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Alignment of Learning Media Selection with Students' Learning Styles Needs in Indonesian Language Learning

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Abstract

This study aims to analyze the alignment of selection and utilization of learning media based on the learning styles of tenth-grade high school students in Pekanbaru. The research sample included tenth-grade students at SMAN 4 Pekanbaru. The total number of student respondents was 104. Data were collected through learning style tests, teacher questionnaires, and student questionnaires. The distribution of learning style tests was carried out through the akupintar.id application, with 30 test items provided. Questionnaires were administered to students through Google Forms. Data analysis techniques included tabulating students' learning style test scores, calculating the percentage of obtained test scores, classifying learning style test scores, categorizing students' learning style test results, analyzing teacher and student questionnaires, and then drawing conclusions about the alignment of learning media selection with students' learning styles. The results of the learning style test revealed seven learning styles among tenth-grade students at SMAN 4 Pekanbaru in 2023: 1) Visual, 2) Auditory, 3) Kinesthetic, 4) Visual Kinesthetic, 5) Visual Auditory, 6) Auditory Kinesthetic, and 7) Visual Auditory Kinesthetic. After averaging, the most dominant learning style was visual, accounting for 21.15%, followed by the combined visual-auditory style at 21.15%. Furthermore, questionnaire analysis indicated that teachers chose or used learning media that were representative of students' visual learning style (84.09% in the "always" category), auditory learning style (68.75% in the "often" category), and kinesthetic learning style (69.89% in the "often" category). This indicates that the selection and utilization of learning media by teachers are aligned with the dominant learning styles of tenth-grade students at SMAN 4 Pekanbaru.

Keywords: Indonesian language; Learning styles; Learning media

Abstrak

Penelitian ini bertujuan untuk menganalisis keselarasan pemilihan dan pemanfaatan media pembelajaran berdasarkan gaya belajar siswa kelas sepuluh SMA di Pekanbaru. Sampel penelitian termasuk siswa kelas sepuluh di SMAN 4 Pekanbaru. Jumlah responden siswa sebanyak 104 orang. Data data dikumpulkan melalui tes gaya belajar, angket guru, dan angket siswa. Pembagian tes gaya belajar dilakukan melalui aplikasi akupintar.id, dengan 30 item tes yang disediakan. Kuesioner diberikan kepada siswa melalui Google Formulir. Teknik analisis data meliputi tabulasi nilai tes gaya belajar siswa, menghitung persentase nilai tes yang diperoleh, mengklasifikasikan nilai tes gaya belajar, mengkategorikan hasil tes gaya belajar siswa, menganalisis angket guru dan siswa, kemudian menarik kesimpulan tentang keselarasan pemilihan media pembelajaran dengan gaya belajar siswa. Hasil tes gaya belajar mengungkapkan tujuh gaya belajar di antara siswa kelas sepuluh di SMAN 4 Pekanbaru pada tahun 2023: 1) Visual, 2) Auditori, 3) Kinestetik, 4) Kinestetik Visual, 5) Pendengaran Visual, 6) Kinestetik Pendengaran, dan 7) Kinestetik Pendengaran Visual. Setelah dirata-ratakan, gaya belajar yang paling dominan adalah visual, terhitung 21,15%, diikuti oleh gaya visual-auditori gabungan sebesar 21,15%. Selanjutnya, analisis angket menunjukkan bahwa guru memilih atau menggunakan media pembelajaran yang mewakili gaya belajar visual siswa (84,09% dalam kategori "selalu"), gaya belajar auditori (68,75% dalam kategori "sering"), dan gaya belajar kinestetik (69,89% dalam kategori "sering"). Hal ini menandakan bahwa pemilihan dan pemanfaatan media pembelajaran oleh guru selaras dengan gaya belajar dominan siswa kelas sepuluh SMAN 4 Pekanbaru.

