



Learning Style with Sensory Preference Approach as Teacher Capacity Development in Teaching

**Gaya Belajar dengan Pendekatan Preferensi Sensori
sebagai Pengembangan Kapasitas Guru dalam Mengajar**

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Abstract

In addition to measuring the initial characteristics of students, it is necessary to know to map out the proper teaching flow. The characteristics of the learner are factors that must be taken into account when choosing learning media. These factors include the number of students and social background to determine the provision of examples in the media; in this case, learning styles are included. This study aims to provide a strategy for developing teacher capacity, especially in delivering material according to students' sensory preferences. Semi-structured interviews were applied to informants to obtain critical information and develop things that need to be known to enrich this research. The results showed that 20%-30% of students tend auditory modality, 40% visual, and 30-40% kinesthetic. However, what is of concern is the awareness of teachers who do not understand the importance of delivering learning according to the modalities of children's learning styles according to their sensory preferences. In this study, researchers used ISO: 21001/2018 (quality management system) as a reference and strategic step for teacher capacity development.

Keywords: learning styles, sensory preferences, teacher capacity

Abstrak

Selain mengukur karakteristik awal siswa, memetakan alur pengajaran yang tepat juga perlu dilakukan. Karakteristik peserta didik merupakan faktor yang harus diperhatikan dalam memilih media pembelajaran. Faktor-faktor tersebut antara lain jumlah siswa dan latar belakang sosial untuk menentukan pemberian contoh di media; dalam hal ini termasuk gaya belajar. Penelitian ini bertujuan untuk memberikan strategi pengembangan kapasitas guru khususnya dalam menyampaikan materi sesuai dengan preferensi indera siswa. Wawancara semi terstruktur diterapkan kepada informan untuk memperoleh informasi penting dan mengembangkan hal-hal yang perlu diketahui untuk memperkaya penelitian ini. Hasil penelitian menunjukkan bahwa 20%-30% siswa cenderung memiliki modalitas auditori, 40% visual, dan 30-40% kinestetik. Namun yang menjadi perhatian adalah kesadaran guru yang belum memahami pentingnya menyampaikan pembelajaran sesuai dengan modalitas gaya belajar anak sesuai dengan preferensi inderanya. Dalam penelitian ini, peneliti menggunakan ISO: 21001/2018 (sistem manajemen mutu) sebagai acuan dan langkah strategis untuk pengembangan kapasitas guru.

Kata kunci: gaya belajar, preferensi sensoris, kapasitas guru

INTRODUCTION

In research, the term measuring instrument or research instrument refers to various kinds of data collection tools (Marliani, 2018). There are two methods of psychological measurement, namely; Psychophysical methods and psychometric methods. Psychophysical methods are intended to study the relationship between the physical properties of an object (stimuli) and the sensations generated, perceptions or subjective responses. The focus of this method is to translate



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the physical characteristics of the stimulant into relevant psychological characteristics. For example, if a person is malnourished, it can affect his psyche, as well as a person with brain damage, and vice versa, if someone feels less confident or nervous in facing the final semester exam, he will feel sick and cold sweat.

Today, psychometric functions are routinely fitted to data collected in analogous studies in different research fields for the stimuli and perceptual dimensions of choice in any sensory modality. Their most easily understandable use is for the functional characterization of sensory processes but psychometric functions are also used as a probe in studies investigating the role of contextual, emotional, or attentional factors in cognition. (García-Pérez & Alcalá-Quintana, 2019)

In addition to measuring the initial characteristics of students, it is necessary to know in order to map out the right teaching flow. In addition, the characteristics of the learner is a factor that must be taken into account when choosing learning media. These factors include the number of students and social background to determine the provision of examples in the media, in this case learning styles are included (Abidin, 2016)

Over time, the study of modality learning styles has been developed with a variety of models. However, the central axis is from Rita Dunn and Kenneth Dunn (1978), Suyono & Hariyanto in (Pratama, 2020); this sensory preference modality is divided into three: visual (V), auditory (A), and kinesthetic (K). Visual preference is a stronger tendency to be aware of the surrounding environment and its existence in the spatial aspect. Visual preferences include depicting information in charts, graphs, flowcharts, arrows, circles, hierarchies, and other shapes that can represent the content of words. Layout, pattern, design, and color are essential for building meaning. Auditory/aural preference is a strong tendency to information that is spoken or heard. Learners with this modality will like discussion activities, talking to others, verbal feedback, asking questions, telephone chats, oral presentations, and class lectures.

