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## Qualitative Analysis Of The Learning Process At Krapyak Wetan State Elementary School

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### **Abstract**

*This study aims to gain a deeper understanding of the dynamics of individual variation in the learning process at Krapyak Wetan Public Elementary School, Bantul, Yogyakarta Special Region. The main focus of this study is to examine how differences in student characteristics influence the effectiveness of classroom learning. The individual variations observed include aspects of intelligence, learning styles, personality, and temperament, which in practice have proven to be important factors in determining the success of the learning process. This study used a descriptive qualitative approach with data collection techniques such as participatory observation, in-depth interviews, and documentation. The research subjects included the principal, grade I, II, and III teachers, and students in the 2024/2025 academic year as the primary data sources. The results show that Krapyak Wetan Public Elementary School has consistently implemented the Independent Curriculum through the application of differentiated learning. This approach allows teachers to adapt learning strategies to the needs, potential, and characteristics of each student. In its implementation, teachers use various adaptive methods, such as the use of visual, auditory, and kinesthetic media to accommodate the diversity of student learning styles. Furthermore, learning is supported by peer tutoring strategies, project-based learning, and flexible grouping, encouraging interaction and collaboration among students. The evaluation process is carried out continuously through formative and summative assessments tailored to each individual's development. This demonstrates the school's awareness and systematic efforts to create more inclusive and responsive learning. Therefore, this study concludes that understanding individual student variation plays a crucial role in improving the quality of learning, ensuring it is not only effective but also adaptive and meaningful for each student.*

**Keywords:** Individual Variation, Differentiated Learning, Independent Curriculum.

### **1. Introduction**

National education is based on Pancasila and the 1945 Constitution of the Republic of Indonesia, rooted in religious values and Indonesian national culture, and responsive to the demands of changing times. Education is a strategic instrument in implementing national development, aiming to create high-quality and highly competitive human resources [1]. The productivity of human resource quality can be measured through various indicators, such as educational quality, workforce competency, participation rate, innovation, creativity, and adaptability to global change [2]. In this context, education serves not only as a means of transferring knowledge but also as a medium for instilling national values, ethics, and social skills necessary to face global challenges.

In line with global developments, the issue of sustainable education has become a crucial focus in the modern education system. Sustainable education emphasizes the integration of environmental, social, and economic aspects to increase individual awareness of global challenges, such as climate change, social inequality, and sustainable economic development [3]. This aligns with the objectives of the Sustainable Development Goals (SDGs) and the vision of Golden Indonesia 2045, which emphasizes the importance of developing superior and character-based human resources. Therefore, the Indonesian education system needs to be designed adaptively by integrating socio-cultural values and learning approaches relevant to current needs. The educational process should not only focus on academic achievement but also on developing students' character, intelligence, and critical and creative thinking skills.

Several studies in the past three years have shown that individual student variation significantly influences the effectiveness of the learning process. Research by Arifin revealed that the implementation of differentiated learning can increase the engagement and learning outcomes of elementary school students [4]. The results of this study indicate that adapting learning strategies based on students' learning styles and abilities can optimally

enhance conceptual understanding. Furthermore, research by Nurhayati confirms that intelligence and learning styles are two dominant factors influencing student academic success, especially at the elementary school level, which is still in the early stages of cognitive development [5].

In practice, the learning process in schools is faced with diverse student characteristics. Differences in background, abilities, interests, and learning styles require a more flexible and adaptive learning approach. Individual variation encompasses aspects of intelligence, learning styles, talents, interests, and learning needs that differ among students [6]. Therefore, differentiated learning is a relevant solution to accommodate this diversity. Differentiated learning allows teachers to adapt learning strategies, methods, and media to suit student characteristics, thereby increasing engagement and learning outcomes [7].

Furthermore, understanding students' learning styles is also a crucial factor in improving learning effectiveness. Each student has different learning style tendencies, such as visual, auditory, and kinesthetic, which influence how they receive and process information [8]. Furthermore, social and cultural environmental factors also contribute to shaping students' learning development, both cognitively and socially [9]. Therefore, teachers, as learning facilitators, are required to be able to create a conducive, inclusive, and nurturing learning environment.

