



## The Effect of Learning Style-based Strategy on Students' Vocabulary Development

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### Abstract

This pre-experimental research was designed to investigate the effect of learning style-based strategy toward vocabulary development of kindergarten students. 15 students in class B2 TK IT Auladuna Bengkulu city were involved in this study and treated by visual and verbal memorizing technique during 6 meetings. The data were collected by pre-test, post-test, and observation checklists. The data were analyzed by software SPSS version 16.00. There were some findings of this research. First, 11 out of 15 students in class B2 TK IT Auladuna tended to be visual learner and the other 4 students tended to be verbal learner. Second, according to the hypothesis testing by SPSS, the value of sig. 2-tailed could not fulfill the requirements of significance value. Hence, null hypothesis (H<sub>0</sub>) was accepted. This means that learning style-based strategy is not effective for children's vocabulary development. Third, even though the strategy is not effective, the data analysis by SPSS showed a small improvement of students score after getting the treatment. The results imply that learning style-based strategy is not effective for children's vocabulary development at TK IT Auladuna Bengkulu City.

Keywords: learning style; verbal; visual; vocabulary

### Introduction

In classroom activities, kindergarten students who are mostly six to seven years old have different learning styles. It can influence the students in understanding the material that is given by the teacher, for instance in learning English. According to Heartley (1998, 46), learning style is the way in which individual characteristically approach different learning task. In addition, James and Gardner (1995, 20) explained that learning style is a complex manner in which, and conditions under which, learner most efficiently and most effectively perceive, process, store, and recall what they are attempting to learn.

There are some ways used by the students in order to get, process, and recall information efficiently and effectively. For instance, some can remember new vocabulary easily by using pictures, some others prefer learning by song, the rest like learning by games or even other ways. These phenomena require the teacher to apply appropriate technique according to students' learning styles,



to let them develop their English vocabulary effectively. There are some techniques that can be applied to encourage students' vocabulary development for example by using figures, gestures, actions, pictures, drawings, descriptions, synonyms and opposites, defining contexts, and translating. Simply, those techniques can be divided into two technique classifications which are visual and verbal memorizing technique.

Visual memorizing technique is a technique that can be used by visual learners to encourage their tendency to remember thing by seeing (Felder and Solomon, 2007). By this technique, the learners can memorize pictures, charts, diagrams, sketches, films, and any other visual course material easily. Moreover, according to a study which was done by McCarthy in Gilbert and Swanier (2008, 31), visual learners have big tendency in processing information by seeing visual media, for instance pictures, diagrams, figures, exhibition, modeling, or video.

On the other hand, verbal memorizing technique is a technique which verbal learners tend to get more words out of written and spoken explanation (Felder and Solomom, 2007). This theory is also supported by a study from McCarthy in Gilbert and Swanier (2008, 31) who said that auditory or verbal learners have big tendency in processing information by hearing sound. They prefer to listen to audio cassette, causeri-lecturing, discussion, debate, and verbal instruction.

Those two techniques are usually found in pre-college and community college classes (Felder and Henriques, 1995, 23). Moreover, most participants of studies on visual and verbal memorizing technique were high school and university students. It is shown by some researches that are related to this field, such as Ashaver and Igyuve (2013, 48) that involved lecturers and staffs of College of Education Katsina-Ana in Benue State, Bagheri (2015, 1071) that involved 60 Iranian high school students and Pallapu (2007, 35) that involved 22 university students who were majoring in education.

Even though the studies of this field were mostly conducted to high school and university students, there are some studies about visual and verbal memorizing technique that were conducted to children. For instance, Chabani and Hommel (2014, 999) that involved 281 children around 13 years old and Richman et al (2005, 566) that involved 48 students with non-syndromic cleft lip and palate (CLP). These studies show that research about visual and verbal memorizing technique can be conducted not only to high school and university students, but also to children including children in kindergarten level.

The different types of learner need to be treated differently. Thus, verbal and visual memorizing technique can be the technique in teaching, including vocabulary teaching. This is supported by the result of research about the impact of verbal, visual, and verbal-visual techniques by Soleimani (2014, 135) and Bagheri (2015, 1071) which found that visual-verbal technique was the most effective technique on vocabulary achievement compared with verbal technique or verbal technique only. These studies showed that learning style-based strategy within visual and verbal

memorizing technique has good impact to vocabulary development. The vocabulary development could influence speaking, reading, listening, and writing skill (Rahmawati, et al. 2019; Syafryadin, 2020; syafryadin, et al. 2020; Martina, et al. 2020; Martina, et al. 2020; Dhillon, et al. 2020; Adeani, et al. 2020).

