BUILDING STUDENTS' INTELLIGENCE IN SD NURIL ISLAM PACITAN

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Abstract
This study aims to determine the teacher's strategy in building multiple intelligences and the obstacles experienced in developing multiple intelligences in students. This research is descriptive qualitative research. Data were collected through intensive interviews with school officials and teachers directly involved in students' daily learning. The interviewees were the grade 2 and grade 5 teachers of SD Nuril Islam Pacitan. Data collection was conducted on June 19, 2023. Researchers collected data by applying the following steps: observation to select schools that will be used as research locations, determine research locations, compile questions that will be addressed to sources, interview homerooms, researchers collect and compile data. The results showed that applying multiple intelligences at Nuril Islamic Elementary School is quite good. Children act and behave according to their age and can capture the learning provided according to the student's grade level. Teachers themselves must be more creative in creating a conducive learning atmosphere so that boredom does not occur and students can accept and apply the learning delivered by the teacher. The teacher must always be alert in dealing with some student problems if they have been unable to solve them. However, some less supportive aspects, such as qualified learning facilities and media, remain.
Keywords: Education, Learning, Multiple Intelligent, Students, Teacher

Introduction

Intelligence is the difference between humans and other living things. Intelligence can be a measure of a person's thinking ability. Intelligence in a person can be seen from their actions, thoughts, and learning process in everyday life. Intelligence is a process of rational and deliberate thinking to respond effectively to the environment (Weschler, 1944). Eggen & Kauchak (2010) also define intelligence as acquiring and using knowledge, solving problems, reasoning abstractly, and adapting to new situations. Feldman (2010) defines intelligence as the ability to understand the world, reason, and use resources effectively when faced with challenges. Henmon defines intelligence as the power or ability to understand. Sternberg (2009) defines intelligence as a purposeful and adaptive action or thought, whereas according to Utami (2019), intelligence can be nurtured, strengthened, or allowed to weaken.

Intelligence raises a lot of controversy because it gives rise to various definitions, tests, and theories. Arthur Jensen (in Santrock, 2007) argues that intelligence is generally inherited, and the environment typically plays a minimal role in influencing intelligence. Just like other human traits, each child's intelligence is also different. Many people assume that children's intelligence is inherited from parents who are also intelligent. A famous saying related to this is that the fruit does not fall far from the tree. According to Jensen (2007), for most people, environmental modifications can dramatically change their IQ scores. While genetic endowment may influence a person's intellectual ability, environmental influences and the opportunities we provide for children (and adults) will also make a difference.

Parents are an essential component in the process of children's intellectual development. According to Puspitasari (2017), parents' quality role in developing children's intelligence and emotional development gradually will encourage children's potential to grow into individuals who have high intelligence abilities, reasonable dynamic control, and intense mental and spiritual. Therefore, as children's most influential educators, parents must create a good environment during the education process. Without parents, children will lose their primary education intake, which causes them to lose direction and find it difficult to survive in real life (Jaelani & Ilham, 2019). According to Munajah (2021), teachers are essential in helping,

guiding, and transferring knowledge. Teachers have a strategic role in shaping the nation's character and developing student potential. The presence of teachers is irreplaceable by other elements, especially in our multicultural and multidimensional society, where the role of technology to replace the duties of teachers is minimal (Arifmiboy, 2016).

IQ, or Intelligent Quotient, is not a measure of intelligence. IQ is a qualification for the ability of rational thinking and logic (Pasek, 2015). According to the multiple intelligences paradigm (Gardner, 1993), it can be defined as an ability that has three main components, namely the ability to solve problems that occur, the ability to produce new issues that are faced to be resolved, and the ability to create something or offer services that will cause appreciation in one's culture. As the name implies, this theory means that human cognitive capabilities are better described in a set of potentials, skills, or intellectual intelligence, called intelligence (Fikriyah and Aziz 2018). According to (Armstrong, 2009) on multiple intelligences, Gardner seeks to expand the scope of human potential beyond the limits of IQ scores. According to (Najafi et al., 2017), the theory of multiple intelligences changed the traditional view of intelligence and mental abilities in education and cognitive science and significantly influenced educational procedures and training programs.

