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# Learning Style of Middle School Students (SMP) in Manggarai, Flores, Indonesia



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**ABSTRACT:** This study aims to identify the forms of learning styles of junior high school students in Manggarai. This research uses a descriptive qualitative approach. The variable of identifying forms of learning styles became the single variable in this study. The research population was all students of grade 1, 2 and 3 of SMP Negeri 1 Langke Rembong in Ruteng, Manggarai Regency. Random sampling was used as a sampling technique. The questionnaire of the forms of learning styles of students was used as a research instrument, and was prepared based on the learning style theory of De Poter and Hernacki. The results showed that students of SMP Negeri 1 Langke Rembong had varied learning styles. Of the 118 students studied, it was found that most students had a tendency to have a visual learning style. Based on data analysis, it is obtained that on average students have a visual learning style of 47%, and 25% of students have an auditorial learning style, while 28% of students have a kinesthetic learning style.

KEYWORD: Learning Style, Middle School Students

#### INTRODUCTION

The idea of learning styles is not new, in fact it dates back to the ancient Greeks (Wratcher et al., 1997). Over the past few years, researchers have looked at many learning methods and learners' learning styles, finding that certain learning styles are preferred by certain learners over others. All people learn in different ways or learning styles. "Learning style" is a term that refers to a person's unique tendencies and ways of receiving, processing and remembering data or information. It is a critical component in optimizing learning and helping students maximize their potential. Therefore, learning style can be defined as an individual trait that can affect the ability to learn to get information and to be able to cooperate with peers and teachers, and can contribute to the achievement of educational goals (Grasha, 1996). These learning preferences can help teachers in planning and strategizing learning (Li, 2011). Learning style is thus a preferred tendency to process information in a particular way.

Learning styles have contributed significantly to exploring learning preferences and informing effective learning design. In this case, effective learning design provides options that are expected to meet learners' learning needs (Qureshi, et al., 2002) and Qureshi, et al., (2012). This is based on the consideration that each learner has unique characteristics and understands learning materials in different ways and has consequences and influences the learning process (Baldwin & Sabry, 2003). The design of learning design that suits the needs of learners also needs to consider the level of education of the learners.

One of the levels of education in Indonesia is junior high school. At this level, students are used as one of the most important supporting components in the interaction of the education system. According to Dimyati, & Mudjiono (2015) that the education system is carried out thoroughly in an effort to develop the level of intellectuality and personality of students as students. To realize this, it is necessary to pay attention to effective learning patterns and be able to accommodate the learning needs of students. This is in accordance with the opinion of Sugihartono, et al (2007) that one of the characteristics of effective learning is if the learning process can respond to the learning needs of students. The learning needs in question are that each learner is unique or experiences learning differences between learners, both in terms of understanding and learning speed and learning style. Knowledge of learners' expectations and needs is needed to design appropriate and effective learning designs and teaching approaches (Alhasan et al., 2017).

The difference in learning styles between students is the easiest way for students to understand the information or subject matter they receive. According to Hamzah (2010), learning style is the easiest and fastest way for someone to understand something in learning. Having a certain learning style will be beneficial to the habit of optimizing learning outcomes, as well as being the key to each individual by accepting their own shortcomings and strengths so that they are able to adjust in every learning situation (Hafler, 2001; Prashign 2007). Learners who are aware of their learning styles can help educators (teachers) plan appropriate learning designs and content so as to improve their learning processes and outcomes and can also increase learners' confidence in utilizing their learning styles (Murrel & Claxton, 1987; Hendry et al., 2005). Conversely, if learners do not realize and know their

learning style well, they will have difficulty in planning effective learning (Sheard & Lynch, 2003). This confirms that the appropriate learning style is very important to be known by each learner, so that they can try to achieve the expected learning success. Learning style is a way that is consistently done by a learner. According to De Porter and Hernacki (2016), learning style is a combination of the way a person absorbs and organizes and processes information. This is supported by Hamzah's (2010) opinion that whatever method is chosen, differences in learning styles indicate the fastest and best way for the individual concerned to absorb information that comes from outside himself. Learning styles are not only limited to aspects of dealing with information, seeing, hearing, writing and saying, but also pay attention to aspects of processing information secunsial, analytic and global and responding to something in the learning environment both abstractly and concretely. Learning style is a unique way for each individual and is closely related to one's personality which is influenced by education and developmental history (Winkel, 2005; Nasution, 2010). Furthermore, De Porter and Hernacki (2007) explain that there are three types of learning styles, namely (a) visual learning style, (b) auditorial learning style, (3) kinesthetic learning style.

