Fifth Grade Students' Learning Styles Based On Differentiated Learning in Elementary Schools

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A R T I C L E I N F O

A B S T R A K

Kurikulum Emansipasi menekankan pada kesempatan belajar yang berbeda yang disesuaikan dengan mengintegrasikan gaya belajar untuk memenuhi kenyamanan dan kebutuhan siswa dalam belajar. Tujuan dari penelitian ini adalah untuk menganalisis gaya belajar siswa kelas 5 sekolah dasar di Buleleng, sehingga guru dapat melaksanakan pembelajaran dengan memperhatikan gaya belajar. Penelitian ini menggunakan pendekatan deskripsi kualitatif, dengan subjek penelitian adalah 49 siswa kelas 5 dari dua sekolah dasa. Pengumpulan data menggunakan kuesioner berbasis kertas dengan dimensi gaya belajar yang sudah diuji validalitasnya. Setelah data terkumpul, dilakukan proses reduksi data dengan abstarksi dan mengkategorikan berdasarkan gaya belajar, dan terakhir dilakukan proses penarikan kesimpulan. Hasil dari penelitian ini adalah gaya belajar visual yang paling dominan dengan 253 respon, gaya belajar kinaesthetic dengan 251 respon, gaya belajar auditory dengan 222 respon, dan read-write dengan 214 respon. Penelitian yang diusulkan untuk mengeksplorasi gaya belajar siswa kelas 5 SD di sekolah dasar, khususnya di Buleleng ini tepat waktu dan diperlukan. Penelitian ini menjawab kesenjangan yang signifikan dalam penelitian yang ada dan memiliki potensi untuk memberikan kontribusi yang substansial terhadap praktik, dan kesetaraan pendidikan di wilayah tersebut.

A B S T R A C T

The emancipated curriculum emphasizes different learning opportunities tailored to integrate learning styles to meet students' comfort and learning needs. This study aims to analyze the learning styles of 5th-grade in elementary school students in Buleleng so that teachers can implement learning by paying attention to learning styles. This study used a qualitative description approach, with the research subjects being 49 students of 5th-grade from two elementary schools. Data collection used a paper-based questionnaire with learning styles dimension that had been tested for validity. After the data was collected, the data reduction process was carried out by abstracting and categorizing based on learning styles, and the last conclusion-drawing process was carried out. The result of this study is the most dominant visual learning style with 253 responses, kinaesthetic learning style with 251 responses, auditory learning style with 222 responses, and read-write with 214 responses. This proposed research to explore the learning styles of grade 5 students in primary schools, particularly in Buleleng is timely and necessary. It addresses a significant gap in existing research and has the potential to make a substantial contribution to practice, and educational equity in the region.

1. INTRODUCTION

Education is one of the crucial sectors of development in every country. Education is organized as a process of coaching and empowering students. To achieve educational goals, a curriculum is prepared, a set of plans and arrangements regarding objectives, content, materials, and learning methods (Barlian et al., 2022; Dian et al., 2023). In 2022, the Indonesian government initiated a series of systematic educational reforms collectively known as the Emancipated Learning to improve learning outcomes and advance the quality and equity of education across Indonesia (Anggraini et al., 2020; Yıldırım, 2016). The Ministry of Education and Culture Research and Technology 2022 established the *Kurikulum Merdeka* or the Emancipated Curriculum. The Emancipated Curriculum emphasizes diverse learning opportunities so that students can explore concepts and improve skills while prioritizing essential material, preparing students to face rapid social, cultural, and world developments, technological advances, and changing times (Barlian et al., 2022; Cooper & Sánchez, 2016; Yunita Anindya et al., 2019).

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In Indonesia, the Emancipation Curriculum supports the learning process in various ways. The aim is to facilitate differentiated learning, which includes increasing student motivation and academic achievement, improving teacher-student relationships, encouraging independent learning among students, and increasing teacher satisfaction in their roles (Ningrum et al., 2023; Sauhana & Yeni, 2021; Siregar et al., 2020). Implementing differentiated learning can be adjusted by combining learning styles to meet students' learning needs and ease. Learning style is an effort to absorb, process, remember, and apply facts. Understanding and recognizing individual learning styles is crucial for both students and teachers as it significantly influences the learning process. Each student has a unique way of absorbing, processing, and recreating information, making it essential for teachers to tailor their teaching methods to meet these varied preferences (Hidayah & Syahrani, 2022; Ibarrientos, 2021; Silitonga & Magdalena, 2020). When students know their own learning styles, they can leverage their strengths and employ strategies that make learning more engaging and productive, enhancing their curiosity and enthusiasm. By applying the right learning style and regularly providing motivation to learn, students can achieve more effective results, making the educational experience more successful and satisfying (Suciani et al., 2022; Susanti et al., 2024; Wahab & Nuraeni, 2020).