Based on the background description above, this paper is based on the importance of multiple intelligences in child development. The author is also interested and tries to study multiple intelligences further. There are differences in research from several articles. Therefore the researcher focuses on examining the role of teachers in developing multiple intelligences in elementary school-age children. In addition, this study also analyzes teachers' challenges in supporting the process of creating numerous intelligences.

Method

This research is descriptive qualitative research. Data was collected through intensive interviews with school officials and teachers directly involved in daily student learning. The interviewees were the vice principal of grade 2 as the representative of the lower grade, and the vice principal of grade 5 as the representative of the upper grade of SD Nuril Islam Pacitan. Data collection was conducted on June 19, 2023. The observers had to observe the actual situation in the school about how multiple intelligence was implemented in SD Nuril Islam. Observers used nine questions covering nine types of multiple intelligences given to the relevant teachers. The researcher collected data by applying the following steps: observation to choose a school that will be the location of the research, determining the location of the study, compiling questions that will be addressed to the sources, interviews with classmates, researchers collect and analyze and conclude data.

Finding and Discussion
Teacher strategies for building multiple intelligence

The theory of multiple intelligences was discovered and developed by Howard Gardner. Gardner defines intelligence as the ability to solve problems and produce products in various settings and real situations. Intelligence is not a person's ability to answer IQ test questions in a closed room independent of his environment. However, intelligence contains a person's ability to solve real problems in various situations.

Gardner's discovery of a person's intelligence has changed the concept of intelligence. According to Gardner, a person's intelligence is measured not by written tests but by how a person can solve real problems in life. Gardner (2003) suggests multiple intelligences because people have different powers of understanding and contrasting styles.
The types of multiple intelligences
Verbal-Linguistic Intelligence

Verbal-linguistic intelligence is the ability to use language, including one's mother tongue and foreign languages, to express one's thoughts and understand others. Using words is

the primary way to think and solve problems for people with this intelligence. Linguistic intelligence is also called verbal intelligence because it includes the ability to express oneself orally and in writing and the ability to master foreign languages.

From the research results, Grade 2 children struggle to express opinions and are still confused about speaking one language. This is also due to the habit of using language at home. Children are focused on academic and religious mastery, and foreign languages are one of the local contents that children are not too focused on, so they still have difficulty mastering foreign languages,

In general, grade 5 children can explain the main point but cannot yet elaborate their opinions widely, especially when the material requires them to discuss. Some of them are still unable to express their thoughts. They are still stiff because they are not used to it, but they can accept and understand the opinions conveyed by others.

The effect of the use of Indonesian at home, children have difficulty using their mother tongue, namely Javanese, and during school, children use Indonesian more often. Thus, children have not used Javanese. In addition, in mastering foreign languages, for example, English, children are still not used to it because this is caused by the exclusion of English from compulsory subjects in the classroom. So it can be concluded the consequences of the policy of eliminating English subjects can trigger a lack of children's ability to master foreign languages.

Logical-Mathematical Intelligence

Mathematical intelligence is the ability to reason, recognize patterns and rules. Logical intelligence can be defined as high reasoning ability. Children with this type of intelligence can analyze problems logically. They think conceptually about numbers, relationships, and patterns. Program Based Learning was implemented in grades 2 and 5, where they were asked to solve a problem and find a solution. During the implementation, Grade 2 and 5 children could provide a solution and reasoning for the given situation, but to present it, they tend to feel stiff because they are not used to this method. In mathematical logic, they could master mathematical methods as taught by the teacher, elementary mathematics.

Spatial (Visual) Intelligence

Spatial intelligence relates to the ability to accurately perceive color, direction, and space or, rather, the ability to understand images and shapes.
At the age of grade 2, children can understand shapes, flat shapes, and colors, but for direction, they only use gestures using an object in the same direction as the object in question. Of course, drawing becomes a fun activity. Students can recognize and use primary colors at this age even though they cannot provide appropriate gradations because this is taught in the upper grades.
For grade 5 students, teachers have taught students to mix colors to produce other colors, and students are free to create new colors as they wish. Students can also recognize directions but need directions using a compass or a guide from the teacher. Students have also been able to acknowledge flat and spatial shapes.

