



Multiple Intellegences-Based & Learning Innovation Towards Era 5.0

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ABSTRACT

The development and advancement of technology at this time is very beneficial for human life, especially in the world of education where with the development of this technology students are expected to improve their performance in lessons. But mostly what happens at this time is the lack of teacher attention to the intelligence possessed by the child. Every child certainly has different intelligence, for that teachers are required to be able to understand and analyze the intelligence possessed by their students. With this multiple intelligence-based learning innovation, teachers can improve learning outcomes according to the abilities and intelligence possessed by each child. The purpose of this research is to find out how multiple intelligence-based learning is appropriate in the teaching and learning process. The method used from this research is quantitative method by using Google Form and WhatsApps application. The results of this study indicate that multiple intelligence-based learning is very well applied in learning. The conclusion of this study explains that the application of multiple intelligence-based learning is very good for improving children's learning outcomes so that children's achievement can increase from the previous one. The limitation of this research is that researchers do not make how many percent of educators who have been able to apply multiple intelligence in learning and the extent of development that has been achieved by educators, for that it is hoped that further researchers can conduct more complete research

Keywords: *Era 5.0, Innovation, Multiple Intelligence*

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INTRODUCTION

Humans are the most perfect creatures of God's creation compared to other creatures of God. Because humans are given reason by God so that they can think and usually distinguish which things are good and which things are bad for themselves. (Haenssle et al., 2018; van der Leest et al., 2019). So that with the potential of the mind, humans can develop new ideas in order to solve a problem that arises in the life they are facing. (Fink et al., 2018; Purser et al., 2020; Shankardass et al., 2018). Because along with the development and change of the times there will certainly arise a new subject matter, the subject matter can be in the form of discoveries that have never existed in previous times, such as the development and advancement of technology, which in ancient times people did not know technology. (Borel et al., 2019; Soukoulis & Bohn, 2018; Toxiri et al., 2019). Therefore, humans are required to be able to adapt and be able to solve these problems by using their minds. Every human being has potential and abilities that differ from one another. because in every person must have their own advantages and disadvantages that have been determined by God, this potential can be in the form of the ability to think, speak logically and so on.(C. Wu et al., 2020). For example, there are those who are experts in learning math, but less in learning sports, and there are those who are experts in music but less in computers. (Batlle et al., 2020; Byambasuren et al., 2020; Martinez, 2020). Therefore, humans must be able to appreciate and realize the abilities possessed by each person. (Chen et al., 2018; Feng et al., 2019; Y. Liu et al., 2018). The differences in the various forms of self-ability are then formulated into a theory, which is often known by many people as multiple intelligence theory. As this theory can be utilized by educators to develop and improve the abilities possessed by each child.

The amount of potential possessed by each learner, this is what makes educators required to be able to develop their duties as educational personnel. However, most of what is found in the field at this time is that educators have not been able to fully facilitate and develop the abilities of the interests and talents possessed by their students. (Adl et al., 2019; Pasolli et al., 2019; Saunders et al., 2018). Most educators tend to pay more attention to the IQ intelligence of children. Therefore, in the theory of multiple intelligence, there is a principle that explains that every child has multiple intelligences and is unique to the potential contained in him. So that by using this theory educators can find out what potential the students have.

Education has tried to provide the best understanding and in accordance with Islamic values so that students can carry out the life that has been entrusted by Allah as caliph on this earth. (Sahin, 2018; Suyadi et al., 2020; Yudiawan et al., 2021). However, most of what happens at this time is that education carried out in schools generally today has the same problem, namely the lack of methodology in learning activities, so that it can cause less interesting lessons in education. (O.Nyumba et al., 2018; Snyder, 2019; Wang et al., 2019). So that it makes students bored and lack enthusiasm in participating in learning because most teachers provide material monotonously. For this reason, innovation is needed in education, in order to improve children's learning outcomes. One

of the ways that teachers can use is by implementing multiple intelligence-based learning in the classroom.

This multiple intelligence-based learning can allow children to have a great opportunity for the success of the learning they are undergoing. Because learning based on multiple intelligence theory emphasizes and understands the advantages of intelligence in a child, which will usually develop through the guidance of a teacher. (Bordeleau et al., 2020; Malik et al., 2020; Vinoth & Datta, 2020). In this case the teacher plays a very big role in training and honing the child's abilities according to the intelligence that the child has. so that children will be able to achieve according to their interests and talents. (MacIntyre et al., 2020; Moorhouse, 2020; Scherer et al., 2019). However, most of what happens is that teachers only pay attention to intelligence in the IQ field without paying attention to other intelligence. So that children who are less in the field of IQ can achieve less in the teaching and learning process. Whereas in humans there is a lot of potential that needs to be developed and trained by educators.

