

THE COMPARISON BETWEEN STAD +3R BASED ON DIGITAL MEDIA METHODS AND THE COOPERATIVE MODEL STAD TYPE IN WRITING EXPLANATION TEXT

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ABSTRACT

The research was backed by Permendikbud number 37 the year 2018, students need to master the technology in writing, thus it takes the right learning method in line with the Permendikbud, researchers offer a method of innovative study that is the method of the STAD + 3R based digital media. The writing that corresponds to KI KD is one of the explanation text. The purpose of this research is to learn the students' learning outcomes in writing the explanation text based on digital media and the different methods STAD +3R based digital media with STAD. The research methods used are quantitative comparatively with the quasi-experiments in the form of a Nonequivalent control group. The population in this study was 300 students of grade VIII SMP Negeri 3 Padalarang. Sampling uses purposive sampling and obtained class VIII B as an experimental class as many as 30 students and class VIII A as a control class as many as 30 students. The results showed an average increase in the value of 21.87 points or 28% from 56.13 to 78. The significant difference through the statistical test with a signification value of 2-tailed test T independent sample test is $0.03 < 0.05$, it can be concluded there is a meaningful difference between the STAD class with the STAD +3R class, the student performance in the STAD +3R class generates digital products in the form of Vlog, Pptx and E-book, while the STAD class does not produce digital products.

Keywords: explanation text, innovative methods, methods of STAD +3R based digital media.

ABSTRAK

Penelitian ini didukung oleh Permendikbud nomor 37 tahun 2018, siswa perlu menguasai teknologi secara tertulis, sehingga dibutuhkan metode pembelajaran yang tepat sejalan dengan Permendikbud, peneliti menawarkan metode studi inovatif yaitu metode STAD + 3R media digital berbasis. Tulisan yang sesuai dengan KI KD adalah salah satu teks penjelasan. Tujuan dari penelitian ini adalah untuk mempelajari hasil belajar siswa dalam menulis teks penjelasan berdasarkan media digital dan berbagai metode media digital berbasis STAD + 3R dengan STAD. Metode penelitian yang digunakan adalah kuantitatif komparatif dengan eksperimen semu dalam bentuk kelompok kontrol Nonequivalent. Populasi dalam penelitian ini adalah 300 siswa kelas VIII SMP Negeri 3 Padalarang. Pengambilan sampel menggunakan purposive sampling dan diperoleh kelas VIII B sebagai kelas eksperimen sebanyak 30 siswa dan kelas VIII A sebagai kelas kontrol sebanyak 30 siswa. Hasil penelitian menunjukkan peningkatan rata-rata nilai 21,87 poin

atau 28% dari 56,13 menjadi 78. Perbedaan signifikan melalui uji statistik dengan nilai signifikansi uji 2-tailed T independent sample test adalah $0,03 < 0,05$, dapat disimpulkan adalah perbedaan yang bermakna antara kelas STAD dengan kelas STAD + 3R, kinerja siswa di kelas STAD + 3R menghasilkan produk digital dalam bentuk Vlog, PPTX dan *E-book*, sedangkan kelas STAD tidak menghasilkan produk digital.

Kata kunci: teks penjelasan, metode inovatif, media digital berbasis STAD + 3R.

INTRODUCTION

The writing of this article contains various aspects of juridical, theoretical, and empirical aspects. Legal or juridical aspect in conducting the learning process one of which is set in Permendikbud nomor 37 the year 2018, clearly in chapter 2-A that the informatics content is integrated into the learning, it has become a consideration of the policy developers, that the use of technology in the learning process is no longer negotiable. The explanation text is found in the KD 3.10 page 18 in the Permendikbud. Theoretically, according to (Cahyadi, 2018) The explanation text means the text is a form of sentence explanation about the process of connectivity of various phenomena, whether it is a natural phenomenon, technology, disaster, politics, culture, social, arts, science, and others. (Kosasih, 2017) The explanation text in answer to the question of why, unraveling is causality, the explanation text in answer to the question of how unraveling is chronological. (Mahsun, 2014) argues that the explanation text is a text-based on the structure, consisting of portions of a general declaration (opening), a row of explanations (contents), and interpretation (conclusion). An indicator of the basic competency of the exporting text is that the student can write the explanation text according to the structure. Writing can be interpreted as an activity to think that has to do with reason, an important activity for affect life, (Wikanengsih, 2013). Writing an explanation requires reason in its implementation.

