

## Visual, Auditory, and Tactile Learning Style in SMP Advent Unklab

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**Abstract** This research aims and focuses on finding out the most dominant leaning styles (visual, auditory and tactile learning styles) at Unklab Adventist Middle School (SMP). This research involved 33 respondents from class VIII B SMP Advent Unklab. The total respondent sampling method was used in this research using a questionnaire as the instrument distributed to the respondents. The questionnaire used in this research, which was adapted from the University of Texas Learning Center (2006), was to find out what learning styles was the most dominant learning styles at SMP Advent Unklab. The results showed that the most dominant learning style is visual learning style (M= 3.57) although it is only slightly different from tactile (M= 3.53), and the last one was auditory (M= 3.47).

**Keywords** Visual learning style, Auditory learning style, Tactile Learning Styles



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## INTRODUCTION

Learning is important because learning can change people's action. Santrock (2008) stated that learning is something that one has experienced which can influence action, ability and thinking competences. Learning is the most basic activity, process activity and is a characteristic element in every level of education and is important in the entire educational process. Learning style by definition is a learning strategy that is unique to an individual or a person to help himself or herself study very well to help in the future. Learning style also refers to how individuals uniquely grasp, handle and retain new information and knowledge. Reid (1987) mentioned that the approach is natural and habitual, always consistent regardless of teaching methods or subject matter (learning content).<sup>1</sup> Moreover, Chieke (2017) believes that something like preference is a learning style for dealing with intellectual tasks in a particular way.<sup>2</sup> One's learning style is different from others. Hedge (2000) defined learning style as characteristic and preferred way of approaching leaning and processing information.<sup>3</sup> Effective learning is crucial to the students' academic success, and understanding individual learning preferences is crucial in optimizing

<sup>1</sup> Reid, J. M. (1987). The Learning Style Preferences of ESL Students. *TESOL Quarterly*, 21, 87-111.

<sup>2</sup> Chieke, J. N. (2017). Determination of Auditory And Visual Learning Styles of Adult Learners in Adult Literacy Centres in Anambra Stte. *IOSR Journal of Research & Method in Education*, 30-33.

<sup>3</sup> Hedge, T (2000). *Teaching and learning in the classroom*. Oxford: Oxford University Press.

learning outcomes. The concept of "Learning Styles" has garnered significant attention in the educational realm, offering a framework for grasping individual differences in information processing.<sup>4</sup> Learning styles represent the unique manner in which individuals acquire, process, and retain information, influencing their learning effectiveness.

Learning style is the acceptance of a person's learning results at an appropriate level or optimal acceptance given other means. John Grinder, and Michael Grinder (2015) mention that there are three types of learning styles identified: Visual which means seeing, Auditory which means hearing, and Tactile which means through physical and direct activities.<sup>5</sup> Most people show a preference or tendency towards certain learning styles compared to other styles because most of them need to have knowledge of that language. Before Grinder brothers, the same theory about three learning styles were also mention by Enid in 2005.<sup>6</sup> Understanding learning styles is the strategies used by teachers that are not only monotonous, but they exist in teacher's variation and innovation in classroom learning, so teachers will be more effective and students will become more confident learners themselves and more satisfied with their learning progress. Understanding learning styles facilitates teacher creativity and adaptability, leading to engaging, student-centered instruction.

Additional information when children reach adulthood, they tend to be a visual learning style in the learning style model according to Survenaz (2013).<sup>7</sup> Humans are able to learn or study material or theory successfully in the learning method used according to the person's or individual's learning, human diversity is taken into noticed and even observed in the learning process, so there is no doubt that the results are as a result, students must be enthusiastic, always have positive thoughts, achieve something without pressure or stress, always increase motivation to learn or live and must always be in control or control the learning process well. When students cannot learn the way the teacher teaches, the teacher should teach students with a good and varies teaching styles because all learning styles are equally good, support their success in certain learning such as study or task and others. Based on the definition above, it can be said that learning styles is a response to the learning that one receives.

## METHOD

This study was quantitative in design and comparative study that analyse the data of learning styles visual, auditory and tactile with the purpose of systematically, factually, and accurately describing the area of interest.

The respondents of this study were the students of SMP Advent UNKLAB Airmadidi in

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<sup>4</sup> Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.

