Development of Reyog Ponorogo Traditional Theater-Based Drama Textbook (Research and Development at the Office of Education of Ponorogo Regency)

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Abstract: *The general objectives of this research are to identify the need for development of Reyog Ponorogo traditional theater-based drama textbook and to examine its effectiveness. Its specific objectives are: (1) to describe the conditions of Reyog Ponorogo traditional theater-based drama learning material in Ponorogo regency; (2) to formulate the need for expected Reyog Ponorogo traditional theater-based drama textbook based on the drama learning need; (3) to explain the process of Reyog Ponorogo traditional theater-based drama textbook prototype development to become a textbook; and (4) to investigate the effectiveness of Reyog Ponorogo traditional theater-based drama textbook. This research used the research and development (R&D) method as to product to be utilized at schools. The experimental group was specially treated with Reyog Ponorogo traditional theater-based drama learning prototype for six meetings. The group consisted of students with inter-class and inter-school homogeneity in Ponorogo regency. The population of the research was the students in Grade XI of Senior Secondary Schools of Ponorogo regency. Its samples were two classes of students in Grade XI of State Senior Secondary School 2 of Ponorogo, two classes of students in Grade XI of State Senior Secondary School 3 of Ponorogo, and two classes of students in Grade XI of State Senior Secondary School 1 of Badegan, Ponorogo. The total number of samples was 238. The data of the research were gathered according to the results of pre-test and post-test. Each test contained 60 multiple choice questions. The collected data were presented in tables and graphs and were analyzed by using the non-independent t test.The test on the extended data shows that Reyog Ponorogo traditional theater-based drama textbook draws the students' learning interest more than the former one which does not use Ponorogo traditional theater-based drama textbook as indicated by the mean score of -50.173. The negative value indicates that the average score of pre-test is lower than that of post-test. The value of t_{count} is -71.24 with the significance or probability value of 0.000. The value is then compared to the significance or probability value of 0.05. Based on the comparison, the significance or probability value is smaller than 0.05, meaning that Ho is rejected, but Ha is verified. Therefore, it can be said that there is a significant difference between the score of pre-test and that of post-test. Based on the experimental tests to 238 students in three schools, the mean value is -54.67. The negative average or mean value shows that the average value of pre-test is lower than that of post-test. The value of t_{count} is -82.796 with the significance or probability value of 0.000. The significance or probability value is then compared to the significance or probability value of 0.05. Based on the values, it is known that the significance or probability value is smaller than 0.05, meaning that Ho is rejected, but Ha is verified. Thus, it can be stated that there is a significant difference between the score of pre-test and that of post-test. Furthermore, the result of t test on the experimental data practically shows that the mean value is -21.412. This negative average or mean value indicates that the average score of pre-test is lower than that of post-test. The value of t_{count} is -26.08 with the significance or probability value of 0.000. The value is then compared to the significance or probability value of 0.05. Based on the values, it is known that the significance or probability value is smaller than 0.05, meaning that Ho is rejected, but Ha is verified. Hence, it can be stated that based on the experimental data of practice score, there is a significant difference between the score of pre-test and that of post-test. Based on the results of the research, the test on the effectiveness of prototype is regarded as a good one. Therefore, it can be concluded that there is an effect of Reyog Ponorogo traditional theater-based drama textbook use on the students' learning result.*

Keywords: Drama learning, theater, and Reyog Ponorogo

1. Introduction

Indonesia has currently experienced multi dimensional crises including corruption, crime, harassment, fraud, intervention of devastating foreign culture, and nationalism erosion. They can undermine national identity, which causes the character of society and nation to be weak and worrying. The effort to deal with such a condition is strengthening the defense of local and national culture by exploring and developing the existing cultural values, and one of them is the value of Reyog Ponorogo traditional theater. The utilization of textbook as a medium to preserve the local culture, in this case Reyog Ponorogo traditional theater, is one of the efforts to help teachers to deliver educational values through learning activities to students.

Specifically, the objectives of this research are: (1) to describe the conditions of Reyog traditional -based drama learning material in Ponorogo regency; (2) to formulate the need for expected Reyog Ponorogo traditional theater-based drama textbook based on the drama learning need; (3) to explain the process of Reyog Ponorogo traditional theater-based drama textbook prototype development to become a textbook; and (4) to investigate the effectiveness of Reyog Ponorogo traditional theater-based drama textbook. This research used the theory claimed by Gall, and Borg (2003: 569) who assert that:

Research and Development (Educational R & D) is an industry-based development model in which the findings of

the research are used to design new products and procedures, which then are systematically field-tested, evaluated, and refined until they meet specified criteria of effectiveness, quality, or similar standard

Borg and Gall (1983:772) explain that:
Educational Research and Development is a process used to develop and validate educational products. The steps of this process are usually referred to as the R & D cycle, which consists of studying research findings pertinent to the product to be developed, developing the product based on these findings, field testing it in the setting where it will be used eventually, and revising to correct the deficiencies found in the field-testing stage. In more rigorous programs of R & D, this cycle is repeated until the field-test data indicate that the product meets its behaviorally defined objectives

In this research, the researcher produces a new product, namely: Reyog Ponorogo traditional theater-based drama textbook with an expectation that it can be used to support drama learning at formal and non-formal institutions.

