

# The Playing Method "ASYIK" Based on Multiple Intelligence in Learning Science Process at

# The Early Childhood Education Program (PAUD)

## Age 5-6 Years

Sri Watini

STKIP Panca Sakti Bekasi Jl. Raya Hankam No. 54 Jatirahayu Pondok Gede Bekasi E-mail: srie.watini@gmail.com

> Hady Efendy (Corresponding Author) Education Practice and Academic Consultant E-mail: efendy\_hady@yahoo.co.id

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#### Abstract

Playing is a joyful activity and an inherent need for children so that children may learn many skills in pleasure without any pressure. Trough play, children will be well prepared for their environment and be ready on their next educational levels. Children's intelligence is not only determined by a single score based on an intelligence test which measures the verbal, linguistic, and logical mathematical competence. Children also have an intelligence which is called multiple intelligences. This research held in order to apply play model "ASYIK" based on the multiple intelligences theory in science learning process for early childhood ages between 5-6 years old at Bekasi (South Bekasi, North Bekasi, East Bekasi and Musika Jaya). The location of this research was in several early childhood institutions, they are; PAUD



An-Nursyihab Tambun, PAUD Al-Ikhlas Mustika Jaya, PAUD El-Kasysyaf Kayuringin Jaya and PAUD Cempaka Pekayon. This research held in almost 10 months from February until November 2014. The R&D Method was used for this research. It contains of 3 stages: method pre-development, method development and method application. This research concluded that none of the early childhood institution was using ASYIK method, especially in Bekasi. That's why this method became the newest innovation of science learning processs in the early childhood institution.

Keywords: Playing method "ASYIK", children, multiple intelligences, learning science



#### 1. Introduction

Early childhood education, hereinafter referred to as PAUD, is a coaching effort aimed at children from birth up to the age of 6 (six) years done through the provision of educational stimuli to assist growth and physical and spiritual development so that children have readiness to enter education more continue. It is necessary to introduce the child to the natural surroundings more closely because the child lives and thrives in nature. Introducing the natural or science environment into a fun activity for children through play activities and move freely explore the environment through a simple investigation. The concepts of simple science and the environment can be easily understood and controlled by the child through observation in real situations. The learning that closer to the natural environment will develop a child's curiosity attitude about everything that exists and occurs in the surrounding environment. Through learning activities that emphasize learning how to know, how to do learning, how to be, and how to learn how to live can be developed through learning about nature or science in real life with a form of attractive presentation or packaging. It will produce children who have tremendous scientific potential.

The scientific potential is positive attitudes that support productivity and activity in developing the competence of science in the child itself (Ali Nugraha, 2005). Therefore, how the learning process designed and presented should be able to develop the competence of science in children well. Science learning outcomes in the form of competencies that will be mastered by the child should be hit on three components as a process, product and developer attitude. Carson in Ali Nugraha (2005) states that science for early childhood especially ages 5-6 years is everything that is found and considered interesting and give knowledge or stimulate it to know and investigate. The science for children is not something far from life but science for children is very close and can be found by children in all places both phenomena that occur in nature is the most prudent to develop. Giving an opportunity and guiding the child to touch various objects directly train the child to develop his reasoning. The science learning is essentially a process of giving children the opportunity to contract knowledge (science) through activities at home, in the yard, at school and so on.

Learning science basically has a very important role in the formation of the character of the child's character (character building) and intellectual development of children. The science learning must be adapted to the nature of science itself and the development and needs of children. Putting the child in a real activity learns about the thinking of the child. Through inquiry thinking shows the child to look for answers to why something happened. Finally, children get a problem that must be faced in their life by way of solving through problem solving. Although the children of scientific settlement in simple and in accordance with his ability and use his own way. Playing for children is essentially the way children learn about science or the environment. This is confirmed by Peaget in Ramaikis Jawati (2013) (Slamet Suryanto, 2005), which states that playing with objects that exist in the environment is the way children learn.

