

## Strengthening Multiple Intelligences Approach for Kindergarten Teachers Al-Fikh Orchard Malaysia



Rizka Harfiani<sup>1</sup>, Mavianti<sup>2</sup>, Nurul Zahriani<sup>3</sup>

<sup>1,2,3</sup>Universitas Muhammadiyah Sumatera Utara

**ABSTRACT:** This article is the output of international community service activities. The aim of this activity is to provide reinforcement of the Multiple Intelligences Approach to teachers at Al-Fikh Orchard Malaysia Kindergarten. The service method used is Participatory Action Research (PAR) with a cycle of work steps including the stages to know, to understand, to plan, to act, and to change. The work matrix includes preparation activities, implementation of training activities, and evaluation of the achievements of the service program. The service partner involved is the owner of the Al-Fikh Orchard Kindergarten which has a branch of 40 Kindergartens spread throughout Malaysia. The result of this service is an increase in the capacity and quality of Al-Fikh Orchard Kindergarten teachers, especially regarding the implementation of learning processes for early childhood based on Multiple Intelligences. These strengthening activities include; provides an understanding of the working system of a child's brain, an understanding of several types of children's intelligence, and how to train children's intelligence according to their intelligence potential.

**KEYWORDS:** approach, kindergarten, multiple intelligence, strengthening, teacher.

### 1. INTRODUCTION

The Multiple Intelligences Theory was developed by psychologist Howard Gardner who challenged long-held beliefs about the meaning of intelligence. Because, during the 20th century, we have become accustomed to linking the level of intelligence with a person's intelligence which is only measured by IQ tests. According to him, intelligence is the ability to perceive new situations, as well as the ability to learn from one's past experiences. Intelligence depends on the context, tasks and demands that life places on us. It doesn't depend on IQ scores, college academic degrees or prestigious reputations (Kusmayadi, 2011).

One effort to provide the right educational pattern is to understand children's intelligence. Every child will have different intelligence potential. This intelligence can be similar to that of its parents, because there are hereditary factors. However, it can also be different because intelligence is also influenced by environmental factors (Harfiani, 2021). Apart from physical condition, talent, interest and motivation to learn, one of the internal factors that influences students' learning success is intelligence (Siregar, 2016).

Efforts to build positive children's intelligence must be done by imparting knowledge based on three principles, namely truth, beauty and morals. It is important to remember that the principle of multiple intelligences is: 1) every child is born with the potential for intelligence; 2) each child shows one or more intelligence strengths; 3) avoid categorizing children into one intelligence, and 4) intelligence is not used singly but in combination (Guru, 2006).

According to Thomas Armstrong, the multiple intelligences learning strategy is a way of accessing information through the intelligence channels that exist in each student, but to release it again, all intelligences work together in a unique unity according to needs. So that students are able to solve learning problems in amazing ways. Armstrong (2002) said that, with the theory of multiple intelligences, it allows teachers to develop innovative learning strategies that are relatively new in the world of education. However, Armstrong added that no learning sequence works effectively for all students. Every student has a certain tendency towards the eight existing intelligences (Said & Budimanjaya, 2015).

Early age is a golden period of development. At that time there was an extraordinary surge in child development that did not occur in the following period. Experts call it the golden age of development. To accelerate this development potential, every child needs balanced nutritional intake, health protection, loving care, and educational stimulation that is appropriate to each child's stage of development and abilities. (Direktorat, 2009b). During the golden age, all children's potential develops most rapidly, therefore the role of parents and teachers is needed so that children can develop their intelligence potential optimally. (Sitepu & Janita, 2016). This is the basis for the importance of parents and PAUD teachers in honing children's intelligence from an early age.

Early Childhood Education (PAUD) is very basic and strategic education. It is not surprising that developed countries have long paid great attention to early childhood education (Direktorat, 2009c).

## **Strengthening Multiple Intelligences Approach for Kindergarten Teachers Al-Fikh Orchard Malaysia**

Early childhood education has a very important role in developing human resources. Improving the quality of services needs to be accompanied by improving the quality of learning. Using the right learning approach can optimize a child's entire development potential. Learning through play is one of the principles of the early childhood approach (Direktorat, 2009a). And one learning strategy that can be applied is learning with a multiple intelligence approach.

Multiple Intelligences, which when interpreted in Indonesian as Plural Intelligence or Multiple Intelligences, in the perspective of Early Childhood Education, simply means that every child has several types of potential intelligence that can be explored by parents and teachers, so that more prominent intelligence will be found and reliable (Harfiani, 2021).