The steps of research and development refer to the ones claimed by Borg & Gall (2003:775-776), namely: (1) research and information collecting; (2) planning (3) development of preliminary form of product; (4) preliminary field testing) (5) main product revision; (6) main field testing; (7) operational product revision; (8) operational field testing; (9) final product revision; and (10) dissemination and implementation.

If closely paid attention to the objectives of the research, the arrangement of prototype of Reyog Ponorogo traditional theater-based drama textbook is very much required at the present time. Reyog Ponorogo traditional theater-based drama textbook must have interesting language, and must be meaningful, easy to remember, and interesting to students.

One of the ways to materialize the learning objectives based on the need analysis is developing the students' skills to play drama through Reyog Ponorogo traditional theater which can be implemented in the four language skills (listening, speaking, reading, and writing). This is in line with the claim of Immas (2013), which says that culture is a thinking system which includes system of ideas, concepts, regulations, and meanings and materialized in the life owned through learning process.

2. Textbook

The Ministry of Education and Culture (2012) defines textbook as a scientific writing in the form of book whose substance of discussion is focused on the science field. Textbook discusses an adequately broad topic (one field of science). The sequence of material delivery and the structure of textbook are arranged according to the logics of field of science (content oriented), and then published officially for market (Guideline for Textbook Writing).

Regulation of the Minister of National Education Number: 2 of 2008 (Article I, Sub-article 1) states that textbook is a compulsory reference book to be used at basic and middle or higher education unit, which contains learning material so as to improve faith, piety, noble character, personality, mastery of science and technology, improvement of aesthetic sensitivity and ability, improvement of kinesthetic ability, and health which is arranged according to the national standard of education.

Based on the aforementioned definition, it is clearly shown that the arrangement of textbook must be subject to the existing principles, be systematic, fulfill all the determined provisions, be related to a specific discipline, and contain learning material so as to improve faith, piety, noble character, personality, mastery of science and technology, improvement of aesthetic sensitivity and ability, improvement of kinesthetic ability, and health which is arranged according to the national standard of education.

In term of textbook function for teachers, Krisnasanjaya (1997:85) claims that textbook serves as a guideline to identify what must be instructed to or learnt by students, to find out the sequence of textbook presentation, to know its instructional techniques and methods, to get the textbook easily, and to use it as a learning tool for students inside or outside their schools. Besides, he also claims that textbook serves as a means of certainty on what is learnt by a student, a control tool to know how much and how far the learning material has been mastered, and a learning tool (outside the class, textbook serves as a teacher) in which he or she can find directions, theories, concepts, and practice materials or evaluation.

Arif Sunarya (2011) states that textbook has functions as: a) a means of developing material and program in educational curriculum; b) a means of facilitating academic tasks of teachers; c) a means of facilitating the achievement and fulfillment of learning objectives; and d) a means of facilitating efficiency and effectiveness of learning activities.

3. Traditional Theater

Riantiarno (2011: 2) defines theater as an art work product which is a unified whole between human beings (actors) as the main media tools and some or the whole supporting elements.

Bakdi Soemanto (2001: 09) in his book entitled"*Jagat Teater*" elaborates that theater is derived from Greek language *theatron*, a word that refers to a place where actor performs his or her role on a stage, and spectators watch it. Furthermore, Bakdi Soemanto (2001: 346) in his book also explains about the elements of drama, which consist of (1) theme, (2) plot, (3) character, (4) time and setting, and (5) conflict.

Herman Waluyo (2009: 14) defines plot as a narrative of events, the emphasis falling on causality overshadows time sequence, meaning that in a plot there is a causal relationship of story sequences that develop the story conflict.

Ridwan (2007:27) claims that local wisdom or local

genious can be understood as man's effort by using his intelligence (cognition) to act and behave against something, an object, or an event happening at a certain time and space. Such a definition is arranged etymologically where wisdom is understood as one's ability to use his or her minds to act or behave as a result of judgment toward something, an object, or an event that takes place.

As a terminology, wisdom is frequently defined as local wisdom. Ritual and traditional theaters are parts of performing arts rotted from ancient cultures or beliefs of a nation. Such performing arts become a memory that persists and saves a memory when the life and business of man are inseparable from his prayers and ritual beliefs.

Meanwhile, Corrigan (1972: 8) claims that theater from *'theatron'* (Greek, a seeing place where one comes to possess a new knowledge) our world 'theater' and 'theory' are derived from the same source. Such a claim indicates that theater derived from *theatron* is a place where people can come to unite a new science. In our language, "theater" and "theory" are derived from the same source.

Corrigan (1972: 8) states that there is a phenomenon of people coming together to perform in the presence of other people who have come to watch the performance. Theater is a highly complex art form. He argues that there is a phenomenon in a theater that it is a collection of people who present performance for spectators to watch it. Theater is a high-level art form.

Edy Sedyowati (2009 ; 09) explains that the elements of theater performance contain aesthetic elements particularly on: 1) play manuscript; 2) actors and actress; 3) *mise en scene*; 4) artistic layout;5) make up; 6) costumes; 7) lighting; 8) sound effects; 9) music effects; and 10) choreography. The intrinsic elements of drama include a variety of elements which directly present in drama text such as plot, character, setting, theme and message, and language element in the form of dialogues. Furthermore she underlines that the more decisive element of traditional theater is style of conduct or the way the roles are performed. Realism theater which has a far-reaching effect on the film world in society requires each role to be accounted for on the basis of possibility in reality. Therefore, the roles must be viewed as uniqueness with typical background.