According to De Porter (1999), three learning styles have their own characteristics. First: Visual learning style. Visual learning style is done by seeing, observing. The strength of this learning style is the sense of sight or eyes that are sensitive to capturing every learning stimulus. The characteristics of individuals who have a visual learning style are liking neatness and skill, a way of speaking that tends to be fast, like to plan carefully for the long term, very meticulous and detailed, concerned with appearance both in terms of dress and achievement, easier to remember what is seen than what is heard, remembering something with visual imagery (association), not easily disturbed by noise while studying, can read quickly and diligently, prefer to read by themselves rather than read by others, do not easily believe in any problem before mentally feeling certain, like to scribble meaninglessly while talking on the phone or in meetings, prefer to perform or demonstrate rather than giving speeches, prefer art to music, often know what to say even though they are not good at choosing words, and sometimes lose concentration when they want to pay attention.

Second: Auditory learning style. It is done by hearing. Individuals who have an auditorial learning style predominantly use their sense of hearing in learning activities, because they feel it is easier to capture stimuli or stimuli. His greatest strength is his ability to hear. The characteristics of individuals who have an auditorial learning style type are that they often talk to themselves while working, are easily distracted by the commotion around them, often move their lips and pronounce when reading, like to read aloud and listen to something, can repeat back and imitate the tone, rhythm and color of the sound easily, finds it difficult to write but easier to tell stories, is fluent in speaking, prefers music to other arts, learns more easily by listening and remembers what is discussed than what is seen, likes to talk, discuss, and explain things at length, and is better at spelling aloud than writing it down.

Third: kinesthetic learning style. This learning style dominantly prioritizes the sense of taste and various physical movements carried out by moving, working and touching. Individuals who have this learning style will find it easier to grasp lessons when moving, touching and taking action. Individuals who have a kinesthetic learning style have the following characteristics: speak slowly, touch to get attention, stand close when talking to others, are always physically oriented and move a lot, memorize by walking and looking, use fingers as a pointer when reading, use a lot of body signals, cannot sit still for a long time, allow poor writing, want to do everything, and like busy games.

Based on these forms of learning styles, it is very important for teachers as educators to understand the learning styles of their students, in order to help and facilitate the learning process. Lack of teachers in understanding the learning styles of students can have an adverse effect on the success of students' learning. Here are some previous studies related to learning styles, among others: research conducted by Johnson & Miller (2010) that learning styles are determined by the characteristics of the fields of science taken, such as physics, mathematics and chemistry disciplines are more likely to have a visual learning style. In addition, research conducted by Buali, et al (2013) that there are significant differences in learning styles between male students and female students. This is reinforced by Asriyanti and Janah (2018) showing that the learning styles of students with academic and non-academic achievements have different ways of learning in learning.

In line with the results of previous research, in this study the researcher wants to continue previous research related to students' learning styles, with a focus on identifying the learning styles of junior high school students in Manggarai. The results of the research are expected to improve and increase the capacity and quality of teachers in addressing the learning styles of students and paying special attention to the various learning styles of students.

## **METHODS**

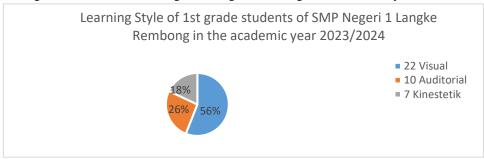
The approach used in this research is a qualitative approach. Identification of students' learning styles is a single variable in this study. The population of this study were all students in grades 1, 2 and 3 of SMP Negeri 1 Langke Rembong totaling 1,118 students. The sample taken was 10% of the population, namely 117 students. The sampling technique uses random sampling. The instrument used used a questionnaire which was prepared based on three learning style theories from De Poter & Hernacki namely visual learning style, auditorial learning style, and kinesthetic learning style. The number of learning style questionnaire items is 37 items, with the following details: 15 items for visual learning style, 11 items for auditorial learning style, and 11 items for kinesthetic

learning style. Overall the statements in the questionnaire are favorable with the options: Always, sometimes, and never. Based on this, the data analysis technique in this study uses descriptive statistical analysis method.