What exactly is intelligence? Until now, experts still seem to have difficulty finding a comprehensive formulation of intelligence. Intelligence can be defined as the ability to solve problems or do and produce something that has value in everyday life. C.P. Chaplin (1975) defines intelligence as the ability to face and adapt to new situations quickly and effectively. Meanwhile, Anita E. Woolfolk (1975) stated that according to old theory, intelligence includes three meanings, namely: 1) the ability to learn; 2) the overall knowledge acquired, and 3) the ability to adapt to new situations or the environment in general. But no matter how scientific it is explained, genius remains as mysterious as the universe (Kusmayadi, 2011).

Multiple Intelligences in basic education are implemented in learning which is useful for meeting all the diverse needs of students. This learning is differentiated learning. A differentiated learning system can be implemented by first identifying the child's abilities, finding learning strategies that suit the child's abilities, and providing learning objects that suit the needs of the students. (Istiningsih & Nisa, 2015).

Teachers can first carry out research in the form of tests to determine the intelligence tendencies of each child, which is usually called MIR (Multiple Intelligences Research). (Said, A., & Budimanjaya, 2016). The intelligence of students in one class varies, so by recognizing children's intelligence first, teachers can process lesson material according to each student's intelligence, so that students get the right teaching model. (Masdudi, 2017). The multiple intelligences approach in education is stated to be in accordance with the spirit of education as a process of humanizing humans, namely that each person should be treated special because each individual has uniqueness, potential and different intelligence (Husnah, 2019).

Multiple intelligence-based learning begins with learning preparation activities, namely recognizing students' intelligence through MIR and Student Maturity Orientation (OKS), then preparing a lesson plan. The learning implementation includes apperception and motivation activities (alpha-zone, scene setting, pre-teach and warner), followed by multiple intelligences-based activities which include nine types of intelligence. Learning assessment activities using authentic assessments include cognitive, affective and psychomotor (Setiawati, 2019).

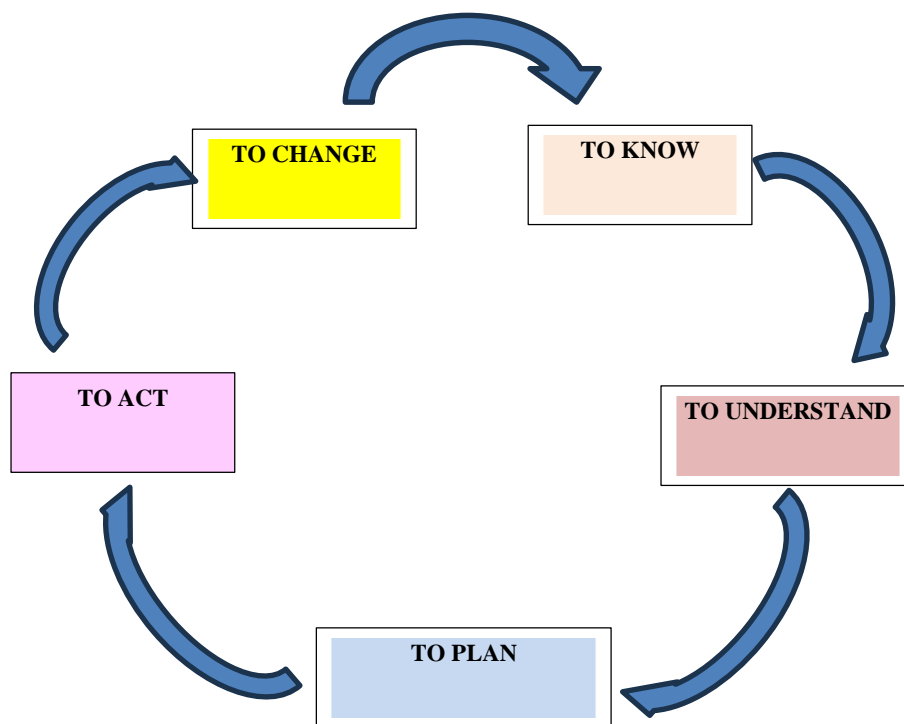
There are nine multiple intelligences in children that can be stimulated, namely linguistic, mathematical-logical, visual-spatial, musical, kinesthetic, interpersonal, intrapersonal, naturalist, extensional/spiritual intelligence (Handayani, 2022). A research result has successfully analyzed that humans have nine intelligences, but only one or two types of intelligence stand out, so they need to be trained and improved so that these intelligences become optimal and able to manage their lives better. (Indria, 2020).