In this multiple intelligence theory, there are nine kinds of intelligence that exist in children that educators need to know and understand. (Adadi & Berrada, 2018; Barredo Arrieta et al., 2020; Li et al., 2020). These intelligences include verbal lexical intelligence, where the child has the ability to speak well and effectively, and is able to influence others through their words. Furthermore, mathematical logic intelligence, where the child is relatively fast in counting activities and likes strategy games such as chess. Next is visual spatial intelligence, where children are able to generate ideas visually. Next is kinesthetic intelligence, where children are quicker to understand fine motor tasks such as knitting, sewing, editing and writing. Furthermore, musical intelligence is that children memorize songs faster and have more enthusiasm if introduced to songs. Next is interpersonal intelligence, where children are easy to understand someone's feelings, and are always leaders among their peers. Furthermore, intrapersonal intelligence, the child has an independent and confident attitude. Naturalist intelligence, where a child loves the outdoors and has a deep curiosity. The last is existential intelligence, where the child likes to ask something that their peers have never thought of.

After knowing the nine kinds of children's intelligence, then a teacher will be able to carry out multiple-based learning, by creating a learning strategy. (Kendal et al., 2018; H. Liu et al., 2018; Y. Wu et al., 2019). Strategy is a tactic or method that can be used by an educator in accordance with the learning indicators that have been set before. The core of this multiple intelligence is the creation of compatibility or harmony between the teaching style of the educator and the learning style of the students, so that the process in learning is not monotonous, and can make a student motivated in learning, which later students will have more enthusiasm in following the lessons so that the final results will be in accordance with what is expected by the teacher and his parents.

The first step that must be taken by a teacher in implementing a learning strategy is to prepare a lesson plan or what is known as a lesson plan. (Backfisch et al., 2020; König et al., 2020; MacDonald et al., 2020). In multiple intelligence, the preparation of lesson plans must be more creative, the creative intention here is that the variety in learning

methods must be adapted to the intelligence of the students. if a child follows the learning, it should be able to make students learn actively, can provide real experiences that are not easily forgotten. (Conner et al., 2018; Mueller et al., 2018; Zhu et al., 2020). There are many methods in learning that can be used by teachers, one of which is to use the group discussion method, where a teacher will provide material to students which will be discussed and solved together with their group members. (Deringer et al., 2019; Y. Zhang et al., 2020). In this group discussion method, students will exchange ideas and share information about solving the material. So that it can stimulate the creativity of children in expressing ideas and ideas of their opinions.

Based on relevant research related to the study material that the researchers are discussing, there is research conducted by M.Thufail Muttaqin, a postgraduate student at Nurul Jadid University Paiton Probolinggo. In his research, M. Thufail Muttaqin said that multiple intelligence-based learning is a form of innovation in learning that can be chosen by teachers, using an interdisciplinary approach in expanding learning materials, using multiple learning models, and using authentic assessment in evaluating lessons, which aims to accommodate the diversity of intelligence contained in children. (Hasanah, 2018). In addition, according to Tri Sukitman, PGSD Program STKIP PGRI Sumenep. In his research it is said that the concept of multiple intelligence-based learning can be used as a basis for developing and improving learning strategies in the classroom. Learning will feel more fun and easy to develop by looking at and applying multiple intelligence concepts. Meanwhile, according to Titin Nurhayati as a lecturer at Al-Falah Sunniyyah Islamic College Kencong Jember. This multiple intelligence theory arises because it is a response to IQ theory which only limits intelligence to mathematical logical abilities and linguistic abilities. (Nurhidayati, 2016). As contained in the theory of multiple intelligence, there are nine kinds of intelligence possessed by every human being. Through the relevant research that has been obtained, it can be concluded that multiple intelligence is very important to apply when doing *pelaajaran*, because by applying multiple intelligence, the learning will feel more enjoyable and easily understood by the students.

The purpose of this research is due to the lack of teacher attention to the intelligence that exists in the child, mostly at this time the teacher is more inclined to pay attention to IQ intelligence only, and ignore the other intelligence that exists in the child, it should be known that every human being has different intelligence and abilities. This is a blessing and a decree that has been given by Allah to humans, which between one and the other must have differences. For this reason, as a teacher, you must be able to understand and recognize every ability that your students have. Especially now that humans live in an age of technological progress and development, where humans live side by side with technology, this is what makes educators today pay less attention to the potential intelligence of the child, educators focus more on learning related to technological advances, without paying attention to the potential of the child. Therefore, in this day and age, teachers must be able to apply various kinds of learning strategies based on multiple intelligence in doing learning, for that in this study, researchers will find out to what

extent the application of multiple intelligence-based learning has been achieved by a teacher.