Spodel in Kostelnik (Sri Sujiati, 2015) states that, "play is defined as a fundamental, because through play activities the child will acquire and process information on new things and train



existing and existing skills." It is understood that through actual play activities of children learn to something in their environment where they will process all new things and train the various skills they have (Masitoh,Ocih Setiasih & Djohaeny Heny, 2005). Therefore, how safe, challenging, and attractive children's environment will affect how children learn about science or the natural world well. Science is not something far from the life of children but science as a means for children to live and develop well with the various problems that are present in itself and need solutions in their own way. The field of science development is much disliked child. Negative perceptions develop and dominate in the child's life that science is a difficult field. In children's minds is installed that science is rigid experimental activities and should not do the slightest mistake. Less actual and contextual learning of science. This means that what is learned about the theme, topic, material, or activity is not something that interests and interests the child.

Learning science less develop concepts that can be studied by children by developing the child's senses optimally. Realities in the field found many early childhood teachers who lack the knowledge and lack of knowledge about science for children, both in terms of concepts, materials and difficulties in planning science learning activities and forms of application. Infrequently the thought or perception of teachers who think science is not important is also taught in children. The science education has not been able to develop the talents and talents of children with diverse intelligence. Therefore, how the design of the program should be developed in such a way that science learning can be based on various intelligence in children new innovations in the form of development methods that are more interesting, targeted and more secure for learners, especially for young children (5-6 years). This method is expected to be used as one of the preferred methods, especially in the process of science learning for early childhood field based on multiple intelligence.

#### 2. Research Methodology

The purpose of this study is to produce a set of methods of learning with the method "ASYIK" based on some intelligence applied in science learning in order to develop science competence in children PAUD age 5-6 years. The study was conducted at the Institute of Early Childhood Education and the age group of 5-6 years in Bekasi, Bekasi, Bekasi Utara, East Bekasi, West Bekasi and Mustika Jaya. PAUD institutions selected according to the study criteria are as follows, 1). PAUD An-Nursyihab Bekasi Timur, 2). PAUD Al Ikhlas Padurenan Mustika Jaya, 3). PAUD Elkassyaf Bekasi Selatan and 4). PAUD Cempaka Pekayon. The research was conducted in February - November 2014 about 10 (ten) months. The method used in this research is the Research method developed by Borg and Gall where research and development is a research method used to develop or validate the products used in education and learning. It is widely used in instructional technology or educational technology such as design or lesson planning, learning process or implementation, learning evaluation, and model of learning program and learning method, then the study serve as a framework of the foundation that research and development can be applied in the world of education.



#### 3. Literature Review

#### 3.1 Early Childhood

Understanding early childhood in general are children under the age of 6 years. Government through law the national education system defines early childhood is a child with a 0-6 year age range. Soemiarti Patmonodewo cites opinions about early childhood according to Biecheler & Snowman, which are preschoolers are those aged between 3-6 years (Sumiarti, 2000). The limitations used by the National Association for the Children of Young Children (NAEYC), and experts in general are: early childhood is a child from birth until the age of eight years. The child's birth until he reaches the age of 6 he will be categorized as an early child.

Some people call this phase or period as golden age because this time is very decisive as what they later if adults both in terms of physical, mental and intelligence. While the nature of early childhood is a unique individual where he has growth patterns and developments in aspects of physical, cognitive, socio-emotional, creativity, language and communication that are specific to the stage that is being passed by the child. The various definitions, researchers conclude that early childhood is a child aged 0-8 year who are in the stage of growth and development, both physical and mental.

#### 3.2 Early Childhood Education Programs

Early childhood education is the level of education before basic education which is a coaching effort aimed at children from birth up to the age of six years. The education is done through the provision of educational stimuli to foster the growth of further education, organized on formal, informal, and informal channels (Maemunah, 2010).

National Education System Law no. 20 of 2003 explains that early childhood education is a coaching effort aimed at children from birth up to the age of six that is done through the provision of educational stimuli to assist growth and physical and spiritual development so that children have readiness in entering further education.

One early childhood education leader, Maria Montessori defines early childhood education as a dynamic process whereby children develop according to the inner provisions of their lives, their voluntary work when placed in an environment prepared to give them freedom in expression self (Maria, 2013).

Suyadi provides an understanding of early childhood education as one form of education that focuses on the basic laying towards physical growth and development (fine and coarse motor coordination), intelligence (thinking power, creativity, emotional intelligence, spiritual intelligence), emotional socio (attitude and behavior as well as religion) language and communication, in accordance with the uniqueness and stages of development traversed by early childhood (Suryadi, 2013).

