusiasm in learning.

**Conclusion**

Based on the discussion it can be concluded that there is effect of edutainment learning using of beach ball
method toward the students’ learning achievement on economic subjects at SMA Negeri 2 Indralaya Utara.
Based on the results of t test Calculation shows tvalue = 31.69 > 1.68 so that H0 rejected and Ha accepted. with
the increasing of learning achievement of learners from the mean score that is from 50% to 81.54%. The
amount of contribution of Edutainment Learning using Beach Ball Method toward students’ learning
achievement was 86.87%, it means 13.13% influenced by other factors from the calculation of the determinant
coefficient.
References
Zumarah & Ningsih (2014). Penerapan metode pembelajaran diskusi strategi beach ball untuk melatihkan Pendidikan karakter pada materi senyawa hidrokarbon kelas x sman 1 karangbinangun lamongan. Jurnal of chemical education. 02(3): 53-60