Several studies on learning style analysis in elementary school students, especially grade 5, have been conducted. The result of the study showed that most grade 5 students tend towards the kinaesthetic learning style with a total of 62.5%, then the auditory learning style 25%, and 12.5% of students tend towards the visual learning style (Marchetti & Cullen, 2015). Another study was conducted by study on grade 5B students of SDN Purwoyoso 04, with the result of student learning styles varying: visual 52%, auditory 29%, and kinaesthetic 19% (Latifah, 2023). Meanwhile, the result of a study conducted showed that most 5th grade students of SDN 3 Sukarapih tend towards on of the learning styles, namely kinaesthetic learning style with an average percentage distribution of 50%, visual learning style 33%, and auditory learning style 17% (Sutisna & Listriyani, 2023). Based on the results of research conducted shows that grade 5 students at SD Negeri Pandeanlamper 01 are more dominant with a visual learning style, with a percentage of 46.63%, followed by a kinesthetic learning style of 28.67%, and an auditory learning style of 25.00% (Herdianto et al., 2023). The last, the results of research conducted showed that students' learning styles showed 20.69% visual, 55.17% auditory, and 24.14% kinaesthetic (Leasa et al., 2020).

This study is similar to previous research examining differentiated learning in primary schools among 5th-grade students in Buleleng Regency. This study aims to understand students' learning style preferences so that teachers can adapt teaching methods accordingly, enabling optimal achievement of learning objectives. The study also highlights the peculiarities of the educational context in Buleleng, a region with unique cultural and socio-economic characteristics, which are rarely explored in the literature. As such, this study contributes to filling the knowledge gap by providing specific insights relevant to primary schools in Buleleng, offering empirical evidence on the effectiveness of differentiated learning implementation and its impact on student learning outcomes.

The most popular learning models in education stem from the VARK model proposed which consists of four perceptual modalities: Visual, Auditory, Read/Write, and Kinaesthetic (Subagja & Rubini, 2023; Wininger et al., 2019). Visual learners tend to understand ideas and concepts through pictures and diagrams, while Auditory learners prefer to acquire information through hearing and conversation. The Read/Write learning style prioritizes information presented in text form, such as reading, taking notes, and writing essays. Meanwhile, Kinaesthetic learners prefer learning through physical experience and hands-on practice. Understanding these learning style preferences can help teachers adopt more effective teaching strategies to improve student engagement and learning outcomes (Fearnley & Amora, 2020; Payaprom & Payaprom, 2020).

Teachers have an important role in organizing learning activities that suit students' learning styles using various strategies and methods. Identifying different learning styles in students encourages teachers to consider this in designing instructional designs (Pujiantini, 2020; Shakiila & Fathurohman, 2022). However, teachers often struggle to implement differentiated teaching due to lacking resources and training. This study highlights the challenges and opportunities in Buleleng, providing the basis for a targeted professional development program (Wardhani & Sartika, 2024; Yusuf & Erviana, 2022; Zulianti & Asari, 2022). The urgency of this research lies in its potential to equip teachers with the necessary skills and the novelty of this study provide strategies to deal with diverse learning styles and help educators in Buleleng adapt their teaching methods to better suit students. The aims of this study is to analyze the learning styles of 5th-grade in elementary school students in Buleleng so that teachers can implement learning by paying attention to learning styles.

2. METHOD

Qualitative description research is employed in this study to explore and comprehend specific phenomena by collecting non-numerical data. This approach allows for insights into the learning styles of fifth-grade elementary school students in Buleleng, providing a nuanced understanding of how these students prefer to absorb and process information (Vaismoradi & Snelgrove, 2019). The study involves 49 grade 5 students from two elementary schools in Buleleng, selected as subjects to represent a diverse sample within the region.

Data collection was conducted using a paper-based questionnaire comprising 12 statements designed to measure various dimensions of learning styles. These dimensions include visual, auditory, read/write, and kinaesthetic preferences. The questionnaire allowed students to select multiple options, reflecting the complexity and variability inherent in individual learning styles. Before distribution, the questionnaire instrument validity was tested by experts to ensure its reliability in measuring the intended constructs. Once data were collected, the researcher engaged in data reduction processes, which involved abstracting and categorizing the data based on identified learning styles. This step aimed to distill the vast amount of qualitative data into meaningful insights, focusing on identifying and describing the predominant learning styles among the participants.

The final phase of the study entails drawing conclusions that align closely with the research findings. By synthesizing the analyzed data, the researcher will provide comprehensive insights into how grade 5 students in Buleleng exhibit various learning preferences (Fauzi & Pradipta, 2018). These insights are crucial for educators and policymakers in tailoring teaching strategies that effectively cater to diverse learning styles, thereby enhancing educational outcomes and fostering a more inclusive learning environment.