According to Glen Dolman, an expert on child development, states that the most rapid development of human brain growth occurs at the age of 0-7 years. Development of the brain at an early age can be achieved maximally if given appropriate stimulus to all the elements of



the development of both stimulation of motor, stimulus to intellectual development, stimulus to social-emotional and language stimuli (language development). The availability of adequate facilities and tools and an age-appropriate environment for children is an important role in supporting the development and capabilities of these children.

#### 3.3 Principles of Early Childhood Education

a) Theoretical principles in early childhood education activities Suyadi cites the opinion of Tina Bruce who has summarized the ten principles of early childhood education as follows (Suryadi, 2013):

- 1. Childhood is from his life as a whole. This period is not prepared to face life in the future money, but optimal optimization of potential.
- 2. Physical, metal, and health, as important as thinking and other psychic (spiritual) aspects. Therefore, the overall (holistic) aspect of child development is equally important.
- 3. Learning at an early age through various activities relate to one another so that the pattern of child developmental stimulation should not be sectoral and partial, only one aspect of development alone.
- 4. Generating intrinsic motivation (self-motivation) of children will produce self-directed initiatives that are of great value rather than extrinsic motivation.
- 5. An early childhood education program needs to emphasize the importance of discipline because it can shape its character and personality.
- 6. Sensitive period (age 0-3 years) to learn something at a certain stage of development, need to be observed in more detail.
- 7. The benchmark of early childhood learning should rest on things or activities that the child has been able to do, not teach new things to the child, even if the goal is good because according to the teacher and the parent is not necessarily good according to the child.
- 8. The best condition or life occurs within the child (inner life), especially on the conditions that support.
- 9. The people around (children and adults) in the interaction is an important center because they automatically become teachers for children.
- 10. In essence, early childhood education is an interaction between children, the environment, adults, and knowledge.
- b) Practical principles in early childhood education activities:
- 1. Child-oriented needs
- 2. Child learning in accordance with child development
- 3. Develop a multiple child intelligence
- 4. Learn through play
- 5. Stages of early childhood learning
- 6. Children as active learners
- 7. Child social interaction
- 8. Conducive environment
- 9. Stimulates creativity and innovation



- 10. Develop life skills
- 11. Utilizing the potential of the environment
- 12. Learning according to socio-cultural conditions
- 13. Stimulation holistically

#### 3.4 Methods in Early Childhood Education

Early childhood learning requires a different methodology than learning at other ages. Early childhood learning requires a unique and creative methodology. The role of a teacher is very necessary in educating children and explore the potential of students. From here teachers in early childhood education are not seen only as caregivers and mentors, but teachers are required to meet teacher professional standards. Jamal cites the opinion of Rini Utami Aziz, educators must have academic qualifications and competencies as learning agents, physically and mentally healthy, and have the ability to realize the goals of national education (Jamal Ma'ruf, 2009).

The quality of educators greatly determines the learning outcomes achieved. Failure and success of education is strongly influenced by the quality of teachers who master the material, teaching methodology, and professional skills. The methods that can be taken in implementing early childhood education according to Jamal in his book Strategic Management of Early Childhood Education include:

a) The global method (Ganze method)

This method encourages the child to make a conclusion with his own sentence. For example, when reading a book, the child is asked to retell it with his own word. Thus, the information that the child gained from his own learning results will be absorbed for longer. The child will be trained to think creatively and take the initiative.

b) Experimental method

This method of learning encourages children and provides opportunities for children to experiment on their own. This is in accordance with the results of Maryam's research, a lecturer at Ciganjur Natural School, South Jakarta, which states that there are three stages of the child to facilitate the entry of information, namely listening, writing or drawing and view and advance the experiment itself.

c) Method of learning by doing

According to Nazhori, nonverbal language is delivered in complementary teaching methods. It is plays a role in teaching and learning process. Nonverbal languages are widely used kindergartens or play groups which adopt many models of Froebel's kindergarten learning and learning models of casa bambini of Maria Montessori. The view of education is an extension of the view of the world of education, about human relations as individuals and God's creatures who have the sacred nature to be developed.

d) Method of home schooling group

The home is the closest child environment and the best place for children to learn. The



children can learn in harmony with their own desires. He does not have to sit waiting until the bell rings, no need to have to compete with other children, no need to be afraid to answer wrong in front of the class, and can immediately get an award or correction if making a mistake. The role of the mother becomes very important, because the main task of the mother is actually a regulator and child educators. Inside the house, there are a lot of suggestions that are used for children's learning. Children can learn a lot of concepts about objects, colors, shapes, and so on while cooking mothers in the kitchen. Children can also recognize God's creation through various living things around the house, listening to mothers reading prayers, listening to children's songs, and stories in a comfortable and fun atmosphere. Therefore, the home is the right environment in organizing education for early childhood.