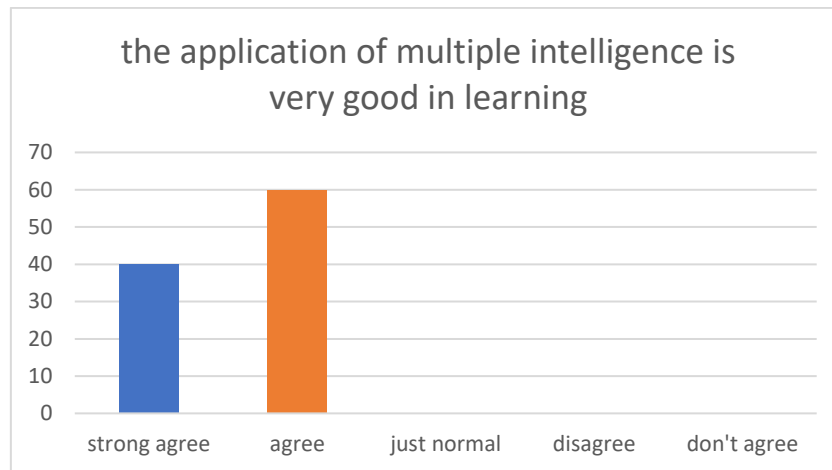
RESEARCH METHODOLOGY

In this study, researchers used a quantitative survey method, in which researchers distributed questionnaires in the form of statements to teachers in Tanah Datar. (Hay-Lombardie et al., 2018; Kim et al., 2021). In this study the respondents will tell the events that are the target of researchers in conducting research. What is meant by the quantitative survey method is a method used about conditions in the form of numbers that are certain of the validity of the data and can be accounted for. Researchers only conducted research with a questionnaire distribution system without conducting direct interviews with the intended teachers when at the time of implementation the school was still in dire need of technology such as in online learning. This time was chosen because online learning is the right time to implement multiple intelligences-based learning innovations towards era 5.0.

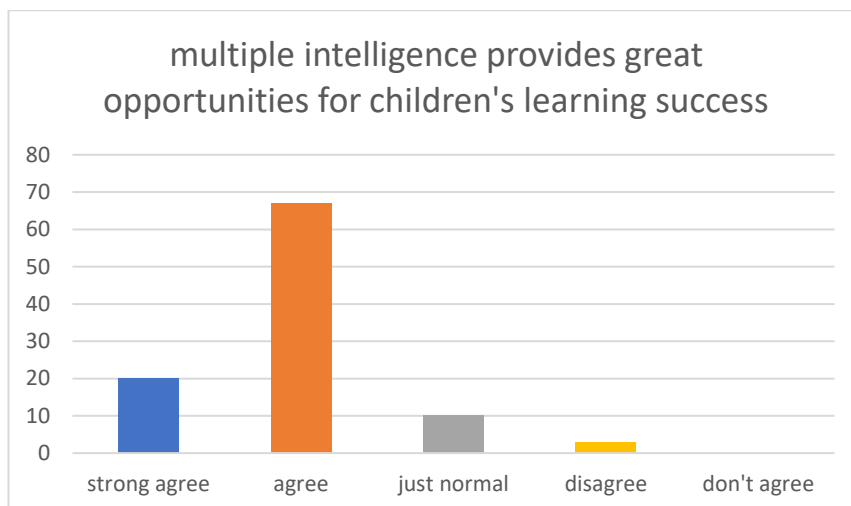
RESULT AND DISCUSSION

In this study, researchers conducted research using data analysis techniques in the form of diagrams. This technique was chosen because it presents data with valid information and is easily understood by many people, so that people will easily know what the main problems are. (Dhiman & Kumar, 2019; Raissi et al., 2019; W. Zhang et al., 2020). By using techniques like this, researchers get a lot of arguments from distributing questionnaires that have been done before. This data analysis technique will manage information to get a conclusion that is in accordance with the answers that have been given by the respondents. Through the questionnaire that has been distributed, 40 people participated in becoming respondents related to the problems raised. From the respondents who have been obtained, conclusions will be drawn through respondents related to learning innovations in the Tanah Datar area.