Meanwhile, extrinsic elements are all kinds of elements outside the drama text, but they play roles for the existence of it. The elements among others include biography of author, philosophy of life of author, and social and cultural elements of society regarded to contribute to the creation of his or her work of drama.

4. Reyog Ponorogo

The origin of Reyog Ponorogo according to Wahyudiyanto (3013:09) actually has a diverse version of backgrounds. However, there two main versions which are known understood extensively and which receive adequate study on the goal and image as important parts of the creation of Reyog Ponorogo performance, namely: (1) the version on the basis of famous Panji legend and (2) the version of Reyog Panorogo as a *satire* performance.

Reyog Ponorogo is the native culture of Ponorogo. It is full of meaning and philosophy of life. Moreover, it is not merely a dance or a performance. Yet, it is one of the efforts to explore or review educative and cultural values of the performance.

Meanwhile, Sururil (2012: 02) in the journal written by KH. Mujab Tohir claims that Reyog art was originally named "*Barongan*". It was brought by Ki Ageng Kutu Suryongalam who was from Bali. Therefore, Reyog art is almost similar to art from Bali named Barong. Reyog is not an original *Barong* so that it is called *Barongan*.

Reyog Ponorogo is one of the traditional arts from Ponorogo. It is a priceless treasure and wealth, which makes Ponorogo regency famous in particular and Indonesia in general. The performance up to the present time is still rooted from the history of Reyog creation in the past. Because it is rooted from ancient culture, Reyog Ponorogo is categorized as traditional theater, particularly if we relate it with the fulfillment of traditional theme. The performance is more frequently mentioned as Reyog Ponorogo. Although it has been scattered to all over Indonesia, the popular name of the performance is still Reyog Ponorogo because its origin is in Ponorogo region.

Reyog Ponorogo is a traditional art that belongs to performance art. Supanggah (2009: 02) says that performance art before it is performed must get through a series of pre-performance activities that can be divided into phases as follows: (1) design or creation phase and (2) practice phase. The two phases cannot be skipped because they support each other to achieve the expected final objective perfectly. In order to achieve the cultural values of Reyog Ponorogo, drama learning by using Reyog Ponorogo traditional theater-based drama textbook is required.

5. Finding

5.1 Extended Experimentation

The results of comparison of initial scores or pre-test scores prior to and following the application of Reyog Ponorogo-based drama textbook prototype at Class XI of Natural Science Program 4 of State Senior Secondary School 1 of Ponorogo and Class XI of Social Science Program 2 of Senior Secondary School 1 of Sambit, Ponorogo are as follows: Prior to the treatment, the average score of Class XI of Natural Science Program 4 of State Senior Secondary School 1 of Ponorogo is 36 whereas the average score of Class XI of Social Science Program 2 of State Senior Secondary School 1 of Sambit, Ponorogo is 29. Following the treatment through the implementation of Reyog Ponorogo-based drama textbook prototype, the average score of initial ability obtained by the students in Grade XI of Natural Science Program 4 of State Senior Secondary School 1 of Ponorogo is 85 whereas that of initial ability obtained by the students in Grade XI of Social Science Program 2 of State Senior Secondary School 1 of Sambit, Ponorogo is 80.

The comparison between the pre-test scores and the post-test scores prior to and following the application of Reyog Ponorogo-based drama textbook prototype at Grade XI of Natural Science Program 4 of State Senior Secondary 1 of Ponorogo, Grade XI of Social Science Program 2 of State Senior Secondary School 1 of Sambit, Ponorogo is presented in the following chart:

Comparison Between Pre-Test Score And Post-Test Score In Extended Experimentation At Grade Xi Of Natural Science Program 4 Of State Senior Secondary School 1 Of Ponorogo And At Grade Xi Of Social Science Program 2 Of State Senior Secondary School Of Sambit, Ponorogo
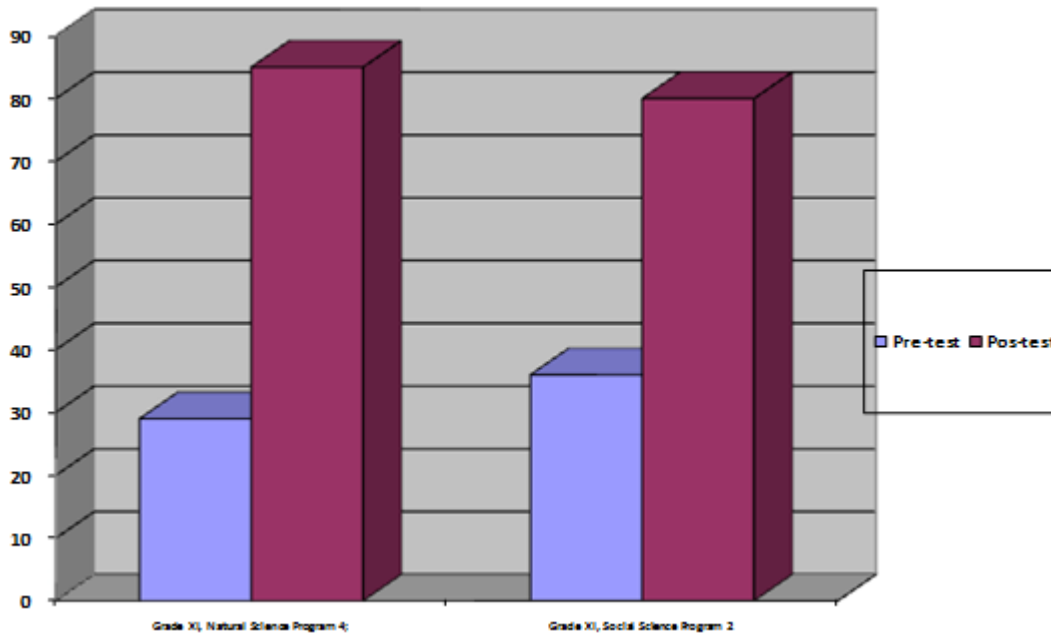