This method of home schooling groups can be accessed by all levels of society, because in its implementation is dynamic, can vary according to the socioeconomic conditions of parents. In the implementation of this home schooling groups require the existence of learning and play groups that can be made by some parents (mother) child itself. It aims to instill the concept of socialization in children, build solidarity among mothers, in addition to relieve the burden of mothers and efforts to improve the community environment. The home schooling groups curriculum is expected to reflect activities to build the child's personality skills, religious knowledge skills, and scientific skills (cognitive, linguistic, gross, fine motor, art, self-reliance, and socio-emotional). Parent involvement (mother) in this method is very dominant and the distance of children to home schooling groups can be reached by children on foot. The role of mother, as the first and main educator is not only in educating his children solely, but also in causing the children interact with other people's children in the neighborhood. Our children need friends to learn to socialize and practice leadership. Being a teacher for early childhood does not mean the mother educates her child individually, but can be done in groups by involving the parents (mothers) who are around the environment into a teacher team (teacher). Group learning systems in the form of groups, in addition to growing togetherness and training children in socializing also fosters brotherhood and closeness among parents, making it easier to provide solutions to the problems that arise from these children.

#### e) Glenn Doman Method

This method is to teach our baby to read. Glan Domman uses this method to children with brain injuries, thus making the child more lately than children of his age, whether in terms of speaking, reading or analyzing. Glenn Doman method invites children to learn in a very comfortable atmosphere. It is as if the child is invited not to learn, but to play happily. It is this atmosphere that raises the curiosity of the child increases. This activity is carried out lovingly parent to the child. However, parents are not allowed to test the child. Activities should be stopped when the child looks bored. According to Glenn Doman's method, parents can begin to teach their children to learn to read since the baby. In fact, since he was still in the womb, parents can already talk to him. Early learning will train the senses of vision. From the above description, unraveling the fact that the earlier teaching the children reading, the better.

#### 3.5 The Theory of Multiple Intelligence



Multiple intelligence theory is a theory of intelligence developed by Howard Gardner (Amstrong, 2004). The theory is a reaction to Howard Gardner's disapproval of the view that has evolved since the beginning of the 20th century that the intelligence of children is determined only by a single score as revealed by intelligence tests. According to Gardner, intelligence tests only measure the child's abilities in the verbal-linguistic and logical mathematical fields whose results are summed up in scores, so the score is not sufficient to determine the intelligence of the child. He argues that children have a number of intelligences that can manifest in a variety of skills and abilities, which are not just verbal-linguistic skills and mathematical logical abilities. These abilities represent the various ways in which children learn and interact with themselves and their environment.

The theory of plural intelligence is important to help the teachers / educators in preparing learning activities that can stimulate various types of intelligence owned by the child so that all the ability can develop optimally. Intelligence is the ability to solve problems and make a product useful for life (Armstrong, 2004). Plural intelligence is a theory of intelligence that suggests that individuals have at least 8 types of intelligence, namely verbal linguistic intelligence, mathematical logic, visual-spatial, kinesthetic, music, intrapersonal, interpersonal, and naturalist.

Verbal linguistic intelligence is the ability to use words effectively both oral and / or written. Logical mathematical intelligence is the ability to use numbers effectively and reasoning well. Visual-spatial intelligence is the ability to perceive patterns, space, colors, lines and shapes and embody visual and spatial ideas graphically. Kinesthetic intelligence is the ability to use the body to express ideas and feelings and solve problems (Armstrong, 2004).

Musical intelligence is the ability to understand and master the pitch patterns, rhythms, and melodies. Intrapersonal intelligence is the ability to understand oneself and act in accordance with his abilities. Interpersonal intelligence is the ability to understand the feelings, intentions, and motivations of others. Naturalist intelligence is the ability to understand and classify plants, minerals, and animals.