<sup>5</sup> Grinder John & Griner Michael (2015). *Gaya belajar*. Oikwurie:

[www.google.co.id/amp/s/oikwurie.wordpress.com/2015/06/15/gaya-belajar/amp](http://www.google.co.id/amp/s/oikwurie.wordpress.com/2015/06/15/gaya-belajar/amp).

<sup>6</sup> Enid, L. (2005). *College success simplify*. Retrieved from

[http://www.puc.edu/\\_data/asset/pdf\\_file/0003/133395/Learning-Styles-Inverntory](http://www.puc.edu/_data/asset/pdf_file/0003/133395/Learning-Styles-Inverntory).

<sup>7</sup> Survenaz Hatami. (2013). *Learning Styles*. *ELT Journal*. Oxford Academic. LearningStyle, 488-490.

the second semester of the 2023/2024 school year. Students at SMP Advent Unklab were given the questionnaires by the researcher. Students in class VIII in parallel class B had 33 students, boys 17 and girls 16, and the total of students at class was 33.

Convenience sampling used to gather the data for this study. According to Sekaran and Bougie (2010), convenience sampling method is “the correlation of information from number of the population who are conveniently available to provide it”.<sup>8</sup> So, only those who were present at the time (at school) were given the questionnaire to be the respondents for this study

### Instruments

An adapted questionnaire from University of Texas Learning Center (2006) was used. The questionnaire contained 24 questions about learning style, visual, auditory, Tactile. The score of Learning Styles Questionnaire. It was classified into the following point values for each Question:

### Questionnaire Outline

**Table 1 Score of Learning Styles Questionnaire**

Kriteria	Skor
Sering	5
Kadang-kadang	3
Jarang	1

Source: Learning Questionnaire adapted from University of Texas Learning Center, 2006

Then, add the points in each column to obtain the students learning Styles preferences score under each heading.

**Table 2 Classified of Learning Styles Questionnaire**

Visual	Auditory	Tactile
2	1	4
3	5	6

<sup>8</sup> Sekaran, U., & Bougie, R. (2010). Research methods of business: A skill building approach ed.) Hoboken: John Wiley & Sons.

7	8	9
10	11	12
14	13	15
16	18	17
19	21	20
22	24	23
Skor Preferensi Visual:	Skor preferensi Auditori:	Skor Preferensi Tactile:

Source: Learning Questionnaire Adapted from University Of Texas Learning Center, 2006

For this adapted questionnaire, the researcher selected 17 numbers for the real study. Those were questionnaire number: 1, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 16, 17, 18, 19, 23, and 24. While the seven number of the questionnaire that were not selected are numbers: 2, 3, 12, 15, 20, 21, and 22. The reason they were emitted was because they were not valid.

### **Pilot study**

The pilot study was conducted in order to find the validity and reliability of the questionnaire. This pilot study was conducted in SMP VIII A Advent Unklab. The researcher sent the letter to do the pilot study from the dean of FKIP to the principal of SMP Advent Unklab. The researcher then distributed the questionnaire to grade VIII A to test its validity. After receiving data from 33 students from grade VIII A, as the respondents, the data then processed using statistical tools applications.

### **Validity and Reliability**

At the beginning of the questionnaire there were actually 24 items in the questionnaire, based on Learning Questionnaire adapted from University of Texas Learning Center (2006) but when the validity test was carried out by the researcher, the researcher found out that there were 7 items that were invalid. The invalid items were visual questions number 2, 3 and 22. The invalid was the auditory items in question number 21. The invalid were tactile items were questions number 12 and 20. After that the researcher discarded the invalid items. The samples were given to class VIII B respondents who were present when the questionnaire was distributed.

## **RESULT AND DISCUSSION**

Table 3 Shows that the average score of visual learning is ( $M = 3.57$ ), auditory learning ( $M = 3.53$ ), tactile learning ( $M = 3.47$ ). Based on the results of the research that has been taken, the visual learning style is the most dominant learning style used by the students in SMP Advent Unklab. Although the result of the visual learner is almost the same as the auditory learner, but still the visual is the most dominant learning style used. The result for the visual learning style and auditory learning style are almost the same: 3.57 and 3.53 (see table 3). These results confirm that the majority of students in SMP Advent Unklab learn best while seeing and observing things in class or elsewhere, think in pictures and learn best in visuals, from lists and written instructions; Students like to make descriptive notes on the material presented by the teacher. In other words, these learners can understand lesson better if they see and read directly the materials as well as looking at their teacher's body language and facial expressions. These findings also suggest that many of the students exhibit auditory learning preferences at school. These kinds of learners learn best when it is spoken or through listening. Listening and speaking are their main ways of learning. They become active and learn better when they listen to lectures in the class or listen to podcast, audiobooks, and educational audio. They prefer to engage in group conversations, debate and role playing. The negligible difference (0.04) between visual (3.57) and auditory (3.53) learning styles suggests that SMP Advent Unklab students exhibit a dual-modal preference where visual and auditory are the preferences leaning styles. This highlights the importance of incorporating both visual and auditory elements in instructional design.