The school is able to accommodate students' learning needs holistically. Based on observations and interviews conducted at Krapyak Wetan Public Elementary School, it was discovered that individual variations such as intelligence, learning styles, personality, and temperament significantly influence the learning process. The implementation of differentiated learning at the school was carried out through modifications to learning media, the use of diverse methods, and approaches tailored to student characteristics. However, in practice, various challenges remain, such as differences in student abilities and differing management needs between active and passive students. Therefore, this study aims to further examine the relationship between individual variations and the learning process at Krapyak Wetan Public Elementary School. This study is expected to contribute to the development of more effective, inclusive, and adaptive learning practices.

## 2. Research Methods

This study employed a qualitative approach with a descriptive design to deeply understand the phenomenon of individual variation in the learning process. This approach was chosen because the research focused on exploring the subjects' meanings and experiences, rather than on hypothesis testing. In qualitative research, the researcher acts as a key instrument, using inductive and contextual data analysis [10]. The descriptive design was used to systematically, factually, and accurately describe the implementation of differentiated learning based on individual variation at Krapyak Wetan Public Elementary School. This approach is considered relevant because it captures social realities and learning dynamics holistically [11].

The study was conducted at Krapyak Wetan Public Elementary School, located in Bantul, Yogyakarta Special Region, considering that the school has implemented the Independent Curriculum and implemented learning strategies that address the diversity of student characteristics. The selection of the research location was based on contextual characteristics that align with the research focus [12]. The research was conducted on December 5, 2024. The research subjects were determined using purposive sampling, which involves selecting informants based on specific considerations in line with the research objectives [13]. The research subjects included the principal as the policy informant, first-, second-, and third-grade teachers as the primary informants for learning practices, and students as observation subjects and supporting data sources.

Data collection techniques included observation, in-depth interviews, and documentation. Observations were conducted directly in the classroom to observe the learning process, interactions, and student responses to the teacher's methods. The observation method allows researchers to obtain factual data directly from the situation under study [14]. In-depth interviews were conducted with the principal, teachers, and students to obtain more comprehensive information regarding the implementation of individual variation-based learning. This technique is effective for exploring the perspectives, experiences, and meanings held by participants [15]. Documentation was used to supplement and validate the data, including analysis of curriculum documents, learning tools, student evaluation results, and evidence of activities in the form of photographs and field notes. The use of this triangulation method aims to increase the validity and reliability of research data [16].

## 3. Results

Observation results were defined through interviews with the principal, homeroom teachers, and students regarding the curriculum, individual variations, and learning evaluation. These interviews demonstrated that Krapyak Wetan Public Elementary School is dedicated to implementing a holistic learning process that is oriented

towards student needs. The principal and teaching staff at Krapyak Wetan Public Elementary School explained that the curriculum is formulated to accommodate the diverse learning styles and opportunities of each student, enabling them to learn effectively. A further explanation follows.

The curriculum, as the primary reference in implementing the learning process, plays a crucial role in determining the direction and quality of learning. A curriculum designed with clear and measurable objectives will assist teachers in planning learning and facilitate students' understanding of expected outcomes [17]. Interviews with the Principal of Krapyak Wetan Public Elementary School, Mr. Suyadi, revealed that the school has consistently implemented the Merdeka Curriculum in daily learning activities. He stated that "The Independent Curriculum gives teachers the flexibility to adapt learning to the characteristics and needs of each student, making learning more meaningful and non-uniform." He also emphasized that collaboration between teachers, students, and parents is one of the keys to the successful implementation of this curriculum, as it can create more optimal and participatory learning support.

The interview findings were further supported by the Vice Principal for Curriculum, who explained that the implementation of the Independent Curriculum at the school was carried out in stages and in a planned manner. In the interview, he stated that "We develop the school's operational curriculum by adapting to the characteristics of the students and the surrounding environment. Teachers are given space to conduct differentiated learning so that all students can be served according to their abilities and learning styles." He further explained that learning focuses not only on cognitive aspects but also on strengthening character and 21st-century skills through various contextual activities.