Figure 1: average scores of pre-test and post-test at State Senior Secondary School 1 of Ponorogo and State Senior Secondary School 1 of Sambit, Ponorogo

	Class XI of Natural Science Program 4 of State Senior Secondary School 1 of Ponorogo	Class XI of Social Science Program 2 State Senior Secondary School 1 of Sambit, Ponorogo
Pre-test	29	36
Post-test	85	80

The students' average scores of pre-test and post-test show that (1) generally there is an improvement of understanding of drama; (2) the result of task assigned by the teacher, namely: exploring the intrinsic and extrinsic elements of Reyog performance in various versions improves; (3) the students' understanding of drama playing improves; (4) the students' understanding of various versions of Reyog Ponorogo performances improves; and (5) the students' understanding of the elements that build Reyog Ponorogo art improves. The result of statistical test of t-non independent for the data of extended experimentation is presented in the following table:

Table 1: the result of normality test of the data of extended experimentation

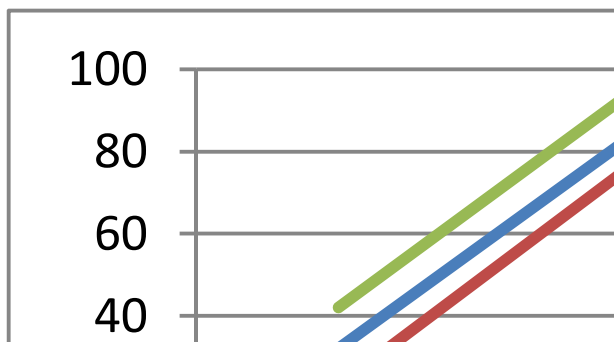|		Pre-test Score	Post-test Score
N		52	52
Normal Parameters(a,b)	Mean	32.06	82.23
	Std. Deviation	4.738	4.813
Most Extreme Differences	Absolute	.117	.141
	Positive	.082	.107
	Negative	-.117	-.141
Kolmogorov-Smirnov Z		.846	1.014
Asymp. Sig. (2-tailed)		.471	.256

The normality test on the pre-test data of extended experimentation by using the Kolmogorov Smirnov results in the value of Kolmogorov Smirnov $Z = 0.846$ and that of $p = 0.471$. The pre-test data have a normal distribution because the value of p is greater than 0.05. The normality test on the post-test data with Kolmogorov Smirnov results in the value of Kolmogorov Smirnov $Z = 1.014$ and that of $p = 0.256$. For the value of p is greater than 0.05, the post-test data have a normal distribution.

The statistical test on the data of extended experimentation results in the final scores consisting of the lowest score, the highest score, and the average score as presented in the following table:

Table 2: comparison between pre-test score and post-test score

	Pre-test Score	Post-test Score
Average	32.06	82.23
Lowest	23	75
Highest	42	93

The scores in the table above show that there is a difference between the pre-test scores and the post-test scores. The scores indicate that the latter are higher than the former. Graphically, the scores can be described in the following diagram:

Figure 2: line graph of pre-test and post-test scores

The table and graph above show that the lowest score of pre-test has a lower value than that of post-test. In addition, the average score of pre-test has a lower value than that of post-test. Similarly, the highest score of pre-test has a lower value than that of post-test. The analysis with t test on the data of extended experimentation results in the following:

	Mean	Std. Deviation	t	Sig. (2-tailed)
Pre-test and Post-test Scores	-50.173	5.079	-71.24	0.000

The mean value is -50.173. Such a mean or negative average value shows that the pre-test score has a lower average score than the post-test score. The value of t_{count} is .7124 with the significance or probability value = 0000. The value is then compared to the significance or probability value of 0.05. The significance or probability value is smaller than 0.05, meaning that Ho is rejected by Ha is verified. Therefore, on the data of extended experimentation, there is a significance difference between the pre-test score and the post-test score.

5.2 Model Development Experimentation Testing

5.2.1. Research Instrument Experimentation
In order to investigate whether or not Reyog Ponorogo-based drama textbook is able to improve the students' competency to master Reyog Ponorogo traditional theater-based drama theoretically and practically, experimentation testing is required to be conducted at several selected schools in addition to the schools where the limited and extended experimentations are implemented. This phase is conducted according to the result of analysis of initially used learning material and that of the application Reyog Ponorogo traditional theater-based drama textbook applied later. This phase aims at testing the effectiveness and feasibility of the model.

5.2.1.1 Validity Test
Validity test is conducted to 32 students. The learning achievement validity test consists of 76 items. Based on the test, the lowest value of r_{count} is -0.151 and the highest one is 0.695 with the highest significance value of 0.855 and the lowest one of 0.000. Based on the significance value of the correlation coefficient, there are 15 correlation values which are not significant or the significance value is greater than 0.05, namely: Questions 3, 7,11, 16,20, 25, 30, 34, 42, 46, 53, 57, 62, 68, and 73. The 15 questions are not used in this research.

