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Method Effect VAKT (Visual, Auditory, Kinesthetic, Tactile) On Beginning Reading Ability and Writing Skills of Class I Students

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Abstract

This type of research is a Quasi Experimental Design with the research design that will be used is the nonequivalent Control Group Design, in this study a certain treatment is given, namely the control class and the experimental class. The number of samples in this study were 58 students. The data collection method used is the activity of learning to read the beginning of grade I students and writing skills tests and documentation. The data analysis technique used is the first by using a descriptive statistical approach, inferential statistics and manova hypothesis testing. The results showed that: 1) the activities of students in the experimental class using the VAKT method with a total score of 52 divided by the total score multiplied by one hundred with a total result of 81.25. From these results it can be concluded that the VAKT method can affect the ability to read at the beginning of class I; 2) the statistical test of the experimental class is 83.59 and getting a good classification score, it can be concluded that the use of the VAKT method can affect the initial writing skills of first grade students; and 3) test the Manova hypothesis with a significant value of 0.000 <0.05, it can be concluded that there is an effect of the VAKT method on students' reading and writing skills..

Keywords*: VAKT method; Beginning Reading; writing skills*

1. Introduction

The role of education is very important in human life. In fact, it cannot be separated from the whole process of human life. In other words, the need for human education really affects the lives of individuals, families and communities, nations and countries. Education is the process of changing the attitude of a person or group of people with an effort to mature humans through training and teaching (KBBI, 2008). The main factor in the success of the teaching and learning process is the general purpose of education.

As in the Law of the Republic of Indonesia No. 20 of 2003 concerning the national education system article 1 paragraph 1 that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by himself, society, nation and state (Tim Pustaka Merah Putih, 2007).

The ability to read is the basis for mastering various fields of study. If a child at the early school age does not immediately have the ability to read, then he will experience many difficulties in learning various fields of study in subsequent classes. Therefore, children must learn to read so that they can read to learn (Abdurrahman, 2010).

The reading interest of students, especially students at the elementary school level, needs to be improved. The era of education 4.0 is a challenge, including elementary schools in fortifying students from the negative impact of the rapid use of technology, especially in students' daily lives. The era of education 4.0 is a modern era where there is a digitalization system in almost all aspects of life, including the learning aspect (Salmia, 2020a). Dengan perkembangan teknologi yang semakin of

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course, this, either directly or indirectly, is a challenge for students. Education 4.0 does not only focus on the use of technology, but students' reading interest also needs to be improved to meet Education 4.0.

The rapid flow of information and technology in the 4.0 education era has an impact on the increasingly limited time students have to read. In fact, reading literacy skills for students in reading can certainly be very necessary for students to keep abreast of all developments, especially those related to their education.

Ironically, the rapid development of information and technology has actually made this nation "backward" in terms of reading literacy. Students now spend more time watching TV or spending their time in front of a gadget screen (Tafti & Abdolrahmani, 2014).

The results of observations in the field also show that the learning of students in grade I apparently has not implemented optimally the School Literacy Movement. This means that the school has not sought actions that can support and improve especially students' reading literacy and writing skills. The interest in reading and writing of the first graders at the elementary school is still low. They are less interested in reading and writing various types of texts.

In addition, based on the results of initial observations and assessments conducted on May 9 – May 11, 2022, it was found that these students had difficulties in initial writing skills, namely students were able to write by imitation, but the student's writing looked large so that it came out of the book line. However, these students are able to recognize the alphabet and are able to write letters (a, i, j, l, o, u). Writing is a skill in expressing thoughts and feelings into written symbols. Writing is a child's functional activity that can affect a child's individual satisfaction, creativity, productivity and academic achievement at school.

Beginning writing is the initial stage of mastering advanced writing skills and is a prerequisite for learning at a later stage. Before a child masters the ability to write well, there needs to be a prerequisite in writing that must be mastered, namely starting writing (Mumpuniarti, 2007).

According to (Abdurrahman, 2010) that the VAKT Method is a multisensory teaching developed by an expert named Grace M. Fernald. By involving all the senses, namely visual (sight), auditory (hearing), kinesthetic (movement) and tactile (touch) will provide a learning experience that further optimizes all senses in spastic cerebral palsy students in early reading and writing.