There are various principles that teachers need to pay attention to in developing plural intelligence. These principles (Amstrong, 2004) are as follows:

1. Every child has all kinds of intelligence. Plural intelligence theory suggests that every child has the ability of the eight kinds of intelligence. The eight intelligences work together on each individual uniquely

2. Most children are capable of developing various types of intelligence at an adequate level of ability. Howard Gardner believes that every child has the ability to develop all kinds of abilities at an adequate level if encouraged, enriched and eligible.

3. Each intelligence usually works together in a complex way. In life there is no intelligence that stands alone except in certain cases that are very rare in the functioning of intelligence interact between one intelligence with another intelligence in the life of an individual.

4. There are various ways to be smart in every intelligence category No one list of characteristics should be used as a criterion for determining intelligence in one particular area.



It could be that a child cannot read but is very intelligent in terms of language skills because it can tell an amazing story or because it has a very large vocabulary.

#### 3.6 Application of Multiple Intelligences

The theory of multiple intelligences has implications for teachers in learning. The theory says that the eight intelligences are necessary for students to function productively in society. Therefore teachers / educators should see that all intelligence is just as important in life. This differs from traditional education systems that place the importance of the development and use of verbal linguistic and logical-mathematical intelligence. The theory of plural intelligence has implications that the teacher / educator should be aware and teach in the perspective of a wider range of students' learning abilities.

#### 4. Result and Discussion

#### 4.1 Learning Planning

Plural-based multiplicity learning planning is a learning design activity by taking into account and using the eight types of intelligence that Gardner proposes. To design learning that includes multiple intelligences can follow the following stages (Amstrong, 2004).

1. Determination of a specific learning objective or topic. Learning objectives or topics that are central to learning activities should be clearly defined and specific.

2. Submission of key questions relating to plural intelligence On the basis of predetermined topics, teachers / educators create steering questions that can include the eight kinds of intelligence to examine the topic.

3. Preparation of the various possibilities Teachers / educators learn the most appropriate techniques and learning materials used to study topics of different kinds of intelligence and to consider the possibilities of others, whether they are appropriate for the effectiveness of learning activities.

4. Brainstorming Teachers / educators identify which learning strategies are suitable for each intelligence in order to learn the predefined topic. To improve the results of this brainstorming would be better if brainstorming with colleagues so that can be stimulated thinking colleagues.

5. Selection of appropriate activities Based on the results of brainstorming on previous learning strategies, then selected the most effective strategy for learning purposes.

6. Determination of lesson plans through play Based on selected learning strategies, then a learning plan is defined around the chosen topics or targets.

7. Implementation of lesson plans through play Lesson plans are implemented and modified as necessary to accommodate changes that occur during the learning process.

#### 4.2 Learning Strategy Development

The theory of plural intelligence provides opportunities for various learning strategies that can be easily implemented in learning activities. In many ways, the strategy is what has been used by good teachers / educators in some other ways. The theory of plural intelligence provides an opportunity for teachers to develop learning strategies that are relatively new in the learning activities.



Among the main learning strategies for each intelligence are as follows. Learning strategies for linguistic verbal intelligence include storytelling, brainstorming, recording, journal writing, and publishing. Learning strategies for mathematical logical intelligence are quantification and calculation, Socrates heuristic questions and scientific thinking. Learning strategies for spatial visual intelligence are visualization, gestures, colors, metaphors, idea sketches and graphic design. The learning strategy for kinesthetic intelligence is the answer by using body cues, Class Theater, kinesthetic concepts, object manipulation and body maps. Learning strategies for musical intelligence are rhythm and song, discography, super-memory music, musical concepts and decent music atmosphere (Amstrong, 2004).

Learning strategy for interpersonal intelligence is sharing with peer, simulation, cooperative group, and cross-age tutorial. The learning strategy for intrapersonal intelligence is the one-minute reflection, personal connection, choice of time, moments of emotional expression and self-study. Some learning strategies for naturalist intelligence are observation, classification, and organization, comparison, "pajanflora" and fauna, and nature tourism (Armstrong, 2004).