Based on the situation analysis above, it shows the importance of PAUD teachers understanding children's multiple intelligences, starting from the beginning recognizing the types of intelligence, so that they are able to design appropriate learning activities according to the needs and potential of each student, and are able to provide authentic assessments. By using the multiple intelligences approach, it is hoped that the intelligence potential of early childhood can skyrocket and teachers can produce students with character and achievements in their fields of expertise according to the intelligence they have.

The partner of this service, namely the Owner of the Al-Fikh Orchard Kindergarten, stated that he needed to strengthen the Multiple Intelligence approach for his teachers in carrying out the early childhood learning process. This programmed training activity is aimed at Kindergarten teachers in recognizing and understanding the various intelligences possessed by young children. It is hoped that this activity will be right on target and effective, so that it will be beneficial for educational development, especially for early childhood education.

## **2. METHODS**

This community service uses the Participatory Action Research (PAR) method for the reason that a more progressive approach is needed to deconstruct the social conditions of society, so that it is hoped that a more emancipatory pattern of social relations will be developed, especially in efforts to increase family welfare and harmony. The work step cycle used is as follows:



**Figure 1. PkM Work Step Cycle with the PAR Approach**

*Source:* (Afandi et al., 2022)

The to Know stage is the stage of knowing the real conditions of the community/partners. Things that are done in this stage are mingling with partner members to build trust. In this case, researchers met with Al-Fikh Orchard Kindergarten teachers to find out the obstacles and problems they faced in the learning process for early childhood.

The to Understand stage is understanding the partner's problem. Steps that can be taken are through focus group discussions (FGD). The focus of the problem found was the lack of understanding of Kindergarten teachers regarding appropriate learning approaches for early childhood children, which are able to boost their intelligence potential in accordance with the intelligence potential possessed by each child.

The to Plan stage is the partner problem solving stage. This stage begins with formulating the problem, then planning action to solve the problem. Based on the problems that have been found, namely the teacher's lack of understanding of appropriate learning approaches for early childhood, the PkM team proposes to carry out training activities that provide reinforcement to teachers regarding learning approaches that are able to boost children's intelligence potential. The approach chosen is the multiple approach intelligence.

The to Act stage is the implementation stage of the problem solving action program, in this case the program chosen is conducting training and strengthening the Al-Fikh Orchard Kindergarten teachers, as well as providing training on the steps for implementing multiple intelligence-based learning, conducting practice and question and answer discussion forums to provide input or solutions to the learning problems they face.

The to Change stage is building awareness for change and sustainability. At this stage, reflection and evaluation will be carried out on the results of the coaching and strengthening process that has been carried out. Reflection is carried out by involving partner members, so that learning is developed for all partner members involved. In this way, a commitment can be built to continue the program to achieve change so that there is no discontinuity.

### 3. RESULTS AND DISCUSSION

This service activity to the international community takes the form of strengthening carried out through training provided to Al-Fikh Orchard Kindergarten teachers. The training location is in the Al-Fikh Orchard Kindergarten office hall which is located in Port Klang Selangor Malaysia. Training is carried out using a hybrid system considering that Al-Fikh Orchard Kindergarten teachers are spread throughout Malaysia, such as in Penang, Kuala Lumpur, Johor, Malaka and Kelantan. Kindergarten teachers located in the Selangor area take training using an offline system, while those located far away use an online system facilitated by zoom meeting media.

The results of this service consist of providing several materials related to the Multiple Intelligence Approach, namely:

## Strengthening Multiple Intelligences Approach for Kindergarten Teachers Al-Fikh Orchard Malaysia

### a. Understanding of Children's Brain Working Systems

The first step in understanding children's intelligence is to first understand the working system of the brain in early childhood. Teachers must understand that young children predominantly work using the right brain, therefore teachers must be able to provide stimuli to children through their right brain, as in the following picture:



**Figure 2. Division of the Child Brain and Left Brain**

*Source: PAUD Education and Training*

The picture above provides an explanation that early childhood children predominantly work using their right brain, namely random, random, imaginative, learn from global to detail, understand meaning as a whole, enjoy pictures, tend to be active and kinesthetic, and involve more emotions. So for learning strategies, teachers must pay attention to the characteristics and working systems of children's brains.