Kata Kunci: Bahasa Indonesia; Gaya belajar; Media Pembelajaran

1. Introduction

In the realm of education, interactions and communications occur between teachers, who are educators, and students, who are learners. Teachers provide information, knowledge, and guidance related to the material or competencies that students need to grasp, while students, as recipients, either understand and internalize the information or respond to it in some way. Beyond imparting understanding, knowledge, and guidance, teachers also have the responsibility of facilitating students to ease their comprehension and digestion of information, catering to the unique needs of everyone. This is due to the diversity of student characteristics and backgrounds, leading to variations in needs, approaches, and levels of aptitude for understanding and mastering a subject within the learning process. Consequently, effective teaching strategies are essential to accommodate these differing student needs.

Every student possesses distinct characteristics and requirements for processing and comprehending information, demanding that teachers first identify these characteristics to devise appropriate teaching strategies. This process aims to create a learning environment and atmosphere that aligns with students' interests, enabling them to concentrate on understanding the material and achieving high-quality learning outcomes.

Learning styles are one of the individual characteristics of each student that teachers need to be aware of. At the very least, teachers should identify the dominant learning styles among students in a class. Understanding the learning styles can assist teachers in creating a multi-sensory learning environment that serves the individual needs of each student [1]. Furthermore, the knowledge of each student's learning style can be utilized by teachers to determine effective teaching strategies. Additionally, teachers can select appropriate instructional media that align with the students' needs when devising their teaching strategies. This implies a connection between students' learning styles as their needs and instructional media as facilitators supporting the learning process. If the instructional media used are in line with the conditions and requirements of the students, the learning objectives can be maximally achieved. This is in line with the viewpoint of who state that learning styles are pivotal in determining the easiest learning methods and serve as a guide in selecting suitable instructional media to achieve learning objectives.

Learning styles encompass an individual's approach to processing information, organizing it, and applying it to solve problems or apply it in daily life. Learning styles are the easiest way for individuals to learn and understand acquired information [2]. Furthermore, each individual possesses different ways of comprehending, organizing, and processing information according to their habits, hence resulting in different learning styles for each person [3]. Based on these opinions, it can be understood that learning styles are specific approaches that differ for everyone in receiving, processing, and understanding information according to individual convenience and habits.

The student's learning styles in learning refer to specific methods that students use to absorb, process, and understand explanations of materials conveyed by teachers in accordance with their interests, habits, and preferences. There are three types of learning styles, namely, 1) visual learning style, 2) auditory learning style, and 3) kinesthetic learning style [4]. Visual learning style involves an individual's method of knowing and understanding something by relying on visual cues. Students with a visual learning style typically grasp materials better when accompanied by images, maps, posters, diagrams, and other visual aids. On the other hand, individuals who rely on auditory senses to acquire and absorb information possess an auditory learning style. Students with an auditory learning style prefer learning that presents materials through audio, direct explanations, listening to readings instead of reading, and even explanations accompanied by music or tonal patterns [4]. However, students with an auditory learning style may struggle to focus and be easily distracted by noise. Lastly, the kinesthetic learning style involves an individual using their body movements to facilitate understanding. Students with a kinesthetic learning style more easily retain information by touching or practicing something related to the subject matter being taught. However, in essence, students often possess more than one learning style or combine several learning styles, such as auditory and visual learning styles, kinesthetic and visual learning styles, among others.

In addition to learning styles, the use of instructional media also plays a crucial role in the learning process. Utilizing instructional media assists educators in presenting materials in a manner comprehensible to students, making learning more engaging, and enhancing student focus, ultimately improving learning outcomes. This is consistent that instructional media are tools that can enhance the effectiveness and efficiency of the learning process [5]. Leveraging knowledge about students' learning styles, teachers are expected to be more creative in designing or selecting appropriate instructional media that align with student needs.

Media is a critical component that supports the learning process to be conducted optimally [6]. Instructional media as an intermediary tool used to facilitate the delivery of content from teachers to students, ensuring effective communication during the learning process [7]. Similarly, Nurrita highlights that instructional media is a tool that aids in delivering clear messages during the learning process, thereby achieving learning objectives effectively and efficiently [8]. Based on these perspectives, it is understood that instructional media serve as instruments used to facilitate interaction between teachers and students in delivering content, ultimately achieving learning objectives and obtaining positive learning outcomes.