In this study, researchers submitted questionnaires and conducted surveys to several sources or samples of researchers. Researchers chose a questionnaire with the reason to make it easier to collect data that has been obtained through the results of several respondents who are research samples given in the form of questions that will be answered, then the answers will be collected and used as data, so that they can be concluded into research results. The user of the questionnaire can also be used as the basis for the preparation of the results and quickly get a response from the source. With a questionnaire, it will speed up the process and the time used will not be wasted much. Thus the researcher asked several questions related to how multiple intelligence-based learning towards the 5.0 era.

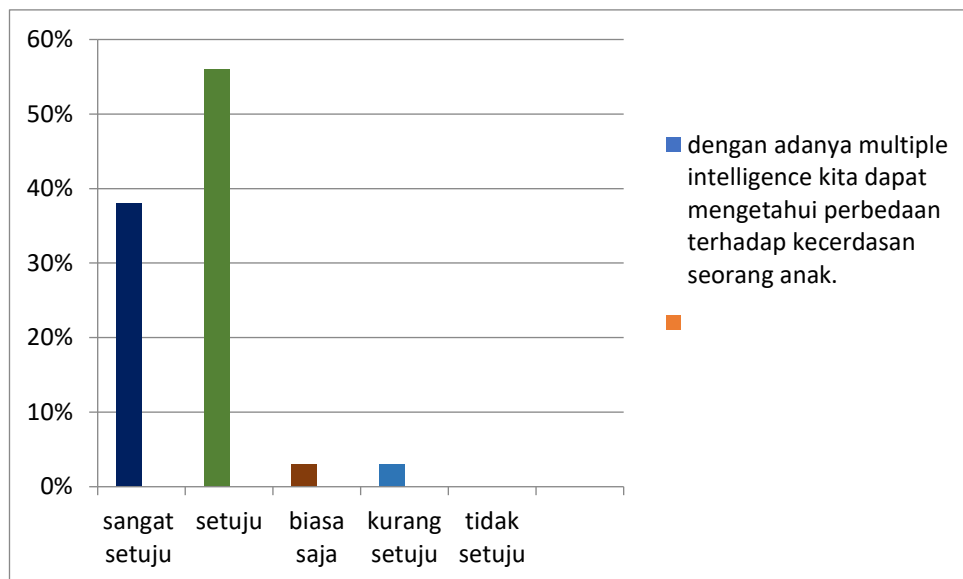


Based on the survey results above, it can be seen that 60% of people agree with the application of multiple intelligence in learning, and the remaining 40% also strongly agree with the application of a system like this. So from the two respondents who have been given it can be concluded that the application of multiple intelligence is very well done in the teaching and learning process, for that teachers are highly expected to be able to apply this multiple intelligence in learning, so that educational goals can be achieved properly, one way is by using this multiplte intelligence method. As a qualified and professional teacher he must first find out and understand what is meant by this multiple intelligence, how the application is suitable to be given, then he can apply and teach methods like this in learning.

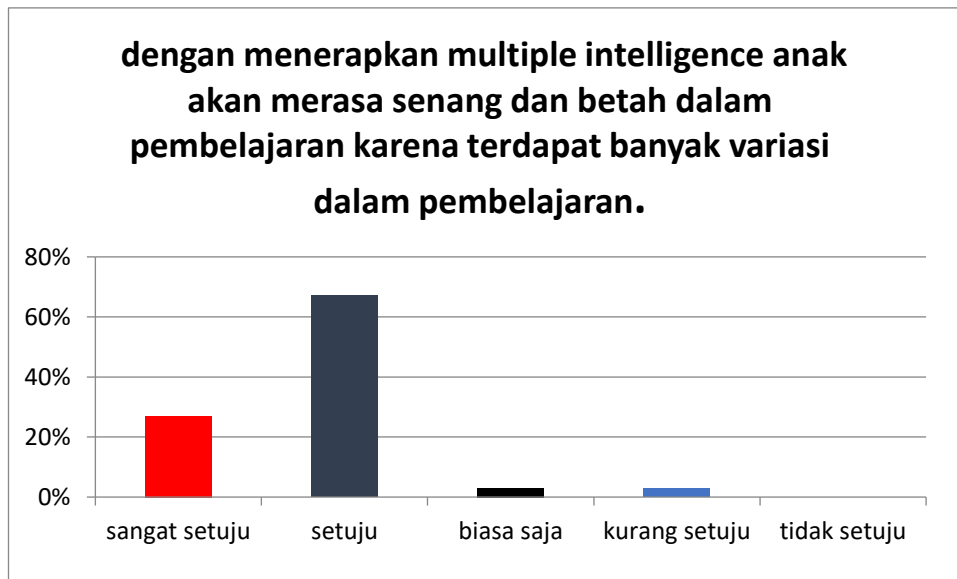


From the picture and survey results above, it can be seen that there are 67% of people who agree, 20% of people strongly agree, 10% of ordinary people and 3% of other people who disagree. Here there are four differences of opinion in which the dominating opinion is the opinion that agrees. So it can be concluded that multiple intelligence does not necessarily fully provide a great opportunity for children's success in learning. This is because each child has a different intelligence, a child will more easily learn and understand learning in accordance with the intelligence contained in him. Therefore, as a teacher, as well as education personnel, he must be able to read, understand and analyze