### b. Understanding of Several Types of Children's Intelligence

According to Howard Gardner, there are several intelligences possessed by children, which are commonly known as multiple intelligences, namely language intelligence, visual-spatial intelligence, musical intelligence, logical-mathematical intelligence, kinesthetic intelligence, interpersonal intelligence, intrapersonal intelligence, naturalist intelligence, and spiritual intelligence. . Learning activities for early childhood should pay attention to the nine learning abilities of children (multiple intelligences) which include:

- 1) Language intelligence (linguistic intelligence), which can develop if stimulated through speaking, listening, reading, writing, discussion and storytelling.
- 2) Visual-Spatial Intelligence, namely spatial abilities that can be stimulated through playing with blocks and geometric shapes, completing puzzles, drawing, painting, watching films or playing with imagination.
- 3) Musical Intelligence (musical/rhythmic intelligence), which can be stimulated through rhythm, tone, time, various sounds and clapping.
- 4) Logical-Mathematical Intelligence (logico-mathematical intelligence), which can be stimulated through counting activities, differentiating shapes, analyzing data and playing with objects
- 5) Kinesthetic Intelligence (bodily/kinesthetic intelligence), which can be stimulated through movement, dance, sports and especially body movements.
- 6) Interpersonal Intelligence, namely the ability to make relationships between people (friends) which can be stimulated through playing with friends, working together, playing roles, solving problems and resolving conflicts.
- 7) Intrapersonal Intelligence, namely the ability to understand oneself which can be stimulated through developing self-concept, self-esteem, self-knowledge and discipline.
- 8) Naturalist intelligence, which loves the beauty of nature, which can be stimulated through observing the environment, farming, raising animals, including observing natural phenomena such as rain, wind, floods, rainbows, day and night, heat and cold, the moon, the sun.
- 9) Spiritual intelligence, namely the ability to know and love God's creation, which can be stimulated through the cultivation of moral and religious values.



Figure 3. Photo of activities to strengthen the multiple intelligence approach

**c. Understanding of How to Train Children's Intelligence**

Implementing games to train children's intelligence is not as complicated as we imagine, the most important thing is that there is careful planning and brilliant coordination from the preparation stage, the implementation stage to the evaluation stage. Things that teachers and parents must always remember when providing stimulation to stimulate intelligence in early childhood are:

- 1) It should be done in a pleasant atmosphere, full of joy. Therefore, stimulation should be given in a playing atmosphere.
- 2) You must remember that learning is having fun, not being sad or even angry.
- 3) Through playing, children will consider the stimulation process to develop intelligence to be an activity that is not boring.
- 4) Parents and teachers should pay attention to the wishes and conditions of children.
- 5) Don't provide stimulation in a hurry.
- 6) Don't stimulate when the child is tired, fussy, whining, sick, bored, sleepy or when the child wants to do something else.

Parents and teachers can be creative in creating their own tools and types of games. To save costs, you can use materials found around you as educational game tools (APE). When creating APE you should pay attention to the following things:

- 1) Contains educational value.
- 2) Not dangerous for children.
- 3) Has attractive colors and shapes.
- 4) In accordance with the child's interests and level of development
- 5) Simple, cheap and easy to obtain.
- 6) Not easily damaged, and easy to maintain.
- 7) The size and shape are appropriate to the child's age.
- 8) Functions to develop children's abilities.



Figure 3. Photo of handover of the Multiple Intelligences Approach Handbook

The discussion of the results of this activity looks at the type of science and technology transferred to partners, namely the strengthening of the Multiple Intelligences Approach for Al-Fikh Orchard Kindergarten teachers, so that an understanding of

## Strengthening Multiple Intelligences Approach for Kindergarten Teachers Al-Fikh Orchard Malaysia

appropriate learning methods for young children according to their type of intelligence is built. This is in line with the Multiple Intelligences theory put forward by Howard Gardner which states that every child has different intelligence. Then Harfiani (2021) explained that the appropriate education pattern is to pay attention to the intelligence potential of each child. Sitepu & Janita (2016) state that parents and teachers have an important role in developing children's intelligence potential. Said & Budimanjaya (2015) added that teachers should innovate learning by paying attention to children's various intelligences, so that learning can take place effectively.

In this activity, Kindergarten teachers are also trained to be skilled in developing learning strategies through multiple intelligence-based play, with the initial step being to first identify the type of intelligence the child has. This is in accordance with the research results of Istianingsih & Nisa (2015) which states that a differentiated learning system must first identify the child's abilities, so that teachers can provide learning strategies and learning objects that suit the child's needs. Masdudi (2017) also added that teachers must be able to process teaching materials according to the intelligence of each child, so that according to Hasna (2019) in the learning process children are treated specially because they have different uniqueness, potential and intelligence. This is one of the aims of carrying out this service activity, namely that teachers are able to provide appropriate learning for young children, so that they are able to boost children's intelligence potential.

