



Identifying the Learning Style to Investigate Senior High School Students' Learning Loss Tarakan

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Abstract. Accidentally, the Learning From Home regulation was implemented. Nevertheless, it is prudent to continue learning activities during the spread of Covid-19. The study revealed that students had diverse learning styles, such as visual, auditory, and kinesthetic. The average score derived from the analysis of all Senior High School Tarakan Research findings indicates that visual learners dominated (37.97). It was then followed by the kinesthetic style (36.60) and ended with the auditory style (35.43). It suggests that some students experience loss of learning. Because they were predominantly kinesthetic learners. Therefore, for optimal learning, they should interact with their environment. They should be directly involved in an activity as opposed to simply listening to a lecture or reading a book. They enjoy engaging in activities utilizing physics to recall information, such as dialing telephone numbers. Students with a kinesthetic learning style enjoy touching an object or performing an activity directly.

Keywords: Learning Styles · Learning Loss · Students Introduction

1 Introduction

It should be understood that effective learning happens when the learners can be aware of the meaning of the learning they perform so that they will be aware of obtaining the goals of the learning activities. Effective learning is a teaching process that is not only focused on the results achieved by students, but also on how the process can provide good comprehension, intelligence, perseverance, opportunity, and quality, as well as cognitive, behavioral, and psychomotor changes that can be applied in real life [1]. The more focused they are on the learning objectives, the more effort they make on the learning. However, during pandemic 19, it is realized that learning from home tends to be conducted in a hurry. However, it is the best way to keep the learning activities going. Teachers in the field are demanded to run the learning programs, although they have limited knowledge of technology. Many teachers are unable to use technology, especially applications offered for online teaching like zoom, google classroom, google form, e-learning, WhatsApp, and youtube. The problems lie not only in teachers' ability but also in the facilities they and students possess for long-distance communication in online learning.

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Students' learning styles are also various. Some of them are more suitable for a particular learning style while others are not. Learning and thinking styles are not abilities but a method someone chooses to use their ability [2]. Teachers may think that children join the learning activities and think through various shocking ways. Teachers also have various teaching and thinking styles, which result in different teaching styles.

The online teaching and learning process has a negative effect on students because it reduces their learning ability (learning loss). In the report "Indonesia Under the new normal challenges and the way ahead of the sparrow" [3], Dartanto and Hartwig in the bulletin of Indonesian economic studies, volume 56 (3), in 2020, survey data shows that schools are less prepared in mitigating students who experience learning loss due to the implementation of distance learning. Only 69% of primary schools and 71% of secondary schools provide additional learning to students. Furthermore, "Learning from Home: A Portrait of Teaching and Learning Inequalities in Times of the COVID-19 Pandemic" stated that if access to learning continues to be unequal, learning loss will be more often experienced by children from vulnerable groups or socio-economically weak. In addition, the lack of communication between parents and teachers has an impact on the intensity of discussions as well as monitoring children's learning development [3].

The phenomena also happened at schools in South Kalimantan, especially in Senior High School Tarakan. The school has implemented the policy of learning from home or long-distance learning for almost a year. It is due to the case of Covid – 19 in the South Kalimantan, which continuously increased. Many teachers and students are confused about online learning activities. The implementation of online learning requires a cost for an internet network that can be easily accessed by students. Besides, they should be able to use the learning media that has been implemented by schools during the pandemic of the virus. Online learning requires the readiness of students and internet networking as the supporting media. Here, students absolutely experience different learning conditions. This aspect can cause learning loss.

To identify the learning loss, there are several categories of student learning styles which are classified as follows: (1) have their own teaching style. (2) these learning styles can be found using specific instruments, and (3) teaching styles that are in accordance with learning styles can increase learning effectiveness so that differences in learning styles affect various aspects of the teaching and learning process. Thus, although each student has a particular learning style to which they are more suited, they also combine different learning styles with meeting the demands of a particular situation. The learning styles in question are Visual Learning Styles that focus on sight, Auditory learning styles that rely on hearing to be able to understand and remember the material, and Kinesthetic learning styles, which require someone to touch something that provides certain information to be able to remember it.

The transition of the academic year affects the progress of children's reading skills [3]. This research proves that the issue of learning loss occurred long before the emergence of COVID-19. Learning loss will get worse when there is inequality in access to learning and the quality of educators, low parental care, and the students' socio-economic conditions. Therefore, learning loss must be defined based on the context because it is caused by various factors and can be solved with various solutions.

Table 1. Research population and samples

No.	Schools	Classes	Number of Students
1	Senior High School 1 Tarakan	XI	342
2	Senior High School 2 Tarakan	XI	334
3	Senior High School 3 Tarakan	XI	282
4	Senior High School 4 Tarakan	XI	144
Total			1.102

Source: Department of Culture, Youth and Sports and Tourism 2021

Table 2. Population and samples

No	Schools	Population	Samples
1	Senior High School 1 Tarakan	342	20
2	Senior High School 2 Tarakan	334	20
3	Senior High School 3 Tarakan	282	33
4	Senior High School 4 Tarakan	144	37
Total		1.102	110

Learning Loss is a phenomenon that is being discussed a lot by national and international education figures today. The term “learning loss” is frequently used in the academic literature to describe student knowledge and skill declines [4]. Learning loss as the loss of student learning competence due to Distance Learning [5]. Learning loss is the loss of the learning experience [6]. Based on this description, this study focuses on identifying the learning styles of students at Senior High School Tarakan in the midst of the Covid-19 Pandemic to investigate the Learning Loss they experience.