Technology is not a foreign thing, gadgets, laptops, and the Internet is a small number of technologies that exist at this time, certainly, the technology can be used for various purposes. Education should not be missed in utilizing technology in the process of learning (Kemendikbud, 2018). STAD +3R based on

digital media is an innovative learning method that utilizes a lot of technology in its learning process. STAD +3R method based on digital media in the development of the STAD type cooperative learning model first developed by Slavin at Johns Hopkins University based in Baltimore, Maryland, US. The STAD stands for Student Team Achievement Division, while the STAD +3R stands for Student Team Achievement Division + Remind, Rewrite, Record. Remind that is to remember, Rewrite means to write back, Record means to save, certainly in the process of recording based digital media. Digital Media means all digital devices include hardware, software or applications, and connected network transmissions, and correlates.

STAD type cooperative learning measures (Slavin, 2000), is the basis of implementation of learning using the STAD + 3R method based on digital media,

- a) transfer of knowledge, teacher conveys basic competencies,
- b) indicator, learning objectives, and presenting the subject matter,
- c) forming a group with a member of students has the same interest,
- d) the teacher gave the duty to the group to be done by the members of his group,
- e) treatment Remind, learners are given time for relaxation and pausing from physical activities, then allowed to remember all the subject matter recently studied and think about the digital products to be made,
- f) rewrite, learners write back everything they wanted,
- g) record, in this step learners are directed to record or save all activities or writings using digital media can be through a computer, laptop or gadget, then students are directed to make the product using digital media can be a vlog, pptx, or e-book, depending on the interests and abilities of the students,
- h) learners present the results of records.
- i) the teacher gives awards and is given an online quiz. (<http://gg.gg/Kuis-Teks-Eksplanasi-Ek-1>)

METHOD

Quantitative methods became the approach used, with the type of comparative research, combined with the quasi-experiments in the form of a Nonequivalent control group, the meaning comparatively comparing two different variables (Sugiyono, 2014) Following the design used,

| | | |
|----------------------|----------------------|----------------------|
| O₁ | X₁ | O₂ |
| O₃ | X₂ | O₄ |

- O₁ = Experimental First Test or STAD +3R (pretest)
- O₂ = Second Test experiments or STAD +3R (posttest)
- X₁ = Treatment Using the STAD + 3R based on Digital Media method
- O₃ = First Test control or STAD (pretest)
- O₄ = Second Test control or STAD (posttest)
- X₂ = Treatment Using the STAD type Cooperative model

Sampling uses purposive sampling and obtained class VIII B as a STAD +3R or experimental class as many as 30 students and class VIII A as a STAD or control class as many 30 students. The instruments used in this study include RPP, test problems, assessments, SIGIL applications, Beesmart, and AV explanation. Instruments are aids in the collection of research data (Arikunto, 2014). The step is to give the first Test, give the treatment, give the second Test, then the test result is collected into the data processed assisted by IBM SPSS application. The process includes data processing, data analyzers, and interpretation of analysis results (Cresswell, 2009).

RESULT AND DISCUSSION

Empirically, Data is presented quantitatively, based on the learning outcomes obtained by STAD +3R or experimental classes using the STAD +3R method based on digital media, and STAD or the control class using the STAD type Cooperative learning model. Analyzed in statistics using the IBM SPSS application Help, the following results in statistical analysis.