### 4. CONCLUSION

Teachers' understanding of children's intelligence is of course very important so that teachers can provide appropriate educational services for children according to their talents, interests and dominant intelligence. Strengthening the Multiple Intelligences Approach provides benefits for Kindergarten teachers to find out the various types of multiple intelligences that children have and how to train them so that they can boost their intelligence potential. It is hoped that after receiving this strengthening, Kindergarten teachers can carry out their educational duties better and more professionally.

### ACKNOWLEDGMENT

Thank you to the Institute for Research and Community Service at the Muhammadiyah University of North Sumatra (LP2M-UMSU) Medan for providing support in carrying out this international community service activity. Thanks are also expressed to the service partner, namely Al-Fikh Orchard Kindergarten, who provided sincere support, both moral and material, so that this community service program could be carried out smoothly.

### REFERENCES

- 1) Afandi, A., Laily, N., Wahyudi, N., Umam, M. H., Kambau, R. A., Rahman, S. A., Sudirman, M., Jamilah, Kadir, N. A., & Junaid, Syahrini, D. (2022). *Community Service Methodology (Suwendi, A. Basir, & J. Wahyudi (eds.))*. Directorate of Islamic Religious Higher Education, Directorate General of Islamic Education, Ministry of Religion of the Republic of Indonesia.
- 2) Direktorat. (2009a). *Family-Based Early Childhood Education Module: Playing While Sharpening Early Childhood Logical-Mathematical Intelligence*. Director General of Non-formal and Informal Education, Ministry of National Education.
- 3) Direktorat. (2009b). *Family-Based Early Childhood Education Module: Playing While Sharpening Early Childhood Musical Intelligence*. Director General of Non-formal and Informal Education, Ministry of National Education.
- 4) Direktorat. (2009c). *Family-Based Early Childhood Education Module: Playing While Sharpening Early Childhood Naturalistic Intelligence*. Director General of Non-formal and Informal Education, Ministry of National Education.
- 5) Guru, T. (2006). *Collection of Early Childhood Education Materials*. KB-RA Istiqlal.
- 6) Handayani, I. N. (2022). Stimulating Multiple Intelligences Through a Scientific Approach for Early Childhood. *Raudhah Journal*, 10(1). <https://doi.org/10.30829/raudhah.v10i1.1656>
- 7) Harfiani, R. (2021). *Multiple Intelligences Approach (Raising the Potential of Early Childhood Intelligence)*. UMSU Press.
- 8) Husnah, Z. (2019). Multiple Intelligence Based-Education Realizes Indonesia as a Nation of Champions. *Al-Mudarris (Scientific Journal of Islamic Education)*, 1(2), 51–65. <https://doi.org/10.23971/mdr.v1i2.1030>
- 9) Indria, A. (2020). Multiple Intelligences. *Early Childhood Education*, 2(1), 235.
- 10) Istianingsih, & Nisa, A. F. (2015). Implementation of Multiple Intelligences in Basic Education. *Al-Bidayah: Journal of Islamic Basic Education*, 7(2), 182–196. <https://jurnal.albidayah.id/index.php/home>
- 11) Kusmayadi, I. (2011). *Uncovering Children's Intelligence (Detecting Children's Talents and Potential from an Early Age)*. Knowledge warehouse.
- 12) Masdudi, M. (2017). Multiple Intelligences Learning Concept for Early Childhood. *AWLADY: Journal of Childhood Education*, 3(2), 1. <https://doi.org/10.24235/awlady.v3i2.1362>
- 13) Said, A., & Budimanjaya, A. (2016). *Learning Strategies Based on Multiple Intelligences: Teaching According to Brain Function and Student Learning Styles*. Jakarta: Prenadamedia Group, 2(2), 59–75.

## Strengthening Multiple Intelligences Approach for Kindergarten Teachers Al-Fikh Orchard Malaysia

- 14) Said, A., & Budimanjaya, A. (2015). *95 Strategies for Teaching Multiple Intelligences* (First). Prenadamedia Group.
- 15) Setiawati, L. (2019). Learning Based on Multiple Intelligences. *SKILLED: Journal of Basic Education and Learning*, 6(2), 140–150. <https://doi.org/10.24042/terampil.v6i2.5180>
- 16) Siregar, I. K. (2016). Emotional Intelligence and Student Learning Outcomes. *In National Guidance and Counseling Seminar UNY* (pp. 1–5).
- 17) Sitepu, J. M., & Janita, S. R. (2016). Improving Children's Fine Motor Skills Through Mosaic Techniques in Raudhatul Athfal Nurul Huda, Sunggal District, Deli Serdang Regency. *Intiqad: Journal of Islamic Religion and Education*, 8(2), 73–83. <https://doi.org/10.30596/intiqad.v8i2.729>



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.