5.2.1.2 Reliability Test
The reliability test of the test items shows that the alpha coefficient value is 0.932. The value of r_{count} of Alpha Cronbach is 0.932, which is consulted to the value of r_{table} of product moment = 0.349 with N = 32 and at the significance level of 0.05 (5%), meaning that r_{count} (0.932) is greater than r_{table} (0.349). Thus, it can be concluded that the test items are reliable. The reliability level of test instrument is determined according to the following provisions of reliability coefficient classification claimed by Suharsimi Arikunto (2002: 71).

Table 3: research instrument reliability level

Coefficient	Reliability
0.800 – 1.000	Very high
0.600 – 0.800	High
0.400 – 0.600	Moderate
0.200 – 0.400	Low
0.000 – 0.200	Very low

The table shows that the value of test item reliability is 0.932. This score lies between 0.800 – 1.000. Thus, it can be concluded that the reliability of test items is in the very high category.

5.2.1.3 Differentiability
Differentiability is the ability of test items to differentiate between the students with the high ability (top group) and those with the low ability (bottom group). The grouping of students into the top group and the bottom group is based on the result of test conducted, in which the scores are ordered from the highest to the lowest one. Then it is divided by two. Its formula is as follows:

$$D = \frac{A}{nA} - \frac{B}{nB}$$

Remarks:
D = Differentiability index
A = Number of students in the top group who answer the questions correctly
B = Number of students in the bottom group who answer the questions correctly
nA = Number of students in the top group
nB = Number of students in the bottom group
The differentiability calculation results in the following criteria:
-1.0 – 0.19: Bad
0.2 – 0.39: Fair
0.4 – 0.69: Good
0.7 – 1.00: Very Good (SuharsimiArikunto, 2007: 213).

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Based on the scores, the test items used are the ones with D bearing the value of greater than or equal to 0.2 (D≥0.2). The highest value of D based on the result of differentiability analysis is 0.688 and the lowest is -0.125. Based on the values of each test item, there are 10 test items with the score of less than 0.2, namely: 11, 13, 25, 37, 42, 46, 53, 62, 68, and 73. Because they are in the bad category, they are not used to test the students' ability.

5.2.1.4 Difficulty Level

A good test item is the one with the adequate difficulty level, meaning that the test is not too easy and not too difficult to answer. To calculate the difficulty level of each test item the following formula is used (SuharsimiArikunto, 2007: 208):

$$P = \frac{A+B}{N}$$

Remarks:

P : Difficulty index

A : Number of students in the top group who answer the questions correctly

B : Number of students in the bottom group who answer the questions correctly

N : Number of students who take the test

The difficulty calculation results in the following criteria:

0.00 – 0.29 : Difficult

0.3 – 0.69 : Moderate

0.7 – 1.00 : Easy

A test item is used if it fulfills the following requirement $0.30 \le P \le 0.70$. The result of difficulty level test of the test items shows that there is not any test items regarded as difficult ones.

5.2.2 Analysis Requirement Testing

The pre-requisite analysis in this research only used the normality test. This was done because the research used the quasi experimental research or developmental research. Thus, technically there is only one group of the research exposed to treatment or experimentation. There was neither control group nor experimental group. The following are the data which present the data with a normal distribution.

Table 4: the result of normality test on the experimental data of written test

		Pretest Score	Post-test Score
N		238	238
Normal Parameters(a,b)	Mean	27.92	82.59
	Std. Deviation	7.278	8.015
Most Extreme Differences	Absolute	.087	.087
	Positive	.087	.059
	Negative	-.053	-.087
Kolmogorov-Smirnov Z		1.339	1.342
Asymp. Sig. (2-tailed)		.055	.055

This research uses Kolmogorov Smirnov's formula to investigate whether or not the experimental data distribution is normal or is not analytical. The formula is used for big samples, whereas Shapiro Wilks's formula is used for small samples. This research uses big samples.

The normality test on the pre-test data with the Kolmogorov Smirnov's test results in the value of Kolmogorov Smirnov Z of 1.339 and that of p = 0.055. Because the value of p is greater than 0.05, the pre-test data have a normal distribution. Meanwhile, the normality test on the post-test

data with the Kolmogorov Smirnov's test results in the value of Kolmogorov Smirnov Z of 1.342 and that of p - 0.055. For the value of p is greater than 0.05, the post-test data have a normal distribution.

Table 5: the result of normality test on the experimental data of practice test

		Pre-test Score	Post-test Score
N		238	238
Normal Parameters(a,b)	Mean	49.15	70.56
	Std. Deviation	11.554	6.425
Most Extreme Differences	Absolute	.084	.087
	Positive	.084	.072
	Negative	-.084	-.087
Kolmogorov-Smirnov Z		1.302	1.345
Asymp. Sig. (2-tailed)		.067	.054

The normality test on the practice score of pre-test with Kolmogorov Smirnov's test results in the value of Kolmogorov Smirnov Z = 1.302 and that of p = 0.067. Because the value of p is greater than 0.05, the pre-test data have a normal distribution. Meanwhile, the normality test on the practice post-test score with Kolmogorov Smirnov's test results in the value of Kolmogorov Smirnov Z = 1.345 and that of p = 0.054. For the value of p is greater than 0.05, the pre-test data have a normal distribution.