3. RESULT AND DISCUSSION

Result

This study's subjects were 49 grade 5 students in two elementary schools in Buleleng. The study used a questionnaire based on Fleming's VARK theory to explore the learning styles of grade 5 students, allowing multiple answers per question. The results of the student's learning style questionnaire are shown in Figure 1.
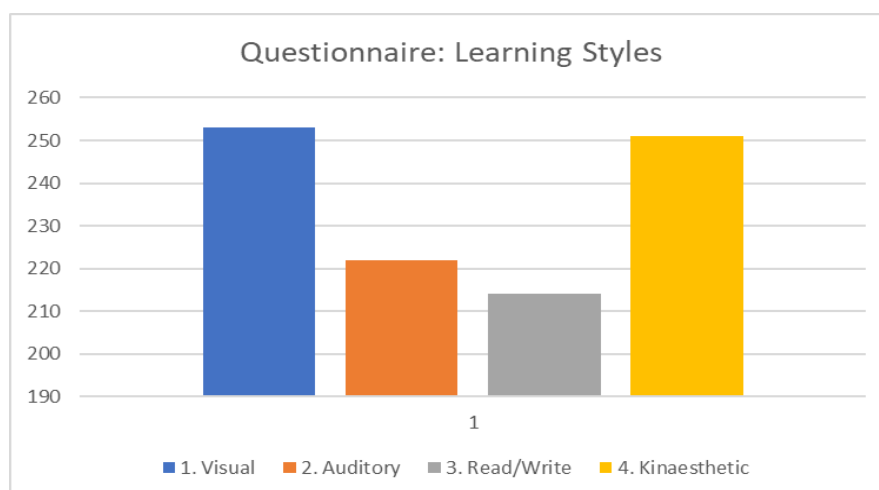

Figure 1. The Result of the Learning Styles Questionnaire

Based on Figure 1, the data collection involved in distributing the learning style questionnaire. Data analysis categorized the responses according to Fleming's model, revealing that out of 940 responses, visual learning style was most preferred by students with the 253 responses, followed by kinaesthetic learning style with the 251 responses, then auditory learning style with the 222 responses, and the last read/write learning style with the 214 responses.

Discussion

Based on the learning style questionnaire analysis results, students who preferred visual learning styles achieved the highest results, totaling 253 responses. This indicates that many students enjoy learning through visual media such as images, graphs, videos, and brochures (Subagja & Rubini, 2023). This finding is consistent with the findings who studied elementary school students in grade 3 and found that most students have a visual learning style because they prefer to remember what they see rather than what they hear (Triwibowo et al., 2017). Students are also attracted to symbols, images, and colors, and those interested in reading predict visual learning styles. Additionally, the kinaesthetic learning style garnered 251 responses, indicating that some fifth-grade students prefer learning involving physical activities. This contrasts with the analysis which showed that second-grade students are more dominant in kinaesthetic learning styles at 37%, followed by auditory at 32%, and visual at 31% (Susanti et al., 2024). There were 222 responses indicating a preference for auditory learning, where students prefer oral discussions, group conversations, and using tools like tape recorders for learning (Leasa et al., 2020; Subagja & Rubini, 2023). This differs from the analysis by other study, which indicated that auditory

learning style ranks second among fifth-grade students with an average score of 77.00 (Kusumasari & Nugraheni, 2023).

The research results of this research also show that the read/write learning style received the fewest responses, totaling 214, indicating lower interest in learning materials presented in written form, such as books or handouts. This differs from the findings which showed that the read/write learning style is the second most dominant learning style among eighth-grade students at 24.32% (Widiyanti et al., 2020). From these research results and comparisons with previous studies across different grade levels, it can be concluded that not all students in the same grade level or across different grade levels have a dominant visual learning style, and the read/write learning style tends to be in the minority. Therefore, teachers need to know and understand students' learning styles to provide learning experiences that meet their needs, thereby enabling students to achieve their learning goals effectively.

Based on the differentiated learning styles of 5th-grade students in Elementary Schools in Buleleng, the suggestions that can be given are to teachers, schools, and other researchers. Teachers need to know their students' learning styles and carry out learning by paying attention to student's learning styles and characteristics through differentiated learning so that students can understand the material more deeply and achieve the learning objectives that have been set. Meanwhile, schools help provide facilities to teachers so that differentiated learning can run well and achieve optimal learning objectives. Thus, for future researchers who want to research students' learning styles, it is advisable to explore further the application and effectiveness of the differentiated learning approach that is adjusted to each student's learning style to improve student understanding and achieve optimal learning objectives. Teachers are expected to adapt teaching and assessment methods to suit students' learning styles, so as to increase their learning effectiveness and interest in learning. As such, these conclusions provide a foundation for the development of learning strategies that are more inclusive and responsive to individual learning needs in grade 5 primary schools in Buleleng.

4. CONCLUSION

Based on the results of a study that used a questionnaire to analyze the learning styles of grade 5 students in two schools in Buleleng, it can be concluded that each student has a different learning style. The findings show that the visual learning style is the most chosen by students in this study. This indicates the need for differentiated learning approaches to meet the individual needs of each student. This conclusion highlights the importance of recognizing the diversity of learning styles in the classroom. Teachers need to pay more attention to each student's learning characteristics and preferences in structuring and presenting learning materials. By paying attention to the dominant visual learning style, teachers can consider using visual materials such as pictures, diagrams or videos in the learning process to improve students' understanding. In addition, this result also emphasizes the importance of differentiated learning approaches in the context of a curriculum that is in the process of being adjusted.

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