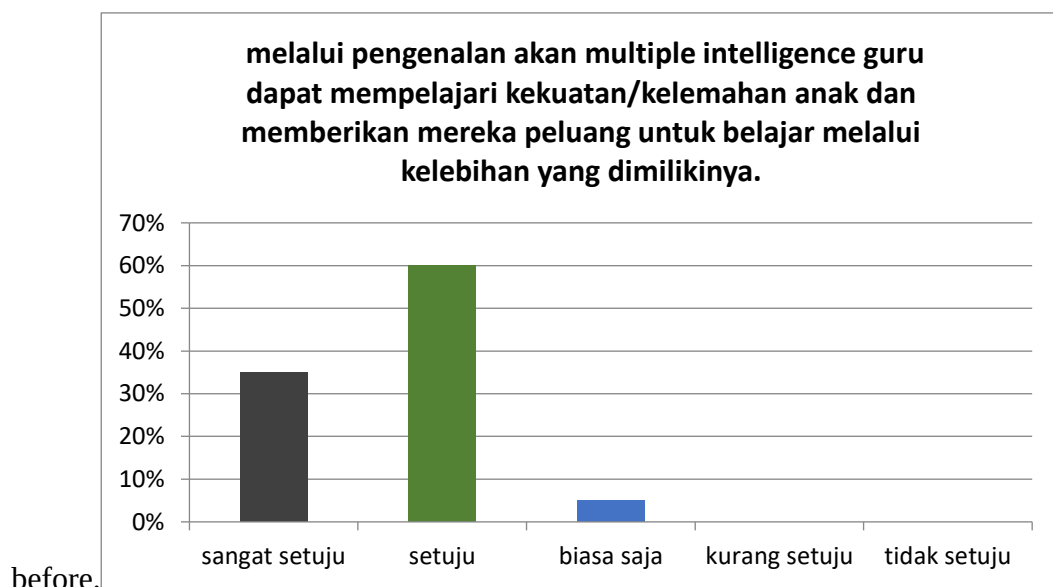
what kind of intelligence is contained in each of his students. Only then can a teacher guide and develop the potential contained in his students.



Regarding the percentage above, it can be seen that there are different opinions given by respondents 38% of people who strongly agree, 56% of people agree, 3% of ordinary people and 3% of others disagree. From the picture above, it can be concluded that many agree that with the multiple intelligence of a guiru can know the differences in a child's intelligence. This is because the multiple intelligence-based method describes nine kinds of intelligence possessed by humans, among the nine intelligences are verbal linguistic intelligence, mathematical logic intelligence, visual spatial intelligence, kinesthetic intelligence, musical intelligence, interpersonal intelligence, intrapersonal intelligence, naturalist intelligence, and existential intelligence. After knowing the various kinds of intelligence that children have. Only then can a teacher provide lesson methods that are in accordance with the child's abilities.