Furthermore, the VAKT Multisensory Method which is an integrated learning method of seeing, hearing, feeling and touching is considered very appropriate to improve the achievement of students' initial reading skills. In addition, the VAKT method is a method based on the study that children will learn better if the subject matter is presented in various modalities. VAKT has its own definition, namely (a) Visual: can be seen with the sense of sight (eyes) or based on sight. (b) Auditory: can be heard. (c) Kinesthetic: a very complex feeling evoked by stimulation in the muscles, tendons, and wrists. And (d) Tactile: related to touch or touch (Basam & Sulfasyah, 2018).

The results of research and assessment suggest that learning with the VAKT method has a significant effect on the early reading ability of elementary school students who have learning difficulties. The VAKT multisensory method was developed by Fernald which is a multisensory reading teaching method for children with reading difficulties. In line with research (Kasiyati; Zulmiyetri; Nurhastuti; Mega Iswari, 2019) also stated that the experimental group benefited from the use of the VAKT multisensory method which was

able to significantly reduce errors and levels of anxiety in students due to difficulties in learning activities. On the other hand, the VAKT method can be recommended and looks promising in encouraging student learning and reducing problem anxiety in elementary school students (Arbi & Rianto, 2019).

Learning by applying the VAKT method in learning that activates students in activities to hone early reading and writing skills. In VAK learning, learning is focused on providing direct and fun learning experiences. Direct learning experience by learning by remembering (Visual), learning by hearing (Auditory) and learning by movement and emotion (Kinesthetic).

Based on the results of observations made on Thursday, May 12, 2022, that learning carried out in grade 1 students still uses the reading method by spelling and writing scans. Researchers found problems in students who had not been able to distinguish the letters: b, d, p, q, m, w, n, and u "where first graders should have been able to distinguish these letters and also be able to connect syllables into words. Furthermore, to find out to what extent the child's ability to read at the beginning, the researchers conducted an assessment of the child. The results of the assessment that the researchers found were that the indicator showed that children's letters got a percentage of 10%, the indicator said that children's letters got a percentage of 15%, and the indicator of distinguishing children's letters got a percentage of 12%. In writing skills, the researchers found that students were still unable to write the letters that had been mentioned, such as students showing the letters "b and d", but if students were invited to write them without looking at the shape of the letters, students would have difficulty distinguishing the two letters..

Apart from that, the learning outcomes that must be achieved in this study are Basic Competence (KD) Understanding pre-reading activities (how to sit properly and properly, the distance between the eyes and the book, how to hold the book, how to turn the page of the book, eye movements from left to right , choose a place with bright light) in the right way. In addition to focusing students on early reading skills in grade 1, teachers should also pay more attention to how students sit when reading, the distance between the eyes and the book in the right way, the point is to get students used to reading in the right and correct way, so that students will not get tired. although later students read for a long time.

As for writing skills, namely Basic Competence (KD) Understanding the correct initial writing preparation activities (how to sit, how to hold a pencil, how to put a book, the distance between the eyes and the book, choosing a place with bright light). The teacher can direct students how to hold a pencil, where the book is and the distance between the eyes and the book. Student writing activities are carried out to familiarize students with writing in the right and correct way.

Children are human resources who will be the force of change for all of us, therefore children need education to become intelligent human beings. (Salmia, 2020b). To achieve complete education for students, media is needed that will help students achieve educational goals.

Based on the problems above, it is necessary to use the right learning media to improve early reading and writing skills. In this case, researchers are interested in improving children's early reading and writing skills through the VAKT method, where this method has never been taught by teachers to grade 1 students in cluster 1, Tamalanrea sub-district. So the purpose of this study is "The Influence of the VAKT Method on Beginning Reading and Writing Skills of Class Students".

2. Method

Research design is a description or design to conduct a research with variables that will be tested for truth. Because not all external variables that can affect the course of the experiment can be controlled, this type of research is experimental (Quasi Experimental design) with the research design that will be used is the nonequivalent Control Group Design.

This study was designed as an experimental study by testing the independent variable VAKT multisensory method on the initial reading and writing skills of first grade students as the dependent variable. This research is a quasi-experimental research, namely experimental research carried out in two groups called the experimental group or class and the control group (Arikunto, Suhardjono, 2011) with the sample determined directly without random.

The research design used was an experimental research conducted in two groups. The research design of these two groups was measured using the same method, which was carried out after being treated in the experimental class (using the VAKT multisensory method) and the control class using the conventional learning method.