#### 4.3 Assessment Development

Multicultural intelligence-based learning is an activity that gives every child an opportunity to develop all kinds of intelligence based on his weakness and strength. The way children learn varies, depending on their strengths and weaknesses, so assessing the learning progress in the same way for each child will not reflect the child's strengths and weaknesses appropriately.

There is a need to assess the learning progress that is appropriate to the way each child learns, so authentic assessment techniques are the right techniques for learning progress in this context. This technique is more emphasis on the assessment tailored to the child's condition. In this case the technique provides an opportunity for the child to demonstrate the performance of learning according to their own way using different intelligences. Some of these authentic assessment techniques include portfolios, independent projects, children's journals, creative task completions, anecdotal notes, observations, and interviews (Amstrong, 2004).

#### 4.4 The Model Concept Developed on the "ASYIK Playing Model"

The model developed in this research is a model of conditioning of play activities while learning especially in playing science. In addition to early childhood education, this activity is better known and synonymous with learning terms. The model of playing activities developed is the Playing Model "ASYIK" which has a prolonged Save, Happy, Confident, Innovative and Creative.

#### 4.5 ASYIK Playing Model

Referring to some explanations about the design of play model, it can be concluded that the design model of play is a form or pattern that will be used as a guide or guidance by teachers in designing an effective, efficient and efficient learning environment that enables children to

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play well as they learn himself and his environment, so that early childhood learning needs to design a conducive environment, attract children's interests and concerns, challenge and fun, and involve elements of singing, moving and playing. Therefore, through the Model of Play Design "ASYIK" which is a design of learning, especially in early childhood through the steps or learning procedures are structured systematically starting from the initial activities, core activities and end activities in which there are elements 3B (Singing, Playing and Moving) as well as having unique singing, yells and rewards in order to develop the child's competence in learning. The "ASYIK" Playing Model has an "A" Aman (Safe), "S" Senang (happy), "Y" Yakin (Confident), "I" Inovatif (Innovative), and "K" Kreatif (Creative).

1. A is Aman or "Safe" in this case contains the meaning of the chosen theme, the material being studied, the media used, the supporting facilities, the activities undertaken during the learning process and various learning resources have all been selected in the safe category. Situations and conditions are safe, then the child will learn comfortably without any fear either to ask, do activities in try a various thing, not afraid to damage things or make mistakes, no worries of dangerous objects, or scolded and so forth. The need for safety in learning is a top priority in applying the "ASYIK" Playing Model. Safeguarding children's security will enable children to explore and elaborate well, without hesitation or doubt in actualizing their potential. The need for security in Maslow's theory concerns physical and psychological security. Therefore, in the learning activities for early childhood these two factors should be the main concern. A conducive learning situation in the sense of security is protected when the child engages in activities will motivate and attract students in learning with enthusiasm and comfort. A safe and comfortable situation will prevent the child from stressful situations and anxiety. This sense of security, the child will feel more appreciated and will eventually form a good self-concept. In addition, the child's sense of security can develop a good attitude of cooperation, tolerance, and respect among others.

2. S is Senang or "Happy". The meaning of pleasure contains several concepts, among others, happy in doing, not forced, passionate, motivated, not monotonous good themes, materials, topics discussed, not boring, fun and enjoy. Therefore, in the application of Play Model "ASYIK" activities with a sense of fun is supported by various actions that have different characteristics with other models of play because in it there are applications yell-yell, typical singing with intonation of spirit of learning and non-verbal expression forming the word "ASYIK" is expected to generate a sense of fun while learning even when students are experiencing saturation during the event. Pleasant learning conditions are expected to raise children to cheer and spirit in doing learning activities without compulsion. Happy state, happy is a positive feeling, comfortable, because fulfilled his needs. The happy state of giving birth to feelings in the child due to the fulfillment of physical needs (eating & drinking), a healthy state, gaining affection, getting a chance to move (play freely) and owning and choosing toys that he likes. For that reason, in the application of Model Design Play "ASYIK" is trying to apply the sense of fun in children during the learning process so that children can actualize themselves while learning with a sense of fun and enthusiasm. The state of pleasure in children while learning is an intrinsic motivation that encourages them to do learning activities. Fun conditions that are intrinsic motivation is for example feeling of



contents, activities undertaken as well as other supporting factors.