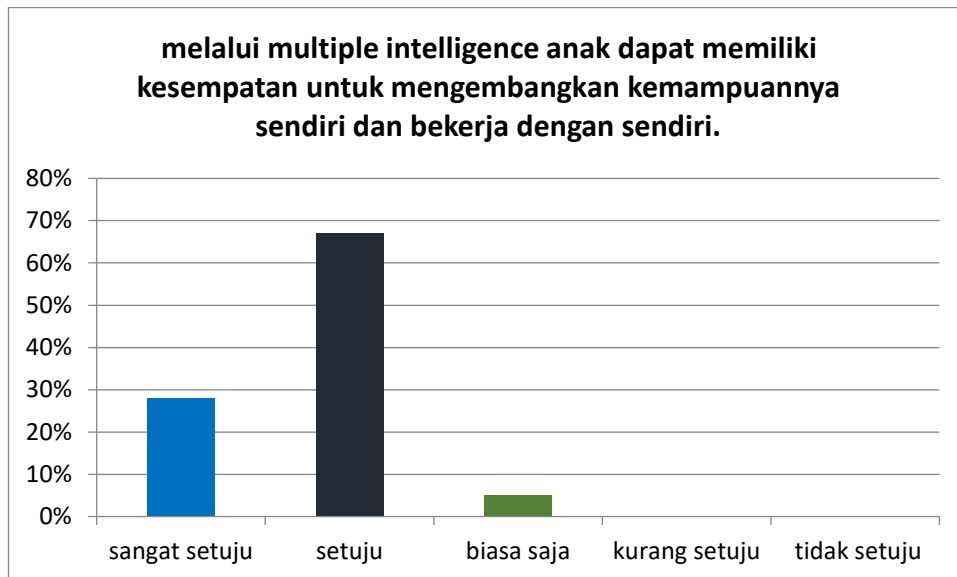


Based on the picture above, it can be seen that there are 27% of people who strongly agree, 67% of people agree, 3% of people who state that it is normal, and 3% others disagree. From the above data it can be concluded that a lot of people agree with applying multiple intelligence, where children will feel happy and at home in participating in learning. because in this method there are many variations of learning that can be done by a teacher in delivering material and explaining lessons in the classroom. One of the variations that can be done by a teacher is to apply a democratic learning style where students are given the freedom to be active in conducting discussions and the teacher is only tasked with controlling the course of the discussion so that it does not expand from the material that has been given.

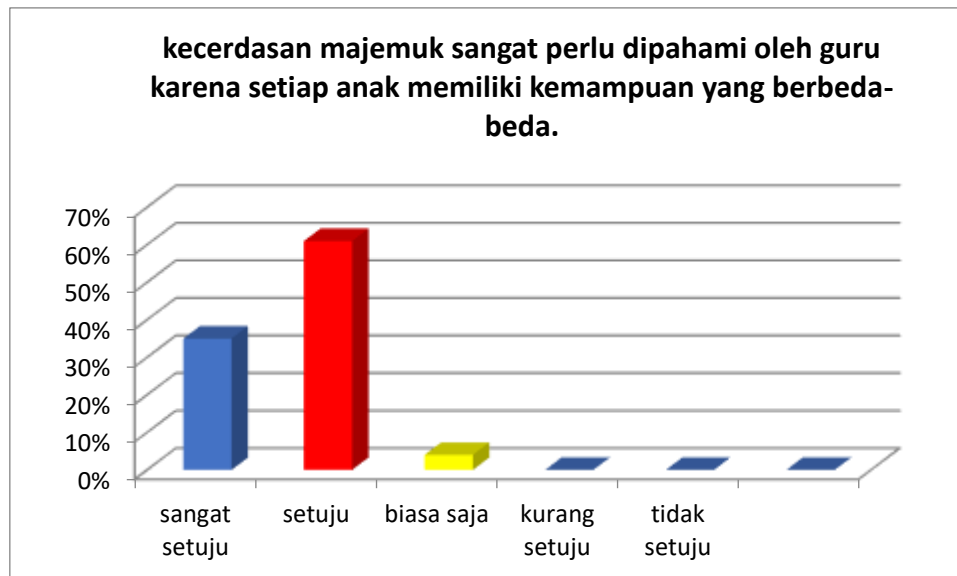


Through the recognition of multiple intelligences, teachers can learn about children's learning strengths/weaknesses and give children the opportunity to learn through the strengths of their intelligence. Based on the results of the survey conducted,

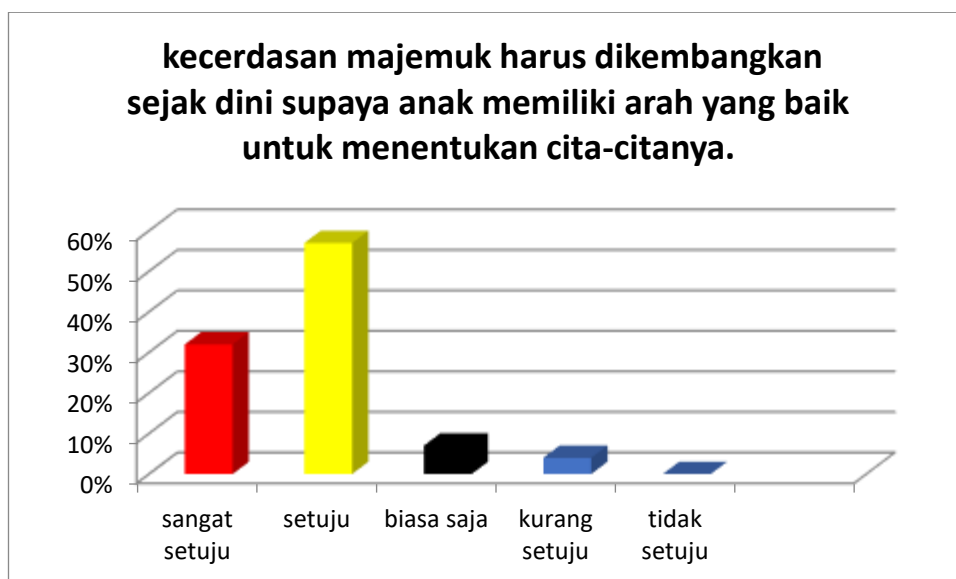
there are three different opinions chosen by the respondents, the most common opinion is the opinion of agreeing which amounts to 60% of 100% of the respondents, this indicates that by knowing the weaknesses and strengths of children's learning, a teacher can train and hone where the child's learning weaknesses lie and the teacher can increase the strengths/skills possessed by a child so that the child will feel happy and feel happy about his abilities, which will have an influence on his learning outcomes so that the child will have special skills or expertise in himself.