The data collection methods used in this study are questionnaires, learning outcomes tests and documentation.

a) Observation

The observation sheet used in this study was the application of the learning model with the VAKT method to determine the initial reading and writing skills of the first grade students. The learning activity observation sheet was carried out in the control class and the experimental class using different treatments, namely in the control class using conventional method and experimental class using the VAKT . method.

b) Test

The researcher will give two kinds of tests, namely pre-test and post-test, regarding questions related to the material studied before and after using the VAKT learning method on the initial reading and writing skills of grade I students.

c) Documentation

Documentation is a record of events that have passed. This study uses the documentation method to obtain data on grade I students and data on the value of initial reading and writing skills. This value is used to determine the normality and homogeneity of the sample.

The data that has been collected will be processed and analyzed using two types of analysis, namely descriptive statistical data analysis and inferential statistical data analysis. To assist the calculation of descriptive statistical data analysis and inferential statistics, the SPSS version 25.0 application program was used.

Descriptive statistical data analysis is used to analyze data by describing or describing the data that has been collected as it is without intending to make generalizations (Sugiyono, 2015). Descriptive statistical data analysis in this study was intended to describe the beginning reading and writing skills of first-grade students. Data on learning outcomes and understanding of students' concepts were analyzed descriptively. The data obtained from the results of the pretest and posttest were analyzed to determine the score of student learning outcomes before and after treatment.

Inferential statistics is intended to analyze data by making generalizations on sample data so that the results can be applied to the population or in other words intended to test research hypotheses. Before testing the hypothesis, the data prerequisite test was conducted. In the data prerequisite test, the data normality test and data homogeneity test were carried out. Meanwhile, the hypothesis test was carried out by the Paired Sample T-Test.

Before analyzing the hypothesis testing, it is necessary to know whether the data has met the requirements for using statistics to be used in hypothesis testing. The data normality test was conducted to determine whether the data obtained from the subjects were normally distributed or not. The normality test was obtained from the pretest and posttest scores. The normality test in this study was carried out using the Statistical Package for Social Science (SPSS) version 25 system of the Kolmogorov-Smirnov method, with the test criteria that the data were normally distributed if the significance obtained was greater than 0.05. On the other hand, it is said that the data are not normally distributed if the significance obtained is less than 0.05.

Homogeneity test was conducted to determine whether the two groups of data obtained had the same variance or were homogeneous. The homogeneity test was obtained from the pretest and posttest scores in the experimental class and the control class. The homogeneity test in this study used the Statistical Package for Social Science (SPSS) version 15 system with Levene's test. If the significance obtained is greater than 0.05, it is said that the variance of the data groups is the same. On the other hand, if the significance obtained is less than 0.05, it can be said that the variance of the data groups is not the same.

Hypothesis testing uses the Manova test to measure the effect of independent variables on a categorical scale on several dependent variables at the same time on a quantitative data scale. This statistical analysis assisted by the SPSS 25.0 for windows program was carried out at a significant level less than (0.05).

By taking into account the hypotheses that have been made previously. Decision making is based on the test results obtained, are:

1) If the significance value or Sig (2-tailed) > 0.05, then H0 is accepted and H1 is rejected.
2) If the significance value or Sig (2-tailed) < 0.05, then H0 is rejected and H1 is accepted

3. Result and Discussion

Beginning reading ability in grade 1 students, this research was conducted in eight meetings, at the first meeting students were given a pretest to determine the students' initial reading ability, for the second meeting until the eighth meeting students were given the VAKT method for the experimental class and the conventional method for the control class. . At the eighth meeting, the two classes gave a posttest to determine the initial reading ability after being given treatment.

Descriptive analysis was used to analyze data from observations of student and teacher activities during the VAKT method learning activities. Student activities use the observation sheet of student activities carried out by the observer. Student activities are carried out to determine the initial reading ability of first grade students. The activities of the experimental class students in using the VAKT method can be seen in the following Table 1.

Table 1. Criteria for the Percentage of Experimental Class Student Activities

No	Scale	Criteria
1	90% - 100%	Very good
2	80% - 89%	Well
3	65% - 79%	Enough
4	55% - 64%	Not enough
5	≤ 55%	Failed

Based on student's activity in the experimental class using the VAKT method is with an average of 81.25 which is in good criteria. With the conclusion that the VAKT method can improve the early reading ability of grade I students.

The writing skills of the first grade students were carried out in the control class and the experimental class. Both classes were given a pretest to determine the students' initial abilities before being given treatment. After the pretest was conducted, the control class was treated with the conventional method and the experimental class was given the VAKT method. After being given treatment, the two classes were given a posttest to determine the students' writing skills. After being given treatment, class I students were given a posttest to determine the students' ability in writing. The following is the posttest statistical data for class I students.