5.2.3 Description of Research Data

The testing of learning result by using Reyog Ponorogo traditional theater-based drama textbook is done through the administration of pre-test and post-test. The tests are conducted in writing so as to investigate the students' cognitive and affective abilities. The analysis of data description is done with the aid of statistical computer program of SPPS. The following is the result of the analysis:

Table 6: the result of descriptive analysis of the experimental data of the students' learning result in writing

	Pre-test Score	Post-test Score	Difference
Mean	27.92	82.59	54.67
Median	27.00	83.00	54.50
Mode	25(a)	83(a)	55
Std. Deviation	7.278	8.015	10.186
Variance	52.973	64.242	103.759
Minimum	13	40	13
Maximum	53	98	84
Sum	6646	19657	13011

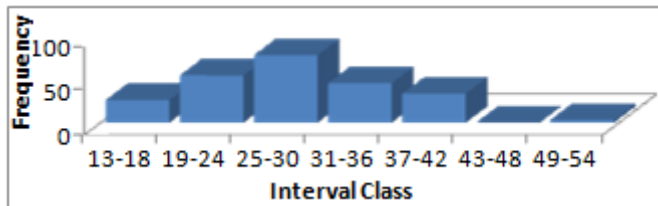**Table 7:** the result of descriptive analysis of the experimental data of the students' learning result in practice

	Pre-test Score	Post-test Score	Difference
Mean	27.92	82.59	54.67
Median	27.00	83.00	54.50
Mode	25(a)	83(a)	55
Std. Deviation	7.278	8.015	10.186
Variance	52.973	64.242	103.759
Minimum	13	40	13
Maximum	53	98	84
Sum	6646	19657	13011

The data of learning result prior to the treatment are presented in the following table of distribution of frequency.

Table 8: distribution of frequency of pre-test result data

Interval Class	Frequency	Percentage
49-54	3	1.26%
43-48	0	0.00%
37-42	33	13.87%
31-36	45	18.91%
25-30	77	32.35%
19-24	54	22.69%
13-18	26	10.92%
Total	238	100.00%

The distribution of the data in the above table can also be described in the following histogram:
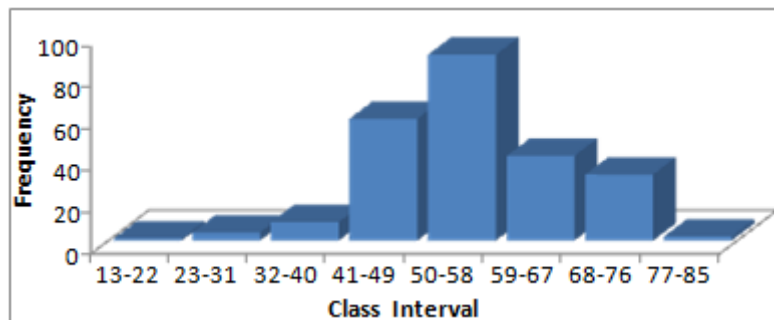

Figure 3: histogram of distribution of frequency of written pre-test score

Based on the result of descriptive analysis, the lowest score of pre-test is 13, the highest score is 52, the mean score is 27.92, the median score is 27.0, the modus score is 25, and standard deviation score is 7.29. Of the scores, the deviation of data can be calculated on the basis of mean score and standard deviation. The lowest deviation of pre-test data is 27.92 – 7.29 = 20.63 whereas the highest deviation is 27.92 + 7.29 = 35.21. The data of learning result following the treatment can be seen in the following distribution of frequency:

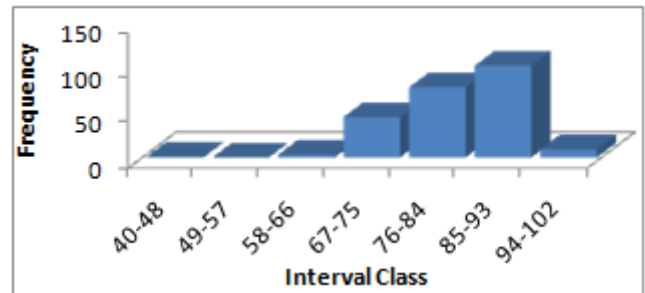**Table 9:** distribution of frequency of written post-test result data

Interval Class	Frequency	Percentage
94-102	9	3.78%
85-93	102	42.86%
76-84	78	32.77%
67-75	45	18.91%
58-66	3	1.26%
49-57	0	0.00%
40-48	1	0.42%
Total	238	100.00%

The distribution of data in the above table can also be described in the following histogram:

Figure 4: histogram of frequency of post-test score

Based on the result of descriptive analysis, the lowest score of post-test is 40, the highest score is 98, the mean score is 82.59, the median score is 83.0, the modus score is 83, and standard deviation score is 8.02. Of the scores, the deviation of data can be calculated on the basis of the mean score and the standrd deviation. The lowest deviation of post-test data in this research is 82.59 – 8.02 = 74.57 whereas the highest deviation of post-test is 82.59 + 8.02= 90.61.