Based on the results of the research that has been conducted, the diagram above shows definite information that there are different opinions that can be said to be in line with the survey in the diagram above. Based on the survey above, it can be concluded that with multiple intelligence, students can develop the talents and abilities they have and can understand a lesson independently or without the guidance of a teacher. However, teachers still have to monitor students so that the process can run well and smoothly. With multiple intelligence, students can explore the abilities within themselves that are not yet known and have not been released by these students, and can make students think ahead in facing a problem that exists and that will hinder these student later.

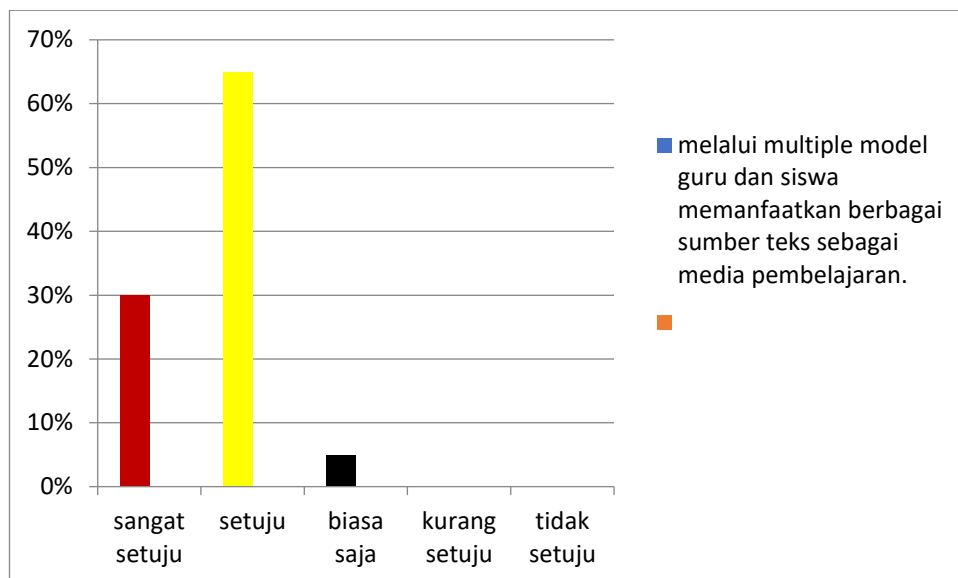


Multiple intelligences need to be understood by teachers because each child has different abilities. In relation to the survey results that researchers have conducted, there are at least 35% of people who strongly agree with this, 61% of people agree, and the remaining 4% state that it is normal. So it can be concluded that as a good teacher must be able to fully understand the different abilities of his students. This difference is proof that diversity must be used as a reference to expand and develop the material that will be taught later by educators to their students, this has a great relationship to the learning outcomes of students, the broader the teacher develops and provides material, the greater the success of learning, on the contrary, if a teacher is less able to develop material, the knowledge and success of student learning can be said to be lacking.