Overall, the curriculum at Krapyak Wetan Public Elementary School is developed as a flexible framework while maintaining a focus on essential material and strengthening student character and competencies. The main characteristics of the Merdeka Curriculum implementation at this school include project-based learning to develop soft skills and character traits in accordance with the Pancasila Student Profile, as well as flexibility in implementing differentiated learning. Teachers are given the freedom to adapt learning strategies to students' needs, including integrating local content and the surrounding environmental context, so that the learning process becomes more relevant, adaptive, and meaningful for students.

Interviews regarding student intelligence at Krapyak Wetan Public Elementary School were conducted involving teachers and students in grades 1, 2, and 3 to obtain a more comprehensive picture of individual differences in learning abilities. In general, student intelligence at the elementary school level shows considerable variation, both in aspects of thinking skills, conceptual understanding, and adaptability to the learning environment. Based on interviews with the first-grade teacher, Mrs. Sri Lestari, S.Pd., it was discovered that the first-grade students are still in the adaptation phase from kindergarten, so their intelligence has not yet developed optimally. This is evident in the fact that some students are still not fluent in reading and arithmetic, necessitating teachers to provide more intensive support. This statement is reinforced by an interview with a first-grade student, Anisa Putri, who stated, "I still like having the teacher read the questions, but if there are pictures or videos, I understand more quickly." This indicates that a visual approach is more effective in fostering student understanding in the early stages.

In second-grade, students' intelligence development showed significant improvement compared to first-grade. This is supported by an interview with second-grade teacher, Ms. Susiati, who stated that students are beginning to better understand basic learning concepts and are actively participating in learning activities. Furthermore, students' social and emotional skills are also developing, supporting the overall learning process. One second-grade student, Rizky Pratama, stated, "I prefer learning through practice, such as batik making or group work, so it's easier to understand." This statement demonstrates that a kinesthetic and collaborative approach is an effective strategy for optimizing. The intelligence of second-grade students is also affected. This diversity of learning styles encourages teachers to implement more inclusive and flexible learning.

Meanwhile, in third-grade, students' intelligence appears to be developing, with more complex variations. An interview with Mrs. Era Kurniasih revealed that student ability mapping was conducted through a diagnostic assessment at the beginning of the lesson to tailor the learning strategies to be implemented. The results indicate that students have diverse cognitive abilities, but are generally capable of thinking more critically and independently. This is supported by an interview with third-grade student Dinda Aulia, who stated, "I prefer learning using videos and group work because I can discuss with my friends and understand things more quickly." Furthermore, the implementation of peer tutoring and the provision of star rewards have also been shown to increase student motivation and participation. Thus, it can be concluded that the diversity of student intelligence at each grade level shows gradual development and requires adaptive and differentiated learning strategies to ensure optimal and meaningful learning.

The research findings indicate that the implementation of the Independent Curriculum at Krapyak Wetan Public Elementary School not only serves as a learning framework but also as an adaptive instrument capable of accommodating variations in student intelligence and learning characteristics in a tiered manner. The curriculum's flexibility allows teachers to adjust learning strategies based on student needs, starting from the adaptation stage in grade 1 to more complex cognitive development in grade 3. These findings indicate that consistently implemented differentiated learning contributes to increased conceptual understanding, student engagement, and the development of critical thinking skills. This is in line with research by Fatmawati, which also confirmed that a differentiation-based student-centered learning approach has a positive impact on the cognitive and social development of elementary school students because it allows students to learn according to their individual potential and preferences [18]. Thus, the results of this study reinforce that the successful implementation of the Independent Curriculum is largely determined by teachers' ability to understand individual student variations and manage flexible, contextual, and learner-centered learning.

Student personality refers to the characteristics, habits, and ways in which students interact in the learning environment. This personality is inseparable from temperament, which influences how students respond to situations, both in academic and social activities [19]. Understanding personality and temperament is crucial for teachers in designing inclusive learning, particularly to accommodate students with active and passive personalities, as well as various temperament types such as sanguine, melancholic, and phlegmatic. An interview with first-grade teacher, Ms. Sri Lestari, revealed that first-grade students exhibit quite a variety of personality traits. One student, Septiano Bima, stated, "I'm sometimes embarrassed when asked to come forward, but when it comes to drawing or role-playing, I'm willing to join in." This indicates that Bima tends to be relatively calm, yet still takes initiative in certain situations. Ms. Sri also added that "First-grade students are still in the adjustment phase, so the approach must be slow and tailored to each individual's character." These findings suggest that identifying personality traits helps teachers determine more appropriate learning strategies.