Rhythmic-Musical Intelligence

Rhythmic-musical intelligence is the capacity to think about music, such as hearing, recognizing, remembering, and manipulating musical patterns. Musically intelligent people have a strong appreciation for music, easily remember songs and melodies, understand timbre and composition, can distinguish differences between tonal patterns, and enjoy being immersed in music. The ability to play instruments comes naturally to people with musical intelligence.
SD Nuril Islam has extracurricular facilities such as "Duror," "Rebana" and a choir team. This can be a supporting component for implementing the process of developing students' musical intelligence and a venue for performances in school events. Most students are very interested in extracurricular activities that intersect with music. Besides the extracurricular side, teachers usually invite students to sing in class, especially when audio instruments generally accompany music-related subjects.

Physical-Kinesthetic Intelligence

Physical-kinesthetic intelligence is the ability to use the whole body to express ideas, feelings and use the hands to produce or transform something. People with an advantage in kinesthetic intelligence tend to have strong feelings and a deep awareness of physical movements. They can communicate well through body language and other forms of material behavior. They can also perform tasks well after seeing others do them, then imitate and follow their actions. However, people with this intelligence often feel uneasy when sitting for relatively long periods and even bored.

In grade 2 children, they usually learn to practice creating a shape according to the theme determined by the teacher using clay or plasticine. Besides that, they also create art using splashing techniques, practice sports and memorize Pancasila gymnastics.

In grade 5 students, they can create a work of their own hands or create something from the equipment they bring themselves, such as a source of electricity from a dynamo connected to a lamp. When the dynamo is turned, the lamp lights up, making a mini stove from a can perforated from the side and giving a candle inside to heat the bottom of the can that looks like a mini frying pan. Children also try to fry quail eggs. Being taught material from the teacher and then students practicing on their own either at school or home with assistance can free children to move according to their creativity. Besides getting it from the teacher, they also get ideas like that through the internet. In addition to hand creativity, they are active in physical activities such as sports, where grade 5 students often participate in competitions related to physical activities.

Interpersonal Intelligence

It is the ability to read social signs and signals, verbal and non-verbal communication, and appropriately adjust communication styles. People with high interpersonal intelligence negotiate relationships with skill and finesse because they understand the need for empathy, compassion, understanding, assertiveness, and expression of needs and desires.

According to the head of class 2, some children are active and communicative, such as when talking to the teacher. Some children do not want to talk if they are not spoken to. The percentage of children actively talking and not is 60% communicative, and 40% are still less communicative. Some children are intelligent when asking questions or criticizing the teacher. Children dare to come forward. Some children can be independent of an object that belongs to them or is their responsibility, and they can mingle and build good relationships like children. When they argue, the homeroom teacher must be available to intervene to provide a solution to the problem.

Grade 5 children build self-confidence in their learning and can communicate and have opinions. It's just that children in the choice of words are somewhat less precise but with a meaning that can be understood. They can get along with their peers even though they occasionally fight because they have unstable emotions and are influenced by puberty. The teacher handles the handling when there is an argument for separating the child who is arguing and tells to apologize and settle with the child's parents. So that parents do not also advise them at home and do not misunderstand. Usually, if a child is naughty when he is wrong and causes him to fight with his friend at home, he complains to his parents and even complains that his friend bullied him. Bringing together the parents of both parties to the quarrel aims to avoid misunderstandings between children and parents.

Intrapersonal Intelligence

Intelligence comes from understanding oneself thoroughly to face, plan, and solve various problems. People with this intelligence tend to have high self-awareness where they can process clear goals about everything done now and in the future.
In grade 2, students can understand their capacity. They can recognize an activity that they can do or not. Grade 5 students struggle while searching for their identity, so they still need

direction, such as telling them what to do or leaving something behind. However, they can recognize their shortcomings in certain areas that they understand.

Naturalistic Intelligence

This is recognizing and classifying various species in an environment, including flora and fauna. People with naturalistic solid intelligence are interested in the outside world or the animal world, which starts early in life. They love subjects, stories, and shows related to animals and natural phenomena.

According to Gardner, children with naturalistic intelligence can be more in tune with nature and its surroundings. They are susceptible and aware of the changes that occur in their environment. Providing opportunities for children to interact with nature and their surroundings is vital in enhancing this intelligence. While enjoying outdoor activities, children will also learn to appreciate and maintain the diversity of the natural environment.