3. Y is Yakin or "Confidence". It means that this model of "ASYIK Playing" design provides an opportunity for the child to always try and perform various activities or activities of play in order to obtain various information or answers that he wants with full responsibility, dare to take risks, faced and ultimately had a belief in the truth of the science he was looking for and had the courage to take responsibility for what he did with confidence and form a positive character in his soul. Being confident and self-assured is a feeling of self-acceptance, of high confidence and integrity that it is capable of. There is another opinion that confidence and self-confidence is a mental condition or psychological self that gives a person a strong belief in himself to do or do something action. According to Doroty self-confidence is an attitude in which he is able to make a business and sure will succeed.

4. I is Inovatif or "Innovative". The innovative meaning is how the design of learning activities that are able to attract, varies both in terms of methods, media, activities and others in order to accommodate each child who has a variety of characteristics and different learning styles such as audio, visual and kinesthetic. Innovative for the child is how during the learning process can motivate the child to express many ideas, many opinions, many questions, many wishes, many changes in him, provoking his curiosity to learn very big, and innovative in learning outcomes in the form of process, product and activities. Innovative in this learning activity how to produce an extraordinary new change so as to produce something more valuable and more useful and better. In this case after the children learn in the process and innovative way it will happen a tremendous change in the form of improved achievement of learning outcomes of children. Campbell in Utami declared innovative is something interesting, surprising, yet unprecedented, strange and extraordinary. According to Endang Mulyasa innovative is to produce something interesting, surprising, critical thinking and a lot to ask.

5. K is Kreatif or "Creative", which has a meaning how teachers able to design learning activities that can stimulate the creativity of learners in developing skills in thinking and action. Utami Munandar states that the creative in a person consists of four P namely his personal creative, press or incentive in this form (intrinsic motivation) creative in the process and creative in the results or products. Therefore, in the Model of Play Design "ASYIK" is an effort to create, engineer the learning process that can make children more creative both in terms of personality, motivation, learning process and learning outcomes.

#### 4.6 Singing, Moving and Playing in a Model of Play Design "ASYIK"

This "ASYIK" perception is expected to have an impact on learning that is happy, comfortable, fun, excited, motivated, challenged, and confident and will succeed in learning.

#### 1) Singing in the Design Model of Playing "ASYIK"

Singing for children is a fun activity in order to express thoughts and feelings through tones and words. In early childhood activities singing has lyrics of songs tailored to the theme or topic being studied. Two statements that through singing activities the child can express his thoughts and feelings through tones and words according to what he sees, learns and desires.



The model uses 2 song titles. The first song with the title ASYIK, and the second song using the title according to the theme.

The activity of Yell-yell is accompanied by the movement of the song is as follows: A sets the letter A with two thumb and two index fingers (while saying the word Safe), S form the letter S with the index finger, (while saying Happy), Y form Y (while saying Confident & Believe the position of the hand gripping with excitement), I form the letter I with thumb, (while saying Innovative), K form the letter K with the index finger collaborated two fingers right hand index and middle finger (while saying Creative), How to study today? "FUN".

2) Moving in the Design Model of Playing "ASYIK"

Moving in this model has two elements of activity namely exploration and elaboration. Exploration activities are an exploration action, a search for the purpose of finding something. Curin & Sun in Carlson Ginjer said "Elaboration is an activity in order to do something diligently, carefully and thoroughly. Exploration and elaboration activities are two mutually exciting activities, through which the child can optimally obtain the learning outcome through his or her senses.

3) Play in the Design Model of Playing "ASYIK"

Playing activities is a way typical for early childhood in learning about the nature of himself with his environment. Playing itself in this model collaborates on the science process skills. Ali Nugraha states that the skills of the process of science is an approach in science learning that has stages, among others, a) Observing, b) Identifying / categorizing c) Interpreting, d) Predicting, e) Applying, f) Applying g) Planning simple research and h) Communicate.

#### 4.7 Reward in Play Model "ASYIK"

Skinner in Aswan Zain and Syaiful Bakhri Djamarah stated that Reward is an activity in order to change the behavior of a person (students) to do the repetition of learning so that the result becomes better. In the application of Playing Model "ASYIK" is also there is a distinctive reward and is expected to provide motivation or enthusiasm in learning children in the form of the words "I Can, I'm Great and I'm Successful. Yes! "The purpose of this reward is to generate a motivation to learn the child internally that researchers have confidence if the motivation can be raised from within a person itself results will be more extraordinary than just coming from others around him.