Table 1. Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|------------------|----|---------|---------|-------|----------------|
| Pretest STAD +3R | 30 | 35 | 63 | 56.13 | 10.868 |
| Pretest STAD | 30 | 44 | 76 | 55.87 | 10.681 |

Table 1. Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|-------|----------------|
| Pretest STAD +3R | 30 | 35 | 63 | 56.13 | 10.868 |
| Pretest STAD | 30 | 44 | 76 | 55.87 | 10.681 |
| Valid N (listwise) | 30 | | | | |

Based on table Descriptive Statistics Pretest above, student learning results in the first Test STAD +3R obtained a minimum value of 35, the maximum value of 63, and mean 56.13. Meanwhile, a minimum value control or STAD of 44, the maximum value of 76, and mean 55.87

Table 2. Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|------|----------------|
| PosttestSTAD +3R | 30 | 67 | 88 | 78 | 10.814 |
| PosttestSTAD | 30 | 50 | 88 | 67,5 | 10.131 |
| Valid N (listwise) | 30 | | | | |

Based on the Descriptive Statistics Posttest table above, student learning results on the second Test class STAD +3R were obtained a minimum value of 67, the maximum value of 88, and mean 78. The minimum value control or STAD is 50, the maximum value is 88, and the mean 67.5.

After analyzing the student outcomes through the PretesPostest Descriptive Statistics, then test normality as one of the absolute requirements before conducting parametric statistical analysis, following the IBM SPSS application-assisted normality test.

Table 3. Tests of Normality^c

| | Class | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|------------------|-----------------|---------------------------------|----|-------|--------------|----|------|
| | | Statistic | df | Sig. | Statistic | Df | Sig. |
| Student Learning | PretestSTAD +3R | ,124 | 30 | .200* | ,950 | 30 | .303 |
| Outcomes | PretestSTAD | ,115 | 30 | .200* | ,944 | 30 | .654 |

According to table 3. Above, it appears that the value of the significance score pretests 0.200 in an experiment class or STAD +3R with a statistical value of 0.124 whereas for the control class or STAD the significance value 0.200 with a statistical value of 0.115 the value is greater than the significance level $\alpha = 0.05$.

Table 4. Tests of Normality^c

| | Class | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|------------------|------------------|---------------------------------|----|-------|--------------|----|------|
| | | Statistic | df | Sig. | Statistic | Df | Sig. |
| Student Learning | PosttestSTAD +3R | ,178 | 30 | .200* | ,901 | 30 | .273 |
| Outcomes | PosttestSTAD | ,188 | 30 | .200* | ,904 | 30 | .453 |

Table 4. Above indicates that the significance value of the Posttest score 0.200 in a STAD +3R class with a statistical value of 0.178 whereas for the STAD class the significance value 0.200 with a statistical value of 0.188 the value is greater than the significance level $\alpha = 0.05$. About the test criteria, the H0 was received stating that the pretests and Posttest score in the class of expiration and control class was normal, both in the Kolmogorov Smirnov test and Shapiro Wilk which is > 0.05 (statistical standard value) then it was concluded that the research data is related to gauss or normal.

Once it is known that all the subsequent distribution of the gauss is conducted homogeneity test, used to know the data variance of Postes STAD +3R class pretests and Posttest STAD class pretests data is homogeneous or not. The results of signification based on mean obtained 0.153 greater than > 0.05 concerning the test criteria then H0 received. Both classes are homogeneous. Furthermore, Test T-Test independent samples T-tests, aimed at knowing the ability to write the student's explanation text in STAD +3R classes and the STAD class is equal or not, or has a distinction. Here's the result.

Table 5.Independent Samples Test

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
|---|---|------|------------------------------|--------|----------------|-----------------|-----------------------|---|---------|
| | F | Sig. | T | Df | Sig (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| | | | | | | | | | |
| Student Equal Pretest variances assumed | 2,104 | ,153 | ,546 | 55 | ,557 | 1,19458 | 2,18820 | 5,57983 | 3,19066 |
| Equal variances not assumed | | | ,549 | 50,104 | ,565 | 1,19458 | 2,17470 | 5,56238 | 3,17322 |

Based on the signification value of 2-tailed test T, independent samples test data pretests The initial ability of the student is $0.557 > 0.05$, so also T-calculate value 546 greater than 0.05 then H0 accepted meaning hypothesis is

acceptable, can be deduced there is no difference in the ability to write the text explanation.