In second-grade, students' personalities and temperaments begin to appear more stable and developed, particularly in social interactions. An interview with a second-grade student, Siti Nurhaliza, revealed that "I enjoy group work because I can chat and help friends who don't understand." This statement reflects a tendency toward an open and cooperative personality. On the other hand, there are also students with quieter personalities, such as Ahmad Fauzan, who stated, "I prefer to do my own homework first, and then when I'm finished, I help my friends." This demonstrates the variety of temperaments within a class that requires different approaches. The second-grade teacher adjusted strategies by providing opportunities for both group work and individual assignments to keep all students engaged according to their comfort level.

Meanwhile, in third-grade, the dynamics of student personality and temperament become more complex as age and social skills develop. An interview with third-grade student, David Arif Wicaksono, revealed that "I sometimes don't dare to speak first, but if I'm asked, I can answer." This demonstrates a tendency toward passivity, yet still possessing strong academic potential. On the other hand, another student, Raka Saputra, expressed that "I like to ask questions and come forward because I want to know more." According to Ms. Era Kurniasih, these differences need to be managed with appropriate strategies, such as assigning extra assignments to overly active students to help them focus, and providing stimulus or feedback to passive students to boost their confidence. Therefore, understanding students' personalities and temperaments has been proven to help teachers create a more balanced and harmonious classroom atmosphere, supporting optimal student academic and social development.

Research findings indicate that student personality and temperament play a significant role in shaping classroom learning dynamics, both in terms of participation, social interaction, and responses to teacher-implemented learning strategies. Variations in character, such as active, passive, cooperative, and reflective students, require a flexible and adaptive pedagogical approach to ensure optimal support for all students. In the early grades, students' personalities, still in the adjustment stage, require a more supportive and gradual approach. In higher grades, personality management becomes more complex as students' social and emotional abilities develop. These findings align with research by Dahlan, which also emphasized that teachers' understanding of students' psychological characteristics, including personality and temperament, is key to creating inclusive and effective learning because it can help teachers determine strategies that are appropriate to students' individual needs [20]. Therefore, the results of this study reinforce that appropriate personality and temperament management not only creates a harmonious classroom atmosphere but also contributes to improving students' overall academic and social development.

Learning evaluations are conducted to determine students' level of understanding of the material being taught, including basic skills such as reading, writing, and arithmetic. Additionally, initial assessments and placement tests are used as initial steps to map student abilities so teachers can adapt appropriate learning strategies [21].

Interviews revealed that teachers at Krapyak Wetan Public Elementary School use a variety of evaluation methods, such as written tests, observations, and project-based assessments. Ms. Era Kurniasih explained that evaluations focus not only on final results but also on the students' learning process. She stated, "Teachers also need to reflect on whether the methods used are effective. So, evaluation is not just for the students, but also for the teachers." This demonstrates that learning evaluations are comprehensive and ongoing.

In first grade, learning evaluations are still conducted simply and in stages, adapting to students' basic abilities, which are still developing. An interview with first grade student Nabila Rahma revealed that, "If there's a question, the teacher usually reads it first, then I answer or write it down slowly." This demonstrates that evaluations are conducted with intensive teacher support. Furthermore, another student, Fajar Maulana, stated, "I like drawing or coloring assignments, because they're easier than writing a lot." This statement demonstrates that varied forms of evaluation, such as visual assignments, are more effective in measuring understanding in early grade students.

In second grade, evaluation methods begin to evolve, combining written tests and activity-based assessments. One student, Rizky Pratama, stated, "After studying, there are usually questions, but sometimes they also require practical work or group work." This demonstrates that evaluation measures not only cognitive aspects but also social and practical skills. Meanwhile, in third grade, evaluation is more complex, emphasizing conceptual understanding and reflection on learning. Third-grade student, Dinda Aulia, stated, "After studying, there's usually a test, but sometimes they're also asked to do a project or present in front of the class." This demonstrates that evaluation is already geared toward developing critical thinking and communication skills. Overall, learning evaluation at Krapyak Wetan Public Elementary School is conducted in a formative and summative manner, tailored to student characteristics and development, thus providing a more comprehensive picture of student learning outcomes.