The score difference data of learning result prior to and following the treatment are investigated so as to know the students' abilities prior to and following the use of Reyog Ponorogo traditional theater-based drama textbook. The score difference data of learning result prior to and following the treatment can be seen in the following distribution of frequency:

Table 10: distribution of frequency of pre-test and post-test result score difference data

Interval Class	Frequency	Percentage
77-85	2	0,84%
68-76	32	13,45%
59-67	41	17,23%
50-58	90	37,82%
41-49	59	24,79%
32-40	9	3,78%
23-31	4	1,68%
13-22	1	0,42%
Total	238	100,00%

The distribution of data in the above table can also be described in the following histogram:

Figure 5: histogram of distribution of frequency of pre-test and post-test score difference

Based on the descriptive analysis, the lowest score difference between the pre-test score and the post-test score is 13, the highest score difference is 84, the mean score is 54.67, the median score is 5.50, the modus score is 55, and the standard deviation score is 10.19. Of the scores, the deviation of data can be calculated on the basis of mean

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score and standard deviation. The lowest deviation of post-test data is 54.67 – 10.19 = 44.48. Meanwhile, the highest standard deviation is 54.67 + 10.19 = 64.86.

5.2.3.1 The data of practice learning result prior to the treatment (pre-test)

The data of practice learning result prior to treatment is done to investigate the students' abilities before receiving the learning with Reyog Ponorogo traditional theater-based drama textbook. The data can be seen in the following distribution of frequency:
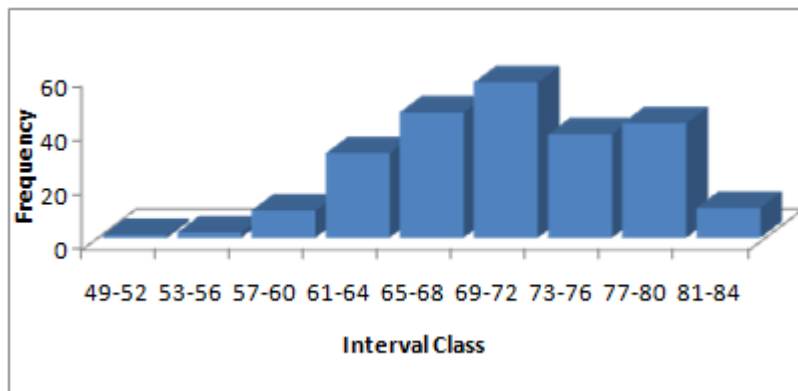
Table 11: distribution of frequency of practice pre-test result data

Interval Class	Frequency	Percentage
23-29	6	2.52%
30-36	32	13.45%
37-43	33	13.87%
44-50	59	24.79%
51-57	47	19.75%
58-64	30	12.61%
65-71	28	11.76%
72-78	3	1.26%
Total	238	100.00%

The distribution of data in the above table can also be described in the following histogram:
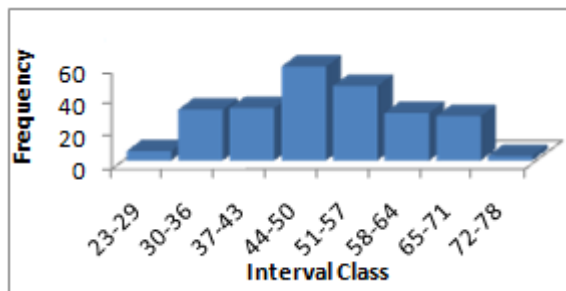
Figure 6: histogram of distribution of frequency of practice

pre-test score

Based on the result of descriptive analysis, the lowest score of pre-test is 23, the highest score of post-test is 74, the mean score is 49.15, the median score is 49.0, the modus score is 44, and the standard deviation score is 11.554. Of the scores, the deviation of data can be calculated on the basis of the mean score and the standard deviation score. The lowest deviation of pre-test data is 49.15– 1155 = 37.59 whereas the highest deviation is 49.15 +11.55= 60.70.

5.2.3.2 The data of practice learning result following the treatment (post-test

The data of practice learning result prior to treatment is done to investigate the students' abilities after having received the learning with Reyog Ponorogo traditional theater-based drama textbook. The data can be seen in the following distribution of frequency:

Table 12: distribution of frequency of practice post-test result data

Interval Class	Frequency	Percentage
49-52	1	0.42%
53-56	2	0.84%
57-60	10	4.20%
61-64	31	13.03%
65-68	46	19.33%
69-72	57	23.95%
73-76	38	15.97%
77-80	42	17.65%
81-84	11	4.62%
Total	238	100.00%

The distribution of data in the above table can also be described in the following histogram:

Figure 7: histogram of distribution of frequency of practice post-test score

Based on the result of descriptive analysis, the lowest score of post-test is 49, the highest score is 83, the mean score is 70.56, the median score is 71.0, the modus score is 72, and the standard deviation is 6.425. Of the score, the deviation of data can be calculated on the basis of mean and standard deviation. The lowest deviation of post-test data in this research is 70.56 – 6.425 = 64.13 whereas the highest deviation is 70.56 + 6.425= 76.98.