By observing the findings above, it is interesting then to know the effect of learning style-based towards vocabulary development in another level in different settings, such as Indonesia. Finally, the result of this research is expected to give a contribution in English teaching and learning especially to be the consideration in developing the material of English for children.

### **Research Methodology**

This research was a pre-experimental design. During six meetings, as much as 15 kindergarten students in class B2 TK IT Auladuna Bengkulu City were treated by visual and verbal memorizing technique.

There were two instruments that were used in this research. The first was pre-test and post-test to see the improvement of the students. Both pre-test and post-test were consisted of 10 questions about numbers, alphabets, colors and animals. The data were analyzed by software SPSS version 16.00.

The second instrument was observation checklist. There were two observation checklists that were used in this research. Observation checklist 1 was used to analyze students' learning styles. This consisted of 22 statements; 11 statements indicated the tendency of visual learner and 11 statements indicated the tendency of verbal learner. The data collected from this observation checklist were then analyzed by using the technique that was adopted from Cohen, Oxford, and Chi's (2001, 1) learning style survey. In addition, observation checklist 2 was used to analyze the students' performances during the treatment to see their involvement, contribution and concentration in pre-teaching, while teaching and post teaching activities. The data collection from observation checklist 2 were used as a complementary information.

### **Findings and Discussion,**

#### **Findings**

##### **a. Learning Style**

Preliminary observation was conducted on March 28-29, 2017. It was conducted in order to find out students' learning styles. In addition, the observation was extended until the treatment to get a valid data. The finding of this research shows that majority of students in class B2 TK IT Auladuna Bengkulu city was visual learners. The result shows that from 15 students in class B2, there are 11



students who are visual learners and 4 students who are verbal learners. It was investigated through the tendencies of the students in doing their daily activity in school.

The finding was in line to the research by Pallapu (2007, 36) which found that the number of visual learners was more than verbal learners. Although Pallapu involved participants between age 20-25 years old and this research involved participants between age 6-7 years old, the results were similar. Visual learners were the majority learner.

Students' activities in school had shown their learning style. Similar to theory by Felder and Solomon (2007), the 11 visual learners in class B2 TK IT Auladuna tended to see and respond teaching technique with visual media than to listen to the teacher without visual media. Moreover, some visual learners were also neat. This could be seen by the way students coloring a picture, writing their names on their coloring books, taking care on their appearances and organizing things well, such as in arranging their shoes, bags, books, and any other things.

On the other hand, verbal learners were different to visual learners. In line to the theory by Felder and Solomon (2007), verbal learners tended to get out more of words in written and spoken explanation. They tended to respond more on teacher's questions and do a kind of small discussion in group work. They also used to talk to the others in leisure time, remember new words or lyric of a song easily and almost all of them were active in singing activity.

b. Pre-test and Post-test

Pre-test was given on April 17, 2017. It was intended to measure students' knowledge of new vocabulary that would be introduced during the treatment. During 45 minutes, the researcher assisted the students in doing the pre-test by giving instruction of how to do it one by one. The result of pre-test showed variant score which means that the background knowledge of the students is different one each other. Some students could answer the questions correctly. The highest score was reached by one student whose answered all question correctly and got 100 as the score. On the other hand, there was a student who got the lowest score which was 30. Some other students were gotten similar score, for example student S1, S2, S5, S12, and S14 who could answer 7 questions correctly and got 70 as their score, and student S4, S6, S8, S9, and S13 who could answer 6 questions correctly and got 60 as their score.

Post-test was given after the students being treated by visual and verbal memorizing technique in 6 meetings. It was given to see the improvement of the students. It was held on April 26, 2017 and involved the similar 15 students who were given 10 similar written questions as they did in the pre-test. Post-test were administered one by one. The students were called one by one to do the post-test by instruction in front of the researcher and co-researcher. It was organized in order to get a valid data without any intervention from some factors, for instance cheating.

The result showed the different score compared to pre-test score. After getting 6 meeting treatment, there were 2 students who could answer all question correctly. The lowest score was also improved from 30 in pre-test to 40 in post-test. There were also some students who reached similar score in their post-test, for example student S1, S4, and S8 whose score was 80 and student S3, S5, S9, and S14 whose score was 70.