Meanwhile, kinesthetic preference refers to the use of simulated or real experiences and good practices. Learners of this modality will tend to like hands-on experience, giving examples, exercises, and simulations. Learning activities as such are often referred to as "learning by doing." (Pratama, 2020).

This modality requires various senses (sight, touch, taste, smell) to understand the Environment and learn new things. (Sreenidhi & Tay Chinyi, 2017). The type of preference can be single or unimodal (V/A/K), dual or bimodal (VA/VK/AK), and triple or trimodal (VAK/AVK/KAV, etc.) multiple preferences. Currently, teachers must also be able to teach according to the learning modalities of their students. This is because a person's tendency to learn is very diverse and influenced by several things. The way a person absorbs information, processes it, and manifests it in real life behavior is called learning style/type. Everyone has different learning styles and typologies, but there may also be similar learning styles/typologies. In fact, learning styles and typologies affect the results obtained. In the reality of everyday life, there are people who easily receive new information by listening directly from the source, some are enough with writing or memos, and some have to demonstrate their activities.. (Bire et al., 2014).

Research conducted (Dalem et al., 2018) states that every student tends to use one particular learning style, and teachers are expected to make changes in the classroom that can benefit each learning style. Therefore, in these three learning styles, teachers' use should be facilitated in the teaching and learning process, especially in conveying information to students. However, it is still found that many teachers still use conventional methods in teaching and learning activities. Direct teaching using lectures still tends to be used, where generally, the lecture method only facilitates the type of auditory learning style if the use of other tools does not support it. This shows that teachers may still not maximize all types of learning styles in the teaching and learning process. This study seeks to design learning standards by considering sensory modalities.

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METHOD

Qualitative methods were applied in this study. To get the quality of the data, the researcher triangulated the data, namely by mixing and matching the data obtained from several informants and observations. (Robbani et al., 2020). Researchers currently conduct interviews with teachers, principals, and supervisors at a school and conduct observations directly at schools. The researcher uses semi-structured interviews; SSI is designed to ascertain subjective responses from persons regarding a particular situation or phenomenon they have experienced. The purpose of SSIs is to ascertain participants' perspectives regarding an experience relating to the research topic. Beyond that common denominator, however, SSIs have diversified into different types, each uniquely oriented to assessing, confirming, validating, refuting, or elaborating upon existing knowledge and discovering new knowledge. (McIntosh & Morse, 2015).

This study uses a descriptive approach, Cresswell (in Robbani et al., 2020) explaining that descriptive research explains one variable without making comparisons and without looking for influence on other variables. Data analysis techniques were used in this study. The analysis technique used refers to the data collection method, according to (McIntosh & Morse 2015). Analytically, the SSI is characterized by comparing participants' responses by item. Because all participants are asked the same questions in the same order, data collected are comparable and maybe numerically transformed and quantified.

RESULT AND DISCUSSION

Result

In several relevant studies, it was found that the average increase in the posttest results compared to the pretest was 3.5 points, and the results of the discussion showed that the participants were able to provide activity plans according to the objectives with methods that maximized learning styles. (Dalem et al., 2018). Setiap kelas pembelajaran para siswa umumnya tersebar dari 3 modalitas belajar atau preferensi sensori ini. According to Dunn and Dunn (1978), only 20-30% of school-age children appear to be auditory learners, 40% are visual learners, and 30-40% are tactile/kinaesthetic or visual/tactile learners.

The teacher as a pillar in learning becomes a significant role in the learning process; according to (Abbas Pourhossein Gilakjani & Ahmadi, 2011), research in this area continues to grow, teachers should make concentrated efforts to teach in a multi-style fashion that both reaches the greatest extent of students in a given class and challenges all students to grow as learners. It is imperative to understand and explore each individual's learning style. Analyzing one's particular learning style can be beneficial to the student by aiding them in becoming more focused on an attentive learner, which ultimately will increase educational success.

From semi-structured interviews that researchers have conducted. Similar things were found as in previous research. There are at least 20%-30% of students have a tendency to auditory modalities, 40% visual, and 30-40% kinesthetic. However, what is of concern is the awareness of teachers who do not understand the importance of delivering learning according to the modalities of children's learning styles according to their sensory preferences. in this case the school management is also required to increase the capacity of teachers by providing awareness and training on how to learn.