Based on the interview results regarding learning evaluation, it can be concluded that Krapyak Wetan Public Elementary School has implemented a comprehensive learning process involving both teachers and students. This diverse approach to evaluation methods is expected to improve the quality of learning and achieve students' full potential.

The research findings indicate that learning evaluation at Krapyak Wetan Public Elementary School has been implemented comprehensively and continuously, integrating various assessment techniques tailored to the students' developmental stages. Evaluation serves not only as a measure of academic achievement but also as a means of reflection for teachers to improve the effectiveness of their learning strategies. The application of diagnostic, formative, and summative assessments, combined with test and non-test methods, such as observation and projects, demonstrates a holistic and student-centered evaluation approach. This is evident in the differences in evaluation approaches at each grade level, with early grade students being facilitated more with mentoring and visual media, while in higher grades, evaluation is directed at developing critical thinking, collaboration, and communication. These findings align with research Fitiyanti, who also emphasized that the use of formative and project-based assessments can improve conceptual understanding and student engagement in learning by providing more contextual and meaningful learning experiences [22]. Thus, the results of this study strengthen that the implementation of varied and adaptive learning evaluation not only improves the quality of the learning process, but is also able to optimize students' potential as a whole according to their individual needs and characteristics.

### **3. Discussions**

Based on the results of interviews and evaluations conducted to obtain valid data and information, several important findings emerged that can be used as a reference in understanding teaching and learning activities at Krapyak Wetan Public Elementary School. These findings cover various aspects such as facilities and infrastructure, curriculum, individual variations, and evaluation of student learning outcomes. This finding suggests that teachers at Krapyak Wetan Public Elementary School have implemented innovative and interactive spelling methods. This undoubtedly contributes significantly to increasing student motivation and engagement in the learning process.

#### **School Facilities and Infrastructure**

Facilities and infrastructure refer to all the facilities and infrastructure needed to support the teaching and learning process in schools. These two elements play a crucial role in creating an inclusive and efficient learning environment for students. They are used to develop and foster a socio-emotional climate throughout the learning process. Furthermore, facilities and infrastructure serve as a benchmark for assessing the quality of a school [22].

chool facilities include all tools, materials, and facilities, such as classrooms, libraries, laboratories, and teaching aids.

The etymological definition of "infrastructure" comes from the Sanskrit word "prasara," meaning distribution or development. In the context of education, infrastructure refers to indirect means for achieving goals. Furthermore, according to Fadillah infrastructure is a facility that supports learning activities, such as the environment, access roads to the school, and school regulations. Based on this description, facilities and infrastructure are crucial instruments in school activities [23]. In relation to observations at Krapyak Wetan State Elementary School, it can be seen that the school's facilities and infrastructure are adequate, including roads, a library, classrooms, a canteen, and an ICT lab that meet standards. The availability of good facilities and infrastructure is essential for a successful educational process [24]. Therefore, it is crucial for the school and stakeholders to continuously monitor and improve existing facilities and infrastructure. These facilities are expected to create a pleasant and conducive learning environment.

### **School Curriculum**

A curriculum is a systematic and structured learning plan to support the teacher's learning process. The curriculum's scope relates to materials, methods, evaluation, and so on. Curriculum strategies are designed to provide feedback to students and teachers regarding the effectiveness of teaching. Adapting learning in the context of elementary school education is an appropriate step to ensure that every student has an equal opportunity to learn and develop. From this description, Miladiah stated that the arrangement of interrelated components in the implementation of an educational program is one definition of a curriculum [25]. This arrangement of components is based on Pancasila and the 1945 Constitution.