### c. Hypothesis Testing

The Data of pre-test and post-test were analyzed by Paired Sample T-Test formula in SPSS version 16.00. The result shows that the value of sig. (2-tailed) is 0.111 which is more than 0.05. Thus, null hypothesis ( $H_0$ ) is accepted and alternative hypothesis ( $H_1$ ) is rejected. This means that learning style-based strategy is not effective for children's vocabulary deveopment. Furthermore, the data analysis also showed the negative (-) value of  $t$  which is -1.703. This indicates that there is an improvement of students' score after the treatment but it is not significant. It can be seen from the improvement of mean that is increased from 66,67 in pre-test to 74.00 in post-test.

### Discussion

Since the results showed that learning style-based strategy is not effective for children's vocabulary deveopment at TK IT Auladuna Bengkulu City, there might be some possible factors that affect the result. It can be from external factor such as invalid data of pre-test and internal factor, such as student performance.

Invalid data of pre-test could be happened because of ineffective approach in administering the pre-test. According to the teacher, this pre-test was the first written test that was done by the students. It means that the students were not familiar with a kind of test. So, expecting kindergarten student to do the test like high school student was totally not easy. Besides, all of them did not know the rule that they were not allowed to see their friends' answers. So, doing the pre-test together by all kindergarten students in the same time was not effective and could cause invalid data.

The next was the influence of the technique used with students' performances in the classroom. The students with improvement and the students with similar score between pre-test and post-test were mostly the students that had good performances in the classroom. Both visual and verbal learners involved in all meetings, concentrated by taking full attention on teacher's explanation, and contributed by answering teacher's question. Beside, according to Piaget's theory, the cognitive funtions of the students were also developed well, so they could remember the material by using this visual and verbal memorizing technique.

On the other side, the students with lower score of post-test compared to their pre-test score were sometime showed unexpected performances. Some of them were not involved in pre-teaching activity and most of them were having problems in taking full attention to the teacher. Further,

according to the theory of learning readiness by Wood (2007), the cognitive skill of the students of class B2 might be not ready to process the information effectively. This caused the students could not understand and remember the material maximally through visual and verbal memorizing technique.

Beside, the kindergarden students are not reliable. This is intended to the behaviour of the children in general. Once, they choose or do one thing, and it can be changed as they want. This is also the way children develop their skill and ability. They tend to acquire new things rather than learning it formally.

The different result among this research and the previous research by Bagheri (2015, 171) and Soleimani (2014, 135) can be happened because of some possible factors. First, eventhough the design was the same, the population and the sample of the researches were different. Visual and verbal technique was effective for high school students, but according to the result of this research, it was not effective to be implemented to kindergarden students. This is because kindergarden students are still in the period of golden age where all inputs are processed without determining whether those are visual inputs or verbal inputs.

Another factor that influenced the result of research was the number of meetings. Both previous studies organized the treatment in 10 meetings. This means that there were 4 more meetings compared to this research which had 6 meetings only to deliver the material by using verbal and visual memorizing technique.

### **Conclusion and Suggestion**

This pre-experimental study that was conducted through kindergarden students in class B2 TK IT Auladuna Bengkulu city was finally answer the research question of “is learning style-based strategy effective for children’s vocabulary development?”.

There are some results according to this research. First, 11 out of 15 students in Class B2 TK IT Auladuna Bengkulu City were visual learners and the other 4 students were verbal learner. This showed that visual learner is more dominant than verbal learner. Second, according to statistical testing by SPSS version 16.00, the result showed that null hypothesis ( $H_0$ ) was accepted. This means that learning style-based strategy is not effective for children’s vocabulary development. The last, even though the strategy is not effective, there the result of pre-test and post-test and statistical testing as well indicated an improvement of students’ score. The improvement was only a small improvement and it cannot fulfill the requirement of significance value in SPSS, so this is a cause of why  $H_0$  is accepted. Besides, there were also some possible causes of insignificant improvement, such as, ineffective approach of administering pre-test and post-test and students’ performances in the classroom.



According to the results above, the researcher conclude that learning style-based strategy is not effective for children's vocabulary development. It can be applied to kindergarten students, but the result of such technique is not maximal. As this the first trial to kindergarten students, this could be a reference for those who are interested in doing the similar research. In order to apply this technique to kindergarten students, the researcher need to consider the number of meeting. The longer duration is given, the more reliable result is gotten. Besides, the researcher needs to consider the approach of assessing the students as well. In this case, it could be used authentic assessment.

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