### 5.2.4 Model Testing of Reyog Ponorogo Traditional Theater-Based Drama Textbook

The statistical descriptive testing of the experimental data results in the final scores with the category of the lowest score, the highest, and average as presented in the following table:

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Table 13: comparison between pre-test score and post-test score

Score	Written test		Practice Test	
	Pre-test Score	Post-test Score	Pre-test Score	Post-test Score
Average	27.92	82.59	49.15	70.56
Lowest	13	40	23	49
Highest	53	98	44	83

The scores in the above table show that there is a difference between the pre-test scores and the post-test scores; the post-test scores are higher than the pre-test scores. Graphically, the scores can be described in the following diagram:
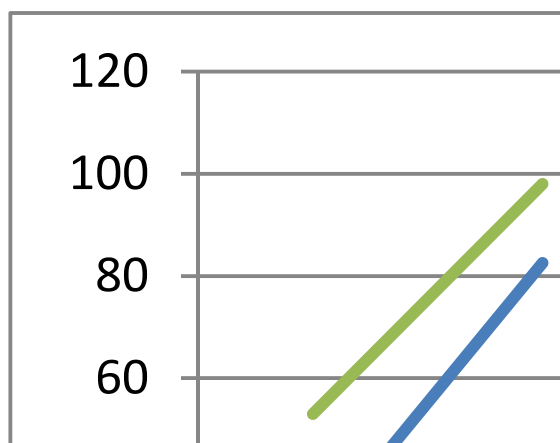
Figure 8: line graph of pre-test and post-test score

In the above table and graph, it is very clear that the minimal score of pres-test score is lower than that of post-test. Similarly, the average score of pre-test is lower than that of post-test. Likewise, the highest score of pre-test is lower than that of post-test.

The statistical testing to determine average difference test in this research aims at investigating whether both the pre-test scores and the post-test scores have a significant difference. The testing is done by using the two-tailed difference test with t test. In order to investigate the score improvement from pre-test to post-test, the analysis of paired sample t-test is conducted. This is done because in this research, there is only one group which is exposed to treatment in an attempt to investigate the development prior to and following the treatment. The t test on the written experimental data results in the following output:

	Mean	Std. Deviation	t	Sig. (2-tailed)
Pre-test Score – Post-test Score	-54.67	10.19	-82.796	.000

The mean score is -54.67. This mean or negative average score indicates that the pre-test score has a lower average score than the post-test score. The value of t_{count} is -82.796 with the significance or probability value of 0.000. The value is then compared to the significance or probability value of 0.05. It is clearly shown that the significance or probability value is smaller than 0.05, meaning that Ho is rejected but Ha is verified. Therefore, it can be stated that on the experimental data there is a significance difference between the pre-test score and the post-test score.

Meanwhile, the t test on the experimental data practically results in the following output:

	Mean	Std. Deviation	t	Sig. (2-tailed)
Pre-test Score – Post-test Score	-21.412	12.667	-26.08	.000

The mean score is -21.412. This mean or negative average score shows that the pre-test score has a lower average score than the post-test score. The value of t test is -26.08 with the significance or probability value of 0.000. The value is then compared to the significance or probability value of 0.05. It is clearly shown that the significance or probability value is smaller than 0.05, meaning that Ho is rejected but Ha is verified. Therefore, it can be stated that on the experimental data of practice score there is a significance difference between the pre-test score and the post-test score.

Based on the result of data analysis on the extended data and on the experimental data, a conclusion is drawn that there is an effect of the use of Reyog Ponorogo traditional theater-based drama textbook on the students' learning result.

6. Conclusion

The conclusions of the research are as follows:

6.1 Based on the result of observation conducted at Senior Secondary Schools of Ponorogo, some fact is obtained that several schools have not possessed traditional theater-based drama textbooks.

6.2 Some schools have not had any kind of drama textbook, neither textbook with traditional theme nor the one with modern theme. Even, some teachers use Student Work Sheet as the only learning resource without other reference books.

6.3 Based on the result of need analyses of the students or the teachers of State Senior Secondary School 1 of Ponorogo, State Senior Secondary School 2 of Ponorogo, State Senior Secondary School 3 of Ponorogo and State Senior Secondary School 1 of Badegan, Ponorogo, the arrangement of Reyog Ponorogo traditional theater-based drama textbook is very much required.

6.4 The value of t test non independent on the extended experimentation is -71.24 with the significance or probability score of 0.000. The value is then compared to the significance or probability value of 0.05. It is clearly shown that the significance or probability value is smaller than 0.05, meaning that Ho is rejected but Ha is verified. Therefore, it can be stated that on the extended data there is a significance difference between the pre-test score and the post-test score.

6.5 The value of t_{count} is -82.796 with the significance or probability value of 0.000. The value is then compared to the significance or probability value of 0.05. It is clearly shown that the significance or probability value is smaller than 0.05, meaning that Ho is rejected but Ha is verified.

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Therefore, it can be stated that on the experimental data there is a significance difference between the pre-test score and the post-test score.

6.6 Based on the result of analysis with t test on the experimental data practically, an output is obtained that the mean score is -21.412. This mean or negative average score shows that the pre-test score has a lower average score than the post-test score. The value of t test is -26.08 with the significance or probability value of 0.000. The value is then compared to the significance or probability value of 0.05. It is clearly shown that the significance or probability value is smaller than 0.05, meaning that Ho is rejected but Ha is verified. Therefore, it can be stated that on the experimental data of practice score there is a significance difference between the pre-test score and the post-test score.

6.7 Based on the results of analysis above, the prototype testing has a good result. Therefore, it can be concluded that there is an effect of the use of Reyog Ponorogo traditional theater-based drama textbook on the students' learning result.

This research is limited to traditional drama learning at Senior Secondary Schools formally. It used limited samples. Therefore, the following researchers are expected to expand their scope of research on it so that Reyog Ponorogo traditional drama learning can reach the national scale, or it can be an effort of saving and improving Reyog Ponorogo traditional theater drama at international scale.

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