While there are various classifications of instructional media proposed by experts, there are three core categories that remain consistent. In accordance with this, instructional media are categorized into three types: 1) visual media, 2) audio media, and 3) audiovisual media [9]. Visual media includes media that can be seen, such as images or photographs. Furthermore, audio media refers to tools used to present materials in audio or sound form, played for students, such as radios, music, and the like. Audiovisual media, on the other hand, combines audio and visual elements, meaning media that can be seen and heard, such as videos, films, and more.

Rahma outlines several considerations before selecting instructional media [10]. Firstly, the purpose of using instructional media should align with the learning objectives. Secondly, attention should be paid to the target users of the media, including analyzing or understanding characteristics, numbers, interests, and motivation levels of students as users. Thirdly, the characteristics of instructional media, including their strengths and weaknesses, should be considered. Fourthly, time-related aspects should be considered, ensuring that the use of specific media doesn't overly extend learning time during preparation.

Fifthly, the costs associated with media usage should be considered. Lastly, the availability of media within the school should be considered.

Every learning process requires suitable and representative instructional media, including in Indonesian language instruction, to ensure the learning process achieves success and the predetermined objectives. General Indonesian language instruction encompasses four aspects: listening, speaking, reading, and writing. The utilization of instructional media in Indonesian language instruction renders these four aspects engaging, focused, and tangible. However, before selecting the appropriate media, teachers should first analyze students' learning styles in Indonesian language instruction. This aligns with the aspect of considering media targets, which includes students' needs and characteristics. Therefore, to understand students' learning styles, educators can employ methods such as conducting learning style assessments.

2. Methodology

This study employs used a quantitative descriptive research approach. The research was conducted at SMAN 4 Pekanbaru with X-grade students as the research subjects. The aim of the study was to analyse the learning styles of X-grade students at SMAN 4 Pekanbaru, analyse the selection and use of learning media by teachers, and determine the suitability of media selection and usage to the learning styles of students in Indonesian language learning. The research sample was determined using random sampling techniques. Random sampling was chosen based on consideration of homogeneous classes at SMAN 4 Pekanbaru. Data collection methods included a learning style test and a teacher questionnaire. The learning style test was administered to X-grade students at SMAN 4 Pekanbaru through the *akupintar.id* application, determining their visual, auditory, kinesthetics, or combined learning style. The teacher questionnaire was distributed to understand the selection and use of learning media that catered to students' learning styles. Data analysis involved scoring the learning style test, calculating the percentage of obtained scores, classifying learning style test results, analysing the teacher questionnaire, and drawing conclusions regarding the suitability of media selection based on students' learning styles.

3. Results And Discussion

3.1. Learning Styles of X-grade Students at SMAN 4 Pekanbaru

Data from the learning style test conducted among X-grade students at SMAN 4 Pekanbaru were divided into learning styles per class and general learning styles of the X-grade students. Data was collected from three classes: X.3, X.4, and X.7. The following data illustrates the learning style test results:

3.1.1. Learning Styles by Each Class

a. Learning Styles of X.3 Class

Table 1. Learning Styles of X-grade Students in Indonesian Language Learning for Class X.3 at SMAN 4 Pekanbaru, 2023

No	Learning Style	Class X.3	Frequency	%
1.	Visual		15	42,86%
2.	Auditory		9	25,71%
3.	Kinesthetic		4	11,43%
4.	Visual Kinesthetic		2	5,71%
5.	Visual Auditory		2	5,71%
6.	Visual Auditory Kinesthetic		3	8,57%
	TOTAL		35	100%

Based on the data in Table 1, X.3 class students exhibit 6 types of learning styles, namely 1) Visual, 2) Auditory, 3) Kinesthetic, 4) Visual Kinesthetic, 5) Visual Auditory, and 6) Visual Auditory Kinesthetic. The distribution of these styles indicates that 42.86% of students have a visual learning style, 25.71% have an auditory learning style, 11.43% prefer kinesthetic learning, 5.71% exhibit a combination of visual and kinesthetic learning, 5.71% prefer a combination of visual and auditory learning, and 8.57% have a combination of visual, auditory, and kinesthetic learning. A histogram depicting the distribution of learning styles in X.3 class is presented in Figure 1.