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Some of the list of questions that the researcher uses include:

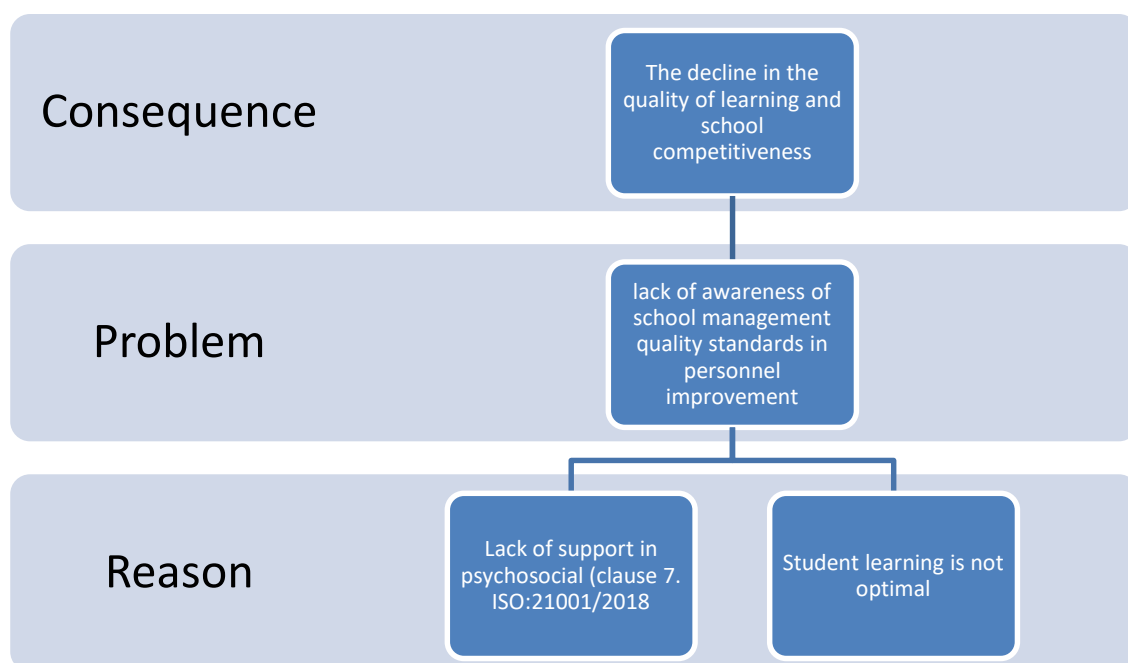
1. How do you convey learning during your teaching?
2. Do you understand the learning method with sensory preference approach (Visual, Auditory, Kinesthetic)?
3. What is your plan to improve the quality of classroom learning?
4. Can understanding student learning methods based on sensory preferences improve student learning outcomes?

From the questions above, the researchers found that several teachers were already actively using learning methods with various sensory preferences in delivering the material. It was found that students were more receptive to the material presented. However, learning success is determined by each student, as explained by Coffield (2004). It is in the learner's hand to use different ways and develop the learning styles.

Discussion

The strategy for schools in developing teacher capacity is a separate quality charge for schools. The reason is, referring to ISO: 21001 of 2018 concerning Management Systems of Educational Organizations, in the note of clause 7.1.4 related to the Environment for the operation of the educational process, which includes Psychosocial factors, it must consider the possibility of personnel development. In the ISO Document, Clause 7 is explained, which discusses support closely related to improvement. So the importance of traceability in improving the quality of schools can be started by improving the quality of teachers.

When using logical framework analysis in determining the core problem, the researchers found that school management needed to pay attention to the elements of the clause described earlier. This can be illustrated in the diagram below.



Source: processed by researchers (2020)

Figure 1. logical frameword analysis

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The diagram above explains that the ineffective delivery of student learning and the absence of a school management support system for teacher capacity building are the leading causes of the lack of awareness of school management on the implementation of quality. This results in a decrease in the quality of learning and school competitiveness.

In terms of the strategy for developing the teaching capacity of teachers, the researcher emphasizes the existence of school awareness in implementing personnel support by developing the competence of personnel, in this case, teachers. Giving awareness about learning methods to teachers is an important thing that increases school competitiveness and learning quality.

CONCLUSION

In this study, the researchers concluded a link between teacher capacity-building strategies related to understanding student learning methods with sensory preferences for school competitiveness and learning quality. Furthermore, it requires school management to increase its attention to the implementation of the quality of education. Researchers hope to continue research related to using quantitative methods by analyzing the influence between teachers who are successful in teaching and understanding the learning modalities of sensory preferences on learning outcomes and on school competitiveness.

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