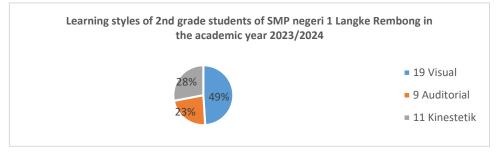
#### RESULTS AND DISCUSSION

Based on the analysis of the results of the questionnaire distributed directly to 117 students who became the sample of this study, the learning style data of students in grades 1, 2 and 3 of SMP Negeri 1 Langke Rembong were obtained as follows.

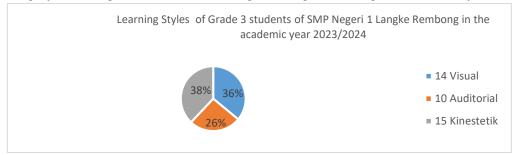
1. Learning styles of 1st grade students of SMP Negeri 1 Langke Rembong in the academic year 2023/2024



2. Learning styles of 2nd grade students of SMP Negeri 1 Langke Rembong in the academic year 2023/2024



3. Learning styles of 3rd grade students of SMP Negeri 1 Langke Rembong in the academic year 2023/2024



Based on the pie chart above, it can be seen that students in grades 1, 2 and 3 of SMP Negeri 1 Langke Rembong have varied learning styles. However, the majority of grade 1 and grade 2 students have a tendency to the same learning style, namely the visual learning style. Whereas in class 3 students are dominated by kinesthetic learning styles at 38%. These varied learning styles are a manifestation of a person's learning modality or style which often has a different way of traveling from other people in understanding the information they learn. This condition is supported by the opinion of Deporter and Hernacki (2007) and Subini, N. (2017) that learning styles according to one's modality consist of three types, namely visual type, auditorial type and kinesthetic type. Thus, learning style is a person's way of understanding information in a way that he considers easier and feels comfortable when learning, both in terms of time and use of senses.

The following is a table of the average learning styles of students in grades 1, 2 and 3 of SMPN negeri 1 Langke Rembong.

No	Learning Style Grades 1, 2 and 3	Average
1	Visual learning style	47%
2	Auditorial learning style	25%
3	Kinesthetic learning style	28%
	Total	100%

Based on this table, students in grades 1, 2 and 3 of SMP Negeri 1 Langke Rembong have varying learning styles on average. Although each learner learns by using the three learning styles, most students are more inclined to one of the same learning styles, namely the visual learning style. As many as 47% of learners have a visual learning style, and 25% of learners have an auditorial

learning style, while learners who have a kinesthetic learning style are 28%. Learners who have a visual learning style have several main characters, including remembering things with visual depictions (associations), remembering what is seen more easily than what is heard, not easily disturbed by noise while learning, can read quickly and diligently, prefer to read by themselves rather than being read by others, prefer demonstrations to oral explanations, must see the teacher's body language and facial expressions to understand the subject matter (De Porter, 2007, and Nurhasanah 2016). This is in line with Piaget's developmental theory that students who have a visual learning style tendency, where they will quickly absorb or understand information by seeing objects directly.

The results of this study are supported by the results of previous studies, including Wilujeng and Sudihartinih (2021) that as many as 13 or 46% of 28 students from class VII junior high school students have a visual learning style, students who have an auditorial learning style are 10 people or 36%, and as many as 5 people or 18% of students have a kinesthetic learning style. Visual learning style emphasizes and prioritizes what is heard and seen (Bire, A. L., Geradus, U., & Bire, J. (2014); Deporter (2007). This phenomenon is also found in developmental psychology. Learners can often be categorized as hear, see or do learners (Felder & Silverman, 1988; Barbe & Milone, 1981). It can thus be assumed that learners have their own learning styles that are different from others.