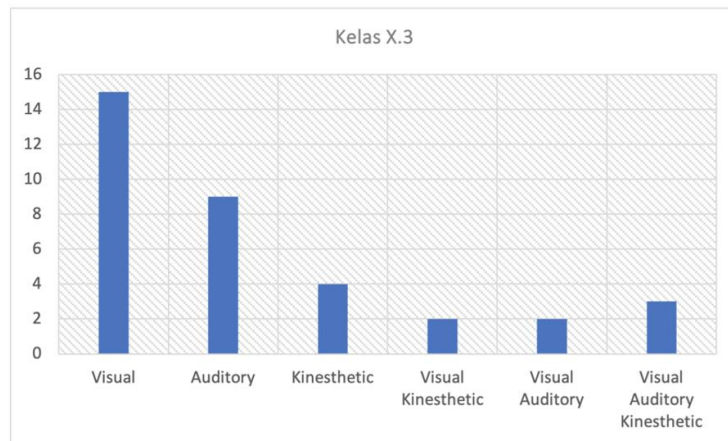


Figure 1. Histogram of Learning Styles in X.3 Class

From the histogram, it is evident that the dominant learning style in the X.3 class is visual learning.

b. Learning Styles of X.4 Class

Table 2. Learning Styles of X-grade Students in Indonesian Language Learning for Class X.4 at SMAN 4 Pekanbaru, 2023.

No	Learning Style	Class X.4 Frequency	%
1.	Visual	3	8,33%
2.	Auditory	1	2,78%
3.	Kinesthetic	3	8,33%
4.	Visual Kinesthetic	10	27,78%
5.	Visual Auditory	10	27,78%
6.	Auditory Kinesthetic	6	16,67%
7.	Visual Auditory Kinesthetic	3	8,33%
	TOTAL	36	100%

Based on the data in Table 2, X.4 class students exhibit 7 types of learning styles, namely 1) Visual, 2) Auditory, 3) Kinesthetic, 4) Visual Kinesthetic, 5) Visual Auditory, 6) Auditory Kinesthetic, and 7) Visual Auditory Kinesthetic. The distribution of these styles indicates that 8.33% of students have a visual learning style, 2.78% have an auditory learning style, 8.33% prefer kinesthetic learning, 27.78% exhibit a combination of visual and kinesthetic learning, 27.78% prefer a combination of visual and auditory learning, 16.67% have a combination of auditory and kinesthetic learning, and 8.33% have a combination of visual, auditory, and kinesthetic learning. A histogram depicting the distribution of learning styles in X.4 class is presented in Figure 2.

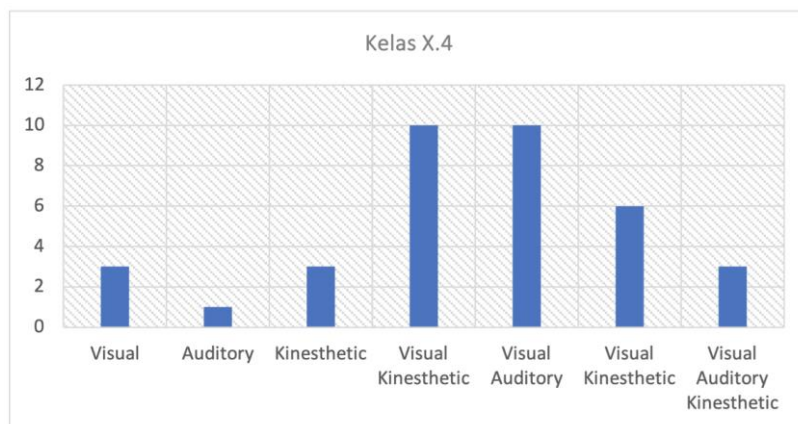


Figure 2. Histogram of Learning Styles in X.4 Class

From the histogram, it is evident that the dominant learning style in the X.4 class is a combination of visual kinesthetic and visual auditory.

c. Learning Styles of X.7 Class

Table 3. Learning Styles of X-grade Students in Indonesian Language Learning for Class X.7 at SMAN 4 Pekanbaru, 2023