Table 6. Independent Samples Test

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|--|---|------|------------------------------|--------|----------------|-----------------|-----------------------|---|----------|
| | F | Sig. | T | Df | Sig (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | Upper |
| Student Equal Posttest variances assumed | ,001 | ,484 | -3,076 | 55 | ,003 | -6,05296 | 1,96789 | -9,99669 | -2,10922 |
| Equal variances not assumed | | | -3,064 | 51,766 | ,003 | -6,05296 | 1,97546 | -10,01744 | -2,08847 |

Based on the signification value of 2-tailed test T independent sample test Data posttest students ' ability is $0.003 < 0.005$ with negative t-count value, then H_0 rejected, meaning there is a meaningful difference, the ability of students in the class of experimental classes when posttest, H_1 accepted means learning achievement writing an explanation.

In addition to the statistical test of empirical data, learning using the method of STAD + 3R based on digital media, directing students to use technology in their learning, proven by the product produced by the students in the form of the vlog, pptx, and e-book. It became a striking distinction between the STAD + 3R method based on digital media with STAD. The following products work students' results from a group performance.

Table 7. Results of the group work

| Group | Remind (2) | Rewrite (3) | Record (3) | Score | Predicate |
|-------|------------|-------------|---|-------|-----------|
| 1 | Vlog | Youtube | https://youtu.be/nyzH1KqZGck | 4 | A |
| | 4 | 4 | 4 | | |
| 2 | Pptx | I Cloud | https://cloud.i/myzz2EfrSSON | 3,62 | A |
| | 4 | 3 | 4 | | |
| 3 | Pptx | G Drive | https://drive.google.com/docs1 | 3,75 | A |
| | 3 | 4 | 4 | | |
| 4 | E-Book | Dropbox | https://dropbox/scl/fi/oef04saS | 3,62 | A |
| | 4 | 3 | 4 | | |
| 5 | E-Book | G Drive | https://books.google.co.id/bsco | 3,62 | A |
| | 4 | 4 | 3 | | |

| Description | | Remind | Rewrite | Record |
|-------------|-----------|------------------|-----------------------|-----------------------|
| Score | Predicate | Digital Products | Digital Storage Place | Digital storage Links |
| 3,50 – 4 | A | | | |
| 3 – 3,49 | B | | | |
| 2 – 2,99 | C | | | |

$$\text{Formula score} = \frac{\text{Total Score} \times \text{3R score}}{\text{3R Maximum Score}}$$

CONCLUSION

The learning outcomes of writing an explanation text using the digital media-based STAD + 3R method increases value acquisition, proving with an average increase of 21.87 points or 28% i.e. from 56.13 to 78. This method directs students to utilize technology in the study, proven by the digital products produced by students.

The difference between the type of cooperative model of STAD with the method of STAD + 3R based on digital media is the final product produced by the student, STAD only products in the form of paper that can be lost or damaged, while the STAD + 3R based digital media not only produces conventional paper in the form of papers, it also produces digital products in the form of vlogs stored in youtube, pptx and e-book stored in google drive, I cloud, or dropbox. On the group's work. It is in line with Permendikbud no. 37 the year 2018, that the informatics content is integrated into the learning process. On average, learning using the digital media-based STAD + 3R method is higher than 10.5 points compared to the STAD-type cooperative model. Also based on statistical test the significance value of the 2-tailed Test T Independent sample test is $0.003 < 0.05$ with a negative T-count value which means there is a significant difference between the learning outcomes of the control class using the STAD-type cooperative model, with the experimental class using the STAD + 3R method of the digital media based.

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