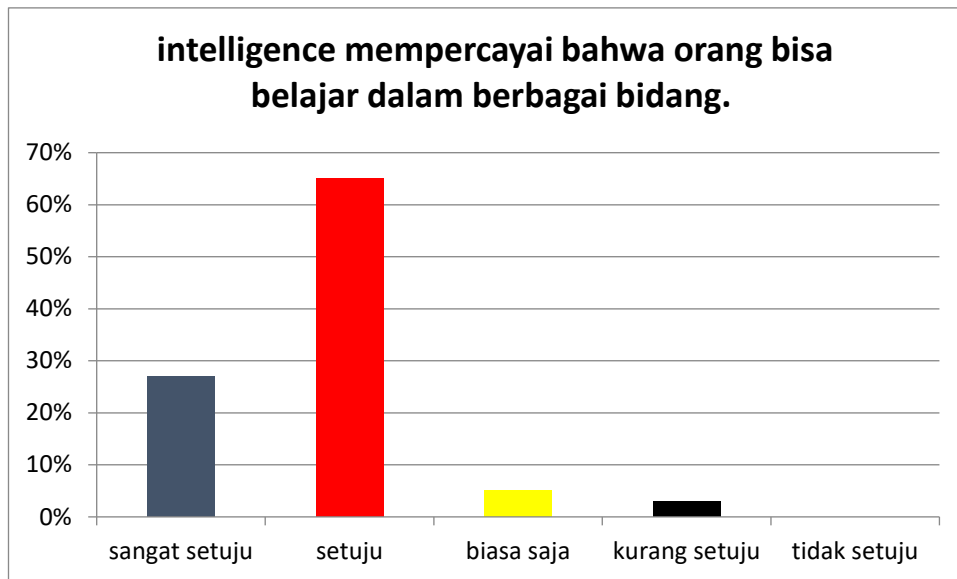


Multiple intelligence must be developed from an early age so that children have a good direction and purpose to determine their life and future goals. Based on the survey results that have been conducted by researchers, there are four different opinions, namely

32% of people strongly agree, 57% of people agree, 7% of people state that it is normal, and 4% of other people disagree. Of the four opinions above, many agreed, this is because if a child has been given direction from an early age then over time he will prepare himself and try his best to reach his goals. Here the role of parents and teachers is very important, especially the role of parents because a child spends more time with his parents at home, and it is parents who know and understand more about the development of their children.



Based on the results of the answers given by the respondents, in the diagram above it can be seen that there are three different opinions on the existence of multiple models of teachers and students can utilize various text sources as learning media. The most dominant opinion is the agreed opinion which amounts to sixty-five percent of the one hundred percent of respondents who responded. This is because the text is understood not only in the form of spoken words, but can be in the form of images, movements and others, which will affect communication, especially when learning is taking place. the application of multiple modal is currently very important especially in the development and advancement of technology today. Through this multiple capital can allow a teacher to meet the needs of different students, when providing learning in the classroom.



Based on the diagram above, it can be seen that there are 4 different opinions given by the respondents, of which there are 27% who strongly agree, 65% who agree, 5% who are normal, and 3% who disagree. The most dominant choice is the choice to agree, because the majority of people believe that everyone can learn in various fields, this is because every human being has a mind that can be used to think, analyze, understand and examine an object. This indicates that everyone can learn in various fields, but the chances of succeeding in all fields are very small. This is because everyone has different abilities and capacities, which is the reason why some respondents disagree. Different capacities will not allow someone to master various fields, if someone has a fast grasp and a strong grasping power then he will understand and master all fields.

From the survey that has been conducted, it can be concluded that multiple intelligence-based learning is very important to be applied in this day and age, especially now that humans are in era 5.0, where humans and technology live side by side with each other, therefore as an educator must be able to apply and apply multiple intelligence-based learning when doing classroom learning. If a teacher cannot carry out this well, then education will be threatened by technological advances, in addition to having a good impact, technological advances also have a bad impact on child development, children will be carried away and carried away by the influence of these technological advances, for example children will spend a lot of time playing hand phones, therefore educators and parents must be able to control and direct their children so that they are not carried away by technological advances.

As a teacher educator, teachers must have good skills and expertise in applying this multiple intelligence, so that their students will feel comfortable and at home in following the learning process in the classroom. If the child already feels comfortable and at home then what is conveyed by the teacher he can understand and understand well. In addition, teachers need to pay attention to the potential of their students, teachers must know where the shortcomings and strengths of their students are, so that teachers can train and hone the potential of students well. If something like this has been done by the teacher, then

gradually the students will experience changes for the better, and can excel both in learning and outside of learning according to the potential of the child, indirectly education will reach the maximum level.

CONCLUSION

Based on the results of the research and the facts that the researchers have collected, it can be concluded that multiple intelligence-based learning is very well applied in the teaching and learning process, especially in this era of technological development and progress, most of the educators emphasize technology-based education. teachers should be able to pay more attention to the intelligence and potential in children. So that children will feel what education means and this is what will later make children able to improve their achievements later in learning. The right way to apply multiple intelligence learning brbais done by an educator is to utilize learning methods and strategies. The right methods and strategies will make children feel happy and at home in following the lessons so that thus the child will be able to achieve according to the talents and interests he has. With this multiple intelligence, children will be able to excel in learning and outside of learning, this is because the child already knows and fully understands his intelligence, so he will be serious about honing and increasing his potential.

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