2 Method

This study used a descriptive quantitative approach that aims to describe a phenomenon [7]. Furthermore, survey research can be carried out on large or small populations, but the data studied come from samples taken from that population to find relative occurrences, distributions, and relationships between sociological and psychological variables. The population in this study were high school students in Tarakan with the following details: (Table 1).

Based on the description of the population, the number of research samples is: (Table 2).

Data were collected in the form of a scale obtained from interviews using a list of statements. The data were then analyzed using quantitative descriptive analysis techniques. After that, the percentage is cal.

3 Result and Discussion

Based on the analysis of Visual, Auditory, and Kinesthetic learning styles, which are presented in statistical tables, frequency tables, and Histograms, students at SMA Negeri Tarakan have varied learning styles, namely Visual with an average of 37.97, kinesthetic with an average of 36, 60., and Auditory with an average of 35.43. This indicates that:

- 1) Students with visual learning style can learn more effectively using their eyes. They enjoy seeing how something can be done rather than discussing it. This is a conventional educational learning style because students have to be directed traditionally. This is not surprising, as 60% of people believe themselves to be visual learners, and this is one of the easier styles to accommodate large-scale learning. The visual learning style is that students enjoy learning activities by seeing and observing.
- 2) Students with Kinesthetic Learning style can learn more optimally if they interact directly or directly experience things around them. They benefit from direct involvement, rather than just listening to a lecture or reading a book. They like to do something and use their physics to remember facts, such as “dialing” a phone number using their cell phone. Kinesthetic learning styles make students more comfortable learning by touching and doing.
- 3) Students with an auditory learning style can understand things better if they hear information. They are usually able to follow directions well, concentrate better on background music, and repeat all the information they hear to make sure they understand it well. The auditory learning style makes students learn by listening intensively.

Based on the analysis of the data displayed in statistical tables, frequency tables, and histograms, the research conducted in all high schools in Tarakan found that every school has students with visual learning styles. Then the only school which has students with Auditory learning styles is Senior High School 2.

The data shows that students have various learning styles, namely visual, auditory, and kinesthetic. This is indicated by the average score of all Senior High Schools in Tarakan. The visual learning style stands out, with an average of 37.97., then in second place is the Kinesthetic learning style, with an average of 36.60., and the last one is the Auditory learning style with an average of 35.43. This shows that there are some students who experience learning loss, as the data shows that:

There are students who have a kinesthetic learning style. Kinesthetic learning styles make students more comfortable learning by touching and doing. This can be seen from several characteristics of learning styles that are generally owned by students, namely:

- 1) Need more breaks and movements
- 2) Talking with a gesture.
- 3) Remember what they have acted, but easily forget what they have said or listened.
- 4) Learning through activities

To maximize the learning activities of students with this style, teachers should understand that:

- 1) Students with kinesthetic learning style enjoy playing a role, to model a learning material, to experiment with physical activities and to do various kinds of sports.
- 2) Physical activities allow them to remember and process something better than when just sitting on the chair while following a long session of learning.
- 3) They tend to avoid a test that needs writing like an essay.
- 4) They are better at demonstrating their mastery of the learning material through quick problem solving like multiple-choice, short answer questions, or short definition.
- 5) If possible, evaluation through physical expression is more effective, such as freewriting and games. Then, to maximize the students' learning activities, below are some advice to be implemented:
 - 1) There should be more breaks
 - 2) They should perform activities like experiments and history show
 - 3) Making models of a learning topic
 - 4) Joining some classes like dancing, kickboxing, or other types of sports.
 - 5) Using adventure or action books
 - 6) Playing a role and practicing learning activities
 - 7) Working in a group with frequent breaks.
 - 8) Using flashcards for memorizing.

All schools have students with Visual and Auditory learning styles. Visual learners learn by seeing and observing, while students with auditory learning styles enjoy learning by listening intently. Unfortunately, these two learning styles can cause learning loss or decline in skills, both general and specific, due to a prolonged gap or non-continuation of the educational process caused by internet network disruptions, an unsupportive family economy, and school dismissals during the pandemic. As stated by Indra, in other countries, learning loss is defined as a phenomenon that occurs in children from the lower middle economic class who are unable to use and access gadgets and the internet for learning [8].

Another factor that causes learning loss during the covid pandemic, which has lasted for almost a year and a half, is:

- 1) Learning motivation decreases. This is caused by low motivation and guidance from teachers and parents. When the teacher pays attention to them directly in class, their desire to learn is relatively high. But when there is no teacher, their willingness to learn usually decreases. At home, parents are busy with other activities, so they can't focus on their children.
- 2) The emergence of discrepancy
- 3) This is generally caused by a significant difference between students with a good learning background with full facilities from their parents and students who are less enthusiastic about learning. Lack of motivation and guidance from teachers, parents, lack of evaluation, and drill questions are causes of this problem.
- 4) Signal connectivity problems and the absence of devices that can be used by students. "In fact, this is a fundamental facility for distance learning, so it is very difficult to do,"
- 5) The impact on students' psychosocial. Lots of kids are bored of staying at home because of the many video conferences they have to attend.

- 6) Lack of parental assistance and guidance at home
- 7) Learning conditions are not dynamic. Many students are lonely and depressed because they do not meet their friends and teachers.
- 8) Stress is caused by too much interaction inside the house rather than outside due to fears of contracting the coronavirus.

4 Conclusion

According to the above writing, some students endure loss of learning. Because they mostly learned through kinesthetic means. Therefore, they should interact with their surroundings for optimal learning. As opposed to passively listening to a lecture or reading a book, they should be actively engaged in an activity. They enjoy using physics to memorize information, such as dialing telephone digits. Students with a kinesthetic learning style like immediately touching an object or engaging in an activity.

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