Similar study done by Wahab & Nuraeni at Muslim University of Maros (UMMA), in the South of Sulawesi. They conducted a study where the respondents were the 24 students of the English department who enrolled in the academic year of 2017. Their research revealed that there were 12 students (50%) that categorized as visual learners, 8 students (33%) that categorized as auditory learner, and 4 students (16%) that categorized as visual-auditory learners. The data indicated that the learning style of the English students at Muslim University of Maros was dominated by visual learners with half of the 24 students preferred visual as their preferable learning style. Those findings also have the same finding done by Kartina and Afriansyah in 2024. The respondent for this study consisted of 24 students from class VII C. The findings indicated that the learning styles of class VII students at SMP Negeri 3 Banyuwesmi are predominantly the visual learning style.

Ebeiani and Rori conducted a similar study but different findings in 2013 about preferable students' leaning styles. They found out that among the students of the grade ten at one of the private schools in Manado, 5 students were visual learners, 12 students were auditory learners and 30 students were kinesthetic (tactile) learners. The data also showed that there were 5 students with both visual and tactile learners, and 4 students with both auditory and tactile learners. The dominant learning style then was the kinesthetic learning style. The similar study with the same result like in the previous finding conducted by Sanger et al. (2020) at class of VIII A, B and C and VIII Plus from the SMPN X Airmadidi. They found out that there were 6 students were visual learners, 18 students were auditory learners, and 78 students were kinesthetic learners. So, the result also shown that most dominant learning style was the kinesthetic (tactile).<sup>9</sup>

<sup>9</sup> Sanger, A. H. F., Rantung F. H., Watumlar C. B., Kasingku, J. D. (2020). Gaya Belajar Visual,

Table.3. Descriptive Statistics: visual; Auditory; Tactile

Variable	N	N*	Mean	SE Mean	StDev	Minimum	Q1	Median	Q3	Maximum
visual	33	0	3,570	0,122	0,700	2,200	3,000	3,800	4,200	4,600
Auditory	33	0	3,533	0,125	0,719	1,800	3,000	3,800	4,200	4,600
Tactile	33	0	3,4727	0,0861	0,4945	2,6000	3,0000	3,4000	3,8000	4,2000

## CONCLUSION

Based on the findings, the dominant learning style of respondents at SMP Advent Unklab was visual learning style. Furthermore, these findings show that the visual learning style is slightly more numerous in respondents at SMP Advent Unklab, although it is only slightly different from the auditory learning style.

The result for the two visual and auditory learning styles are almost the same: 3.57 and 3.53, this shows that the preference for learning styles is high. this confirms that the majority of SMP Advent Unklab students learn best while seeing and observing things in class or elsewhere, think in pictures and learn best in visuals, from lists and written instructions; Students like to make descriptive notes on the material presented by the teacher. At the same time, there are many students who prefer listening and speaking where they learn best through sounds, discussions and oral instructions. They engage in conversation in conversations, debates and presentations. To make the teaching-learning process better, teachers should apply teaching strategies that incorporating both visual and auditory elements.

This research found out that the most dominant learning style is the visual leaning style. Learners with visual learning style as their preferences are students who usually prefer to use pictures, diagrams or mind maps to understand the material. They tend to find value in organizing notes by using different colours to highlight important information or creating flashcards with relevant images. Watching learning videos or using apps that provide visual content can also be a good option for them. English teachers must help students by providing visual activities using pictures and graphs to help them develop more about visual learning.

Since auditory comes second with just a close in numbers then it is also better to the teacher, especially English teacher, to employ hybrid teaching strategies, blending visual and auditory components to optimize student engagement and comprehension inside the class. If done correctly, the teachers could really boost the learning process. Teachers could use visual aids like incorporate images, diagrams, vidoes; at the same time teacher could also consider using audio material like record audio or audiobooks, educational audio, discussion or debate and even role – playing.

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