Table 2. Posttest Statistics of Students' Writing Skills

Statistics

		kontrol postest	eksperimen postest
N	Valid	29	29
	Missing	0	0
Mean		61.86	83.59
Std. Error of Mean		1.094	1.159
Median		63.00	83.00
Mode		63	81[a]
Std. Deviation		5.890	6.242
Variance		34.695	38.966
Range		25	27
Minimum		50	67
Maximum		75	94
Sum		1794	2424

a. Multiple modes exist. The smallest value is shown

Based on the statistical data above, the posttest results can be explained that the minimum score in the control class is 50 while the experimental class is 67. The maximum value in the control class is 75 while in the experimental class is 94. And for the control class the average value is 61, 86 while in the experimental class was 83.59. Based on these data, it can be concluded that the experimental class writing skill scores increased by using the VAKT learning method.

The difference between the VAK method and the conventional method on the reading and writing skills of early grade students can be identified using the Manova test, but before the MANOVA test is carried out, the prerequisites are tested using the normality test and homogeneity test.

The normality test in this study was carried out using the Statistical Package for Social Science (SPSS) version 25 system of the Kolmogorov-Smirnov method, with the test criteria that the data were normally distributed if the significance obtained was greater than 0.05. On the other hand, it is said that the data are not normally distributed if the significance obtained is less than 0.05.

Tabel 3. Normality test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		58
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.19552734
Most Extreme Differences	Absolute	.089
	Positive	.089
	Negative	-.053
Test Statistic		.089
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Based on the SPSS output above, it can be seen that the significance value of Asiym.Sig (2-tailed) is 0.200 which is greater than 0.05. In accordance with the basis for decision making in the Kolmogrov Smirnov normality test above, it can be concluded that the data are normally distributed.

Tabel 4. Homogeneity Test

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Unstandardized Residual	Based on Mean	.013	1	56	.909
	Based on Median	.009	1	56	.927
	Based on Median and with adjusted df	.009	1	49.970	.927
	Based on trimmed mean	.009	1	56	.926

The results of data analysis on the control class group and the experimental class group showed that the significance value of the homogeneity of the variables was 0.926 which was greater than 0.05. These data indicate that the two groups are homogeneous with a statistical levance of 0.009.

Manova Manova hypothesis test to measure the effect of independent variables on a categorical scale on several dependent variables at the same time on a quantitative data scale. This statistical analysis assisted by the SPSS 25.0 for windows program was carried out at a significant level if the significance value or Sig (2-tailed) > 0.05, then H0 was accepted and H1 was rejected, and if the significance value or Sig (2-tailed) < 0.05, then H0 is rejected and H1 is accepted.

Tabel 5. Manova Test

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.996	6745.233[b]	2.000	55.000	.000
	Wilks' Lambda	.004	6745.233[b]	2.000	55.000	.000
	Hotelling's Trace	245.281	6745.233[b]	2.000	55.000	.000
	Roy's Largest Root	245.281	6745.233[b]	2.000	55.000	.000

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.
kelas	Pillai's Trace	.850	155.483[b]	2.000	55.000	.000
	Wilks' Lambda	.150	155.483[b]	2.000	55.000	.000
	Hotelling's Trace	5.654	155.483[b]	2.000	55.000	.000
	Roy's Largest Root	5.654	155.483[b]	2.000	55.000	.000

a. Design: Intercept + kelas

b. Exact statistic

Based on the table above, the data for decision making that the significant value is 0.000 <0.05, it can be concluded that there are differences between the VAKT method and the conventional method on the reading and writing skills of students in Class I Cluster 1, Tamalanrea district, Makassar city.

4. Conclusion

Based on the results of the research above, it can be concluded as follows: The effect of the VAKT method on the initial reading ability of Class I students. Student learning activities using the VAKT method are with an average of 81.25 which is in good criteria. With the conclusion that the VAKT method can improve the reading ability of the first graders of SD Inpres Inpres. The effect of the VAKT method on the writing skills of Class I students. The writing ability of class 1 students uses the VAKT method with the average percentage of good grades. Based on these criteria, it can be concluded that the use of the VAKT method can affect the initial writing skills of class I students. SD Inpres. The effect of the VAKT method on the reading ability and initial writing skills of Class I students. Based on the normality test which has a normal significance value and the homogeneity test, the Manova hypothesis test was carried out, with the conclusion that the VAKT method had an effect on the reading and writing skills of the early Class I students.

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