No	Class X.7		
	Learning Style	Frequency	%
1.	Visual	4	12,12%
2.	Auditory	2	6,06%
3.	Kinesthetic	5	15,15%
4.	Visual Kinesthetic	7	21,21%
5.	Visual Auditory	10	30,30%
6.	Auditory Kinesthetic	5	15,15%
	TOTAL	33	100%

Based on the data in Table 3, X.7 class students exhibit 6 types of learning styles, namely 1) Visual, 2) Auditory, 3) Kinesthetic, 4) Visual Kinesthetic, 5) Visual Auditory, and 6) Auditory Kinesthetic. The distribution of these styles indicates that 12.12% of students have a visual learning style, 6.06% have an auditory learning style, 15.15% prefer kinesthetic learning, 21.21% exhibit a combination of visual and kinesthetic learning, 30.30% prefer a combination of visual and auditory learning, and 15.15% have a combination of auditory and kinesthetic learning. A histogram depicting the distribution of learning styles in X.7 class is presented in Figure 3.

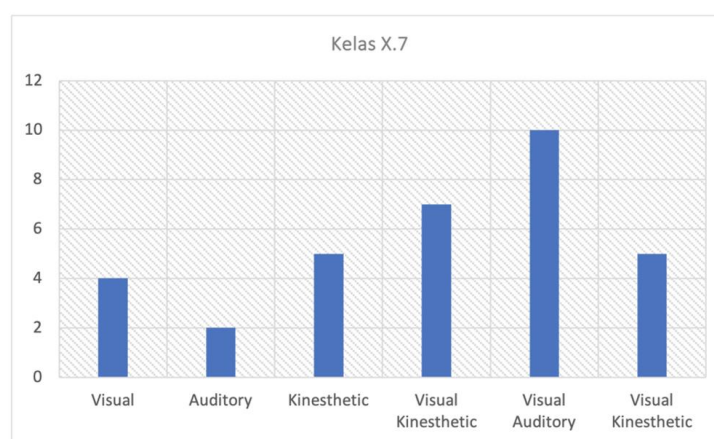


Figure 3. Histogram of Learning Styles in X.7 Class

From the histogram, it is evident that the dominant learning style in the X.7 class is a combination of visual auditory.

3.2. Overall General Learning Styles of X-grade Students

Table 4. Learning Style in Indonesian Language Class of Grade X.7 at SMAN 4 Pekanbaru in 2023

No	Class	Gaya Belajar							Total
		Visual	Auditory	Kinesthetic	Visual Kinesthetic	Visual Auditory	Kinesthetic Auditory	Visual Auditory kinesthetic	
1.	X.3	15	9	4	2	2	-	3	35
2.	X.4	3	1	3	10	10	6	3	36
3.	X.7	4	2	5	7	10	5	-	33
Total		22	12	12	19	22	11	6	104
Average		21,15%	11,54%	11,54%	18,27%	21,15%	10,58%	5,77%	100%

Based on Table 4, learning styles among X-grade students at SMAN 4 Pekanbaru encompass 7 types with the following percentages: 1) Visual at 21.15%, 2) Auditory at 11.54%, 3) Kinesthetic at 11.54%, 4) Visual Kinesthetic at 18.27%, 5) Visual Auditory at 21.15%, 6) Auditory Kinesthetic at 10.58%, and 7) Visual Auditory Kinesthetic at 5.77%. A histogram depicting the overall distribution of learning styles among X-grade students is presented in Figure 4.