To improve this intelligence in grade 5, the class teacher invites children to study outside the classroom, observe every growing plant and write it down as a simple observation. Improving naturalistic intelligence in grade 2 is enough by doing simple things. Learning that has been done is making crafts from clay. In addition, introducing the form of this activity can also improve students' motor skills to feel the difference between clay and other soils. Another activity in improving naturalistic intelligence is nature *tadabbur* activities, outbound carried out in the open with an exploration system, so in addition to getting material, students can also observe the surrounding environment.

Obstacles that hinder the development of multiple intelligences

Nawawi (1989) states that in addition to supporting factors, there are also inhibiting factors. These obstacles can come from the teacher himself, students, family environment, or facility factors. In this case, researchers identify the barriers that occur in developing multiple intelligences in SD Nuril Islam Pacitan students into two categories, namely internal and external factors of students. Where internal factors are components that come from the students themselves. The intelligence of each child is, of course, different. They have their abilities that have nothing in common with each other. This obstacle can be exemplified by children who are quickly bored and easily bored, which will hinder the child's learning process. From these problems, teachers must have creativity that can build student motivation and make students interested so that students can comfort themselves in learning.

Then, external factors are factors obtained from outside the student. External factors can be in the form of student support components such as facility provision. The school building of SD Nuril Islam is still new, so some facilities are still being sought, such as a library and several sports facilities. In addition, after digging deeper, some teachers are not teachers with a background in education majors. But in terms of experience, it does not significantly affect students. They are still able to accept the material provided by the teacher. However, teachers must be able to adapt themselves to the educational environment, which is a challenge for the teachers themselves.

The role of teachers in developing multiple intelligences at SD Nuril Islam Pacitan is crucial. They are vital catalysts in shaping and nurturing students' diverse intellectual capacities. First, teachers are responsible for identifying and recognizing the unique multiple intelligences possessed by each student. Through observation and assessment, they can better understand individual strengths and weaknesses, paving the way for personalized learning experiences. Second, teachers must implement diverse learning approaches catering to different intelligences. By using various learning methods such as visual aids, auditory materials, hands-on activities, and interactive group discussions, teachers create a dynamic and inclusive learning environment that encourages the development of multiple intelligences.

In addition, teachers act as facilitators of interactive learning experiences, encouraging active participation from students. They organize collaborative projects, role-playing exercises, and group activities that require the application of different intelligences. This approach

improves students' cognitive abilities and promotes teamwork and social skills. Support and positive teacher reinforcement are essential for students' self-confidence and motivation. Teachers instill a sense of accomplishment and confidence in their potential by recognizing and praising students' efforts in utilizing their intelligence. In addition, teachers are well-equipped to identify and address learning barriers that may hinder students' development of multiple intelligences. By offering guidance, patience, and encouragement, they help students overcome challenges and unlock their full cognitive potential.

Conclusion

In conclusion, this research on building students' intelligence at SD Nuril Islam Pacitan has shed light on applying multiple intelligences in the school setting. The study utilized a descriptive qualitative approach involving intensive interviews with school officials and teachers directly engaged in students' daily learning. The 2nd-grade teacher and 5th-grade teacher of Nuril Islam Pacitan Elementary School were the primary interviewees.

The research findings indicate that implementing multiple intelligences at Nuril Islamic Elementary School is reasonably practical. The student's behavior and performance align with their respective age groups, demonstrating an adequate grasp of the curriculum tailored to their grade levels. The teachers play a significant role in fostering a conducive learning environment, which helps prevent boredom and encourages students to engage with the material presented actively.

However, the study also highlights specific challenges that hinder the optimal development of students' multiple intelligences. One notable obstacle is the lack of well-equipped learning facilities and media, which can limit the scope and effectiveness of the teaching process.

To enhance the multiple intelligence development of students at SD Nuril Islam Pacitan, the school administration and teachers must address the existing shortcomings in learning facilities and media. Investing in qualified resources and innovative teaching tools can significantly contribute to a more comprehensive and enriching student educational experience.

Furthermore, teachers should continue exploring and employing creative approaches to instruction, allowing for diverse learning opportunities catering to individual students' unique intelligences. By being attentive to students' needs and challenges, teachers can provide the necessary support to help students overcome any difficulties they encounter in their learning journey.

Overall, the research emphasizes the importance of a collaborative effort among school officials, teachers, and other stakeholders to improve the application of multiple intelligences in the school continuously. By doing so, SD Nuril Islam Pacitan can nurture well-rounded and intellectually capable students better prepared for future challenges and opportunities.

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