Learning styles play an important role in the implementation of learning activities. The use of appropriate learning styles will help students in the learning process. Learning is an approach or method to achieve a desired goal. Basically, each learner has a different learning style according to the situation he experiences, so it is possible for students to have a certain learning style or can combine their learning styles. According to the experiential learning theory known as experience learning theory (ELT) (Kolb, 1984) learning is a process and has four cycles which include concrete experience (involving feelings), reflective observation (watching), abstract conceptualization (thinking) and active experimentation (doing). These four stages or cycles must be activated in every learning process. Furthermore, the ability of learners to understand and absorb information has different levels of mastery and understanding, some are fast, medium and slow (Sugiarto, E., Hartono, H., & Subandowo, S. (2020); Rahman, A. A., Yanti, S. (2016). When learners are familiar with and understand their own learning style, they can process the material and take important steps to help themselves learn faster and easier so that they can store information well and can enter long-term memory.

Each learner's learning style has strengths and weaknesses depending on what they want to learn and how. The varied learning styles of students at SMP Negeri 1 Langke Rembong will have an impact on educational services, especially the design and strategy of the learning process used by educators (teachers). Teachers need to consider and plan various activities in the learning process, according to the learning style conditions of their students. In the long run, learners can learn more effectively when they can develop learning skills and recognize their own learning weaknesses (Stice. 1987). In this case, educators (teachers) at every level of education must really know and understand the character of each student, especially in terms of learning styles. Educators (teachers) are very important to understand and be sensitive to differences in learning styles of students, so that they can be considered during the learning process, so that they can realize a learning process that is dialogical, and can maximize the learning experience and needs of students (Bochi et al., 2004; Groat in Ghufron, (2012). Furthermore, Ghufron (2012) explains that in the concept of learning, there is no one approach or method that is suitable or suitable for everyone, so if the implementation of teaching is designed and applied by taking into account the learning style of students, it is believed that it will increase the concentration of students and can understand materials that are considered difficult.

The general purpose of the learning process is for students to achieve the expected goals. According to Sudjana, N. (2010) that every learning implementation process certainly always expects to obtain maximum learning results. This is in accordance with the theory of De Poter & Hernacki (2016) that the appropriate learning style is the key to the success of students in learning. So, to achieve this goal, educators (teachers) are expected to be able to vary dialogical learning strategies by collaborating various learning approaches according to the conditions of variations in students' learning styles. Teachers are expected to direct learners based on their learning experiences and personal reflections in order to form an understanding of knowledge explicitly (Curry, 2014; Uluoglu, 2000). Teachers are also expected to help create a learning design process, such as helping learners learn by doing and helping them understand the process of learning by doing (Dooren, et al, 2014).

Each teacher's teaching method affects how students learn. A successful learning strategy allows learners to manage their own learning process and be able to integrate new learning into their pre-existing cognitive structures, otherwise if the learning strategy used is unsuccessful or inappropriate, it can hinder learners' learning (Pask, 1976; Ford, (1985). If students realize how to absorb and process information according to their respective learning styles, it will make it easier for them to learn and communicate so that their learning outcomes will be maximized. Learning style is the preferred way in which a person approaches or chooses the desired learning situation. Thus it can be concluded that the importance of recognizing the learning style of students.

### CONCLUSION

Based on data analysis, it can be concluded that students of SMP Negeri 1 Langke Rembong have varied learning styles with different levels. Overall, both class 1, class 2 and class 3 have a learning style tendency that is dominated by a visual learning style. Grade 1 students have a visual learning style of 56%, and an auditorial learning style of 26%, and have a kinesthetic learning style

of 18%. While class 2 learners have a learning style dominated by a visual learning style of 49%, auditorial 23% and kinesthetic 28%. While class 3 students have a visual learning style of 36%, an auditorial learning style of 26% and a kinesthetic learning style of 38%. From the three classes, if averaged, the learning style conditions of the students of SMP Negeri 1 Langke Rembong as a whole have a learning style that is dominated by a visual learning style. On average, 47% of students have a visual learning style, and 25% of students have an auditorial learning style, and 28% of students have a kinesthetic learning style. The condition of the varied learning styles is evidence that each learner is unique in learning in their own way which they consider easier to understand information. Thus learning style is a tendency to behave in a certain way when involved in the learning process.

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