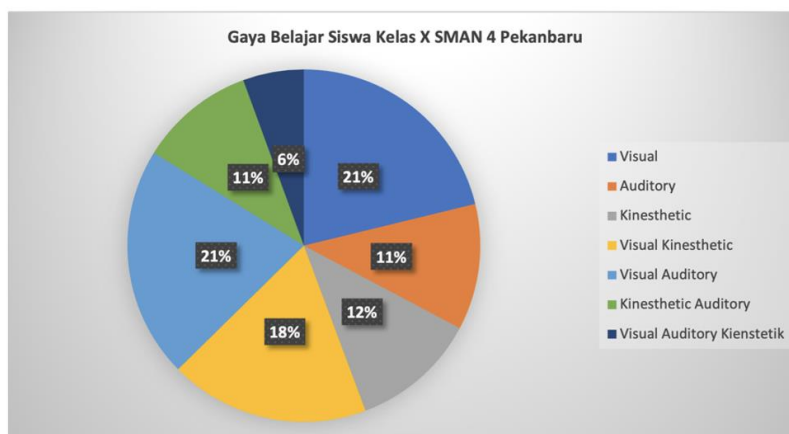


Figure 4. Histogram of Overall Learning Styles

From the diagram, it is evident that the dominant learning styles among X-grade students at SMAN 4 Pekanbaru are visual and a combination of visual auditory.

3.3. Selection and Use of Learning Media by Teachers in Indonesian Language Learning

A questionnaire was distributed to gather data on the types of learning media used by teachers in Indonesian language learning. Responses from 3 Indonesian language teachers at SMAN 4 Pekanbaru were collected and tabulated to present the selection and usage of learning media that aligned with students' learning styles. The percentages of learning media types used in Indonesian language learning at SMAN 4 Pekanbaru are as follows:

Table 5. Learning Media Selection and Usage in Indonesian Language Learning

No.	Learning Style	Total Score	Maximum Score	%	Category
1	Visual	148	176	84,09	Always
2	Auditory	121	176	68,75	Often
3	Kinesthetic	123	176	69,89	Often

Based on Table 5, it is observed that learning media used in Indonesian language learning at SMAN 4 Pekanbaru are representative of students' learning styles. The usage of visual learning media is 84.09% (Always), auditory learning media is 68.75% (Often), and kinesthetic learning media is 69.89% (Often). Teachers tend to use visual media such as videos, images, and PPT displays when delivering learning material in class. Visual media makes it easy for students to improve students' memory of the material [11]. Proper use of media will create excitement in learning, create direct interaction between students and the environment and reality around them and can overcome students' passive attitudes in learning Indonesian Language and Literature [12]. In general, the selection and use of learning media by Indonesian language teachers are aligned with the dominant learning styles of X-grade students at SMAN 4 Pekanbaru.

4. Conclusion

Based on the outcomes of the conducted research, it is revealed that the types of learning styles among X-grade students at SMAN 4 Pekanbaru exceed the conventional three learning styles. From the findings of the learning style assessment, it is discerned that there are seven distinct learning styles present among X-grade students at SMAN 4 Pekanbaru, encompassing both general and combined learning styles. The seven learning styles identified among the X-grade students are as follows: 1) Visual, 2) Auditory, 3) Kinesthetic, 4) Visual Kinesthetic, 5) Visual Auditory, 6) Auditory Kinesthetic, and 7) Visual Auditory Kinesthetic. Based on the analysis of the learning style data, it is ascertained that the predominant learning styles among X-grade students at SMAN 4 Pekanbaru are visual learning and a combination of visual and auditory learning, each constituting an equal percentage of 21.15%.

Furthermore, in accordance with the outcomes of the questionnaire regarding the selection and utilization of representative learning media by teachers, it is evident that such practices are aligned with the students' learning style preferences. This is substantiated by the questionnaire responses, indicating that teachers have adeptly incorporated learning media in various forms such as visual, audio, and audiovisual, all effectively catering to the visual learning style, achieving a substantial 84.09% frequency categorized as 'Always'. Similarly, the instructional media usage also corresponds to the auditory learning preferences of students, registering a frequency of 68.75% categorized as 'Often', along with addressing the kinesthetic learning preferences with a

frequency of 69.89%, also categorized as 'Often'. Consequently, the selection and utilization of learning media by Indonesian language educators at SMAN 4 Pekanbaru aptly adhere to, and effectively serve, the dominant learning style needs in the X-grade classroom, ultimately enhancing the Indonesian language learning experience.

Authors' Contributions

Charlina as the author of the article, Elvrin Septyanti and Tria Putri Mustika as the research data analyst, Syamsuyurnita and Nabila as the research data collector.

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