Furthermore, regarding curriculum observations conducted at Krapyak Wetan Public Elementary School, it was found that curriculum implementation followed government curriculum implementation procedures and created a more engaging and relevant teaching and learning process for students. This school implements the Merdeka curriculum, which provides teachers with flexibility in determining appropriate teaching methods, or what can be described as "Merdeka Belajar" (Freedom to Learn). The Independent Learning method within the Independent Curriculum concept provides educators with the flexibility to act as mediators in enhancing their students' knowledge [26]. Through the Independent Curriculum policy, the government provides schools with the freedom to adapt curriculum development to local contexts and student needs.

An analysis of the Independent Curriculum at Krapyak Wetan Public Elementary School revealed that the school's operational curriculum unit serves as a guideline for implementing school activities, developed by the principal, teachers, school committee members, parents, and community leaders. The implementation of the operational curriculum focuses not only on academic aspects but also on developing students' character and social skills. Furthermore, the Independent Curriculum also implements the Pancasila Student Profile Strengthening Project (P5). According to Ministerial Regulation No. 56/M/2022, P5 aims to strengthen competencies and character in accordance with the Pancasila student profile.

### **Individual Student Variations**

Individual variation is a variation that occurs in each individual, seen from having their own unique traits, talents, interests, and preferences. These differences are aspects that need to be understood in order to respect each other's variations and create a more inclusive environment that can support the development of each individual according to their potential interests and talents. Individual variation according to Lindgren is variation related to a variety of differences in both psychological and physical experiences. In the context of education at Krapyak Wetan Public Elementary School, individual variation refers to the differences that exist between one student and another. This situation is certainly influenced by several factors such as internal factors, external factors, and child psychology [28]. These factors will be interrelated to influence the physical, cognitive, and social aspects, thus influencing the level of intelligence, learning methods or styles, and personality and temperament of individuals. The following is a description of the aspects of individual variation in the student learning process.

#### **a. Intelligence**

Intelligence can generally be understood as an individual's ability to comprehend information, solve new problems, and utilize existing knowledge to adapt to the environment. In educational studies, intelligence

has two meanings: a broad sense, the ability to achieve success in various areas of life, and a narrower sense, which emphasizes cognitive abilities, particularly in the academic context and IQ measurements [29]. Based on research at Krapyak Wetan Public Elementary School, students' intelligence demonstrated significant development and varied according to age and individual characteristics. This was reflected in students' ability to follow the learning process, understand the material, and actively participate in various differentiated learning activities. Thus, students' intelligence positively contributes to the effectiveness of classroom learning.

Furthermore, research findings indicate that students' intelligence development does not occur in isolation but is influenced by various interrelated factors. First, innate or hereditary factors play a role in shaping the foundation of students' cognitive abilities. Genetic factors inherited from parents can influence initial intelligence potential, although in practice, this is not deterministic. This means that this potential can continue to develop or even increase through appropriate environmental stimuli. Second, interest and predisposition factors play a significant role in fostering intelligence development. Students with a strong interest in a field tend to demonstrate stronger learning motivation, making them more active in exploring new knowledge and skills. This is evident in students who are enthusiastic about project-based learning activities and practical activities, ultimately strengthening their cognitive abilities.

Third, environmental factors and maturity are crucial aspects in determining students' intelligence development. Family, school, and socioeconomic conditions influence the quality of stimuli students receive during the learning process. At Krapyak Wetan Public Elementary School, a supportive school environment through the implementation of the Independent Curriculum and differentiated learning has been shown to optimize students' intelligence development. Furthermore, students' developmental maturity also influences their readiness to receive and process information. In line with [30] a conducive environment and appropriate stimuli will enhance cognitive abilities, skills, and individual sensitivity in dealing with various learning situations. Therefore, the integration between innate factors, interests, and a supportive environment is the main key in developing students' intelligence optimally so that learning can take place effectively, adaptively, and meaningfully.

b. Learning Style

Learning styles are an approach that describes how individuals receive, process, and understand information based on their individual characteristics and preferences. In the context of elementary school learning, understanding learning styles is a crucial aspect that teachers must consider to ensure effective and meaningful delivery of material. An appropriate learning style enables a coherent interaction and exchange of information between teachers and students. Based on research at Krapyak Wetan Public Elementary School, teachers have strived to accommodate students' diverse learning styles through the implementation of differentiated learning, ensuring that each student receives learning opportunities tailored to their needs and potential.

One dominant learning style is visual learning, a learning style that relies on sight to understand information. Students with visual tendencies more easily absorb material when presented in the form of images, diagrams, graphs, or other visual media (Ahmadi, 2004). In practice, teachers at Krapyak Wetan Public Elementary School utilize various media such as instructional videos, illustrative images, and interactive whiteboards to help students grasp concepts more concretely. This aligns with the characteristics of elementary school students, who tend to understand things more easily when they are tangible and can be directly observed.

Furthermore, the auditory learning style is also an approach used in learning. This learning style emphasizes listening skills, where students more easily understand material through verbal explanations, discussions, and listening activities [19]. Teachers facilitate this learning style through interactive lectures, question-and-answer sessions, and group discussions that enable students to actively listen and express their opinions. Thus, students not only passively receive information but also engage in the communication process, supporting a deeper understanding of concepts.

Meanwhile, the kinesthetic learning style emphasizes physical involvement and direct experience in the learning process. Students with this learning style tend to understand material more easily through practical activities, experiments, and activities involving movement and touch. At Krapyak Wetan Public Elementary School, the application of the kinesthetic learning style is evident in project-based learning activities, hands-on practice, and outings. This approach provides students with more concrete and contextual learning experiences, making the information acquired easier to understand and retain. Thus, the integration of various learning styles into the learning process not only increases learning effectiveness but also creates a more inclusive learning environment that is responsive to the diversity of student characteristics.

## c. Personality

Personality is an individual's behavioral characteristics, encompassing relatively consistent patterns of attitudes, values, emotions, and communication styles across various situations. Each individual possesses a unique personality, formed through the interaction of internal and external factors, such as biological characteristics, life experiences, social environment, and psychological development.. According to Feist, personality influences an individual's motivation, cognition, and behavior, making it a crucial factor in distinguishing each individual's character. In an educational context, teachers need to understand student personality to design appropriate, adaptive, and sustainable learning strategies [33]. Research at Krapyak Wetan Public Elementary School indicates that variations in student personality significantly influence how they interact, participate, and respond to classroom learning.

The foundations of student personality formation can be viewed from two main aspects. First, the individual's interaction with their environment, which includes socialization with peers, teachers, and family. This interaction shapes social behavior patterns, such as the ability to cooperate, communicate, and empathize. Second, the individual's ability to explore oneself, namely the awareness to recognize potential, manage emotions, and control behavior in various situations. These two aspects are interrelated and develop dynamically along with students' learning experiences. A conducive school environment, such as that found at Krapyak Wetan Public Elementary School, plays a crucial role in supporting the development of positive personality traits through healthy social interactions and learning activities that encourage active student participation.

More specifically, student personalities can be classified into several types: melancholic, sanguine, phlegmatic, and choleric. Students with melancholic personalities tend to be analytical, meticulous, and perfectionist, but also possess high emotional sensitivity. Meanwhile, sanguine personalities exhibit extroverted, communicative, and adaptable characteristics in social interactions. Phlegmatic individuals are characterized by stable emotions, a calm demeanor, and a tendency to avoid conflict, often acting as a balancer in group dynamics. Choleric individuals, on the other hand, possess strong leadership qualities, are assertive, and goal-oriented. Research shows that these four personality types are found in classroom dynamics at Krapyak Wetan Public Elementary School and contribute to the learning process. Therefore, teachers are required to be able to understand and manage this diversity of personalities through a flexible approach, so as to create an inclusive, harmonious learning atmosphere that supports students' academic and social development optimally.

## d. Temperament

Temperament is a basic individual characteristic related to behavioral patterns, communication styles, and emotional responses to various situations. In psychology, temperament is often understood as the initial foundation that influences the formation of a person's personality. Abdullah tate that temperament reflects the unique style of an individual in responding to the environment, both emotionally and behaviorally [29]. In an educational context, understanding student temperament is important because it can provide insight into students' behavioral tendencies in learning, interacting, and facing academic challenges. Research at Krapyak Wetan Public Elementary School shows that variations in student temperament, such as sanguine, melancholic, phlegmatic, and choleric, influence the dynamics of classroom learning. Therefore, teachers need to understand students' temperamental characteristics as a basis for designing adaptive and responsive learning strategies.

Temperament formation does not occur instantly but is influenced by various interacting factors. One key factor is parenting style, which plays a role in shaping children's habits, attitudes, and emotional responses. Positive and consistent parenting will help shape a stable and adaptive temperament, while inappropriate parenting can lead to poorly controlled emotional responses [35]. Furthermore, genetic factors also contribute to the formation of temperament, as certain traits can be passed from parents to children. These factors form an innate foundation that then develops through experience and social interactions. Thus, temperament is the result of the interaction between heredity and environmental factors, shaping an individual's basic character from an early age.

In addition to parenting and genetic factors, psychological and emotional aspects also play a crucial role in temperament development. An individual's ability to manage emotions, control themselves, and respond adaptively to situations determines the quality of their temperament. Students with good emotional regulation tend to be able to adapt to the learning environment, interact positively with peers, and exhibit behaviors that support the learning process. Conversely, students with less than optimal emotional management require special attention and approaches from teachers. Therefore, understanding student temperament is a crucial foundation for creating inclusive, effective, and coherent learning. Teachers not only play a role as material deliverers, but also as facilitators who are able to manage the

diversity of student characters so as to create a conducive learning environment and support optimal academic and social development.

### Evaluation of Learning Outcomes

Evaluation of learning outcomes is a crucial component of the education system, serving to assess the success of the overall learning process. Etymologically, the term "evaluation" comes from the English word "evaluation," meaning assessment or giving a score [36]. In the educational context, evaluation focuses not only on final results but also includes assessing the learning process, the methods used, and the achievement of predetermined learning objectives. Evaluation plays a role in providing information regarding the quality of learning through specific indicators, standards, and criteria. In general, evaluation functions include selective, diagnostic, didactic, psychological, and administrative functions. Therefore, evaluation must be based on the principles of continuity, comprehensiveness, and objectivity, so that the results obtained truly reflect real conditions based on valid data and facts, not fabrications.

In practice, learning evaluation at Krapyak Wetan Public Elementary School is conducted using two main approaches: test techniques and non-test techniques. Test techniques are used to measure students' cognitive aspects through formative and summative assessments. Formative assessments are conducted periodically at the end of each sub-topic to determine students' level of understanding, while summative assessments are conducted at the end of the learning unit to assess overall learning outcomes [37]. The tests used include written, oral, and practical tests, tailored to the characteristics of the material and the students' developmental levels. Research shows that the use of these testing techniques helps teachers map students' intelligence and determine necessary follow-up learning strategies.

In addition to testing techniques, evaluations are also conducted through qualitative non-test techniques that emphasize the holistic process and student development. Non-test techniques include observation, interviews, and portfolio assessments, allowing teachers to obtain more in-depth information regarding students' attitudes, skills, and social interactions. At Krapyak Wetan Public Elementary School, these techniques are used to supplement test data, providing a more comprehensive picture of student development. Thus, evaluation results serve not only as a measure of academic achievement but also as a basis for providing constructive feedback. Teachers use this feedback to identify students' strengths and weaknesses and design more effective, individualized learning strategies for subsequent learning.

### 5. Conclusion

Based on research conducted at Krapyak Wetan Public Elementary School, it can be concluded that Krapyak Wetan Public Elementary School provides learning facilities that can create an inclusive school environment. These facilities include well-equipped classrooms, a library, an ICT lab, a canteen, and supportive school facilities. The implementation of the Merdeka curriculum and the appropriate school operational curriculum also helps Krapyak Wetan Public Elementary School accommodate the relevance of learning according to the individual variations of each student. Furthermore, the implementation focuses not only on academic aspects but also on the development of students' character and social skills. In this regard, individual variations are used to determine which learning strategies are most appropriate for each student's character. Adaptation to individual variations in intelligence competency, learning style, personality, and temperament at Krapyak Wetan Public Elementary School is also carefully considered to determine the final results of the learning process. These learning outcomes can be determined through summative, formative, or test-based learning evaluations, providing an overview of student conditions and achievements in the teaching and learning process.

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