#### 4.8 Advantages and Disadvantages of Playing Model "ASYIK"

This "ASYIK" Playing Model still has both advantages and disadvantages. The translation of these advantages and disadvantages is as follows:

#### a. The Advantages of Playing Model "ASYIK"

1. The "ASYIK" Playing Model applied in science learning has clear and purposeful steps or procedures.

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2. Components in Play "ASYIK" is very easy to do by children, such as the lyrics of fun songs that are easy to memorize, easy movements and familiarize and train children to perform the skills of the science process early on.

3. Having a distinctive reward and able to make children have positive attitudes in the form of a strong personality, tough, enthusiastic, enthusiastic, more confident and have high resilience in facing various problems faced.

4. Learning outcomes in the form of comprehensiveness of science competence comprehensively as process, product and developer attitude becomes more effective and efficient in its achievement.

5. Learning outcomes obtained not only cognitive but also cognitive, affective and psychomotor. Where learning outcomes are more contextual and meaningful.

6. Raising awareness for all parties that success in early childhood education is a shared responsibility of both teachers, parents, communities and related institutions.

#### b. Disadvantages of Playing "ASYIK"

1. Playing "ASYIK" has not been done dissemination and implemented in a very wide scale, so it needs to do further research in order to obtain more validity and validity more.

2. In the application should include the role of all parties such as parents, surrounding communities, related institutions capable of supporting the implementation of learning process by Playing "ASYIK" this, but this is not something easy because it needs more preparedness and even need a long time and funds are not small.

3. Teachers or PAUD educators should always develop their insights about science learning that is relevant to the development and needs of early childhood group B in early childhood in the form of material / teaching material development and various learning activities.

#### 4.9 Preliminary Study Results.

In the pre-development method obtained the conclusion is not found PAUD Institution in Bekasi Kota that Implemented Method of Playing 'ASYIK "based on plural intelligence that is structured, in science learning in children PAUD age 5-6 years. The conclusion that this method is new innovation. In the development of Play Method "ASYIK" obtained: 1. To develop a method conceptually, 2. Procedural method development and 3. Development of methods physically. Preliminary Trial & Revision Results Method by Expert and one-on-one Evaluation (Practitioner). The results of the initial test and the revision of the method state that the "ASYIK" Playing Method based on multiple intelligences is either design or method of learning and the learning process is relevant, clear and good. Field Trial Results is limited trials were conducted in An-Nursyihab Tambun PAUD and extensive trials were conducted at 1). PAUD Al-Ikhlas, 2). PAUD El-Kasysyaf 3) PAUD Cempaka. Effectiveness Test Result as follows:



Name of PAUD	Amount of Child (n)	t Table	T Count
An-Nursyihab	19	2.101	16.617
Al-Ikhlas	19	2.101	27.797
El-Kasysyaf	15	13.069	2.101
Cempaka	18	28.256	2.101

#### Table 1. Effectiveness of Test Result

The "ASYIK" Playing Method was tested on 4 (four) early childhood (PAUD) samples. The t test is one of the parametric statistical tests of the sample under study. This test aims to compare whether the mean of a population or some population, has a significant difference. Based on the table, it appears that the value of t table < T Count for early childhood An-Nursyihab and Al-Ikhlas, then Ho (Initial Hypothesis) rejected which means "ASYIK Playing Method cannot be applied in Early Childhood An-Nursyihab and Al-Ikhlas but can be applied in El-Kasysyaf and PAUD PAUD Cempaka ". The result research can be seen that ASYIK play method cannot be applied to all existing PAUDs.

#### 5. Conclusion

Early childhood education is the level of education before basic education, which is a coaching effort aimed at children from birth up to the age of six years. This education is done through the provision of educational stimuli to foster the growth of further education, organized on formal, and informal channels. A method is needed for early education that effects and targets. Early childhood learning requires a unique and creative methodology. The role of a teacher is very necessary in educating children, which explores the potential of students. Teachers in early childhood education are not seen only as caregivers and mentors, but also as professionals.

Multiple intelligences are a theory of intelligence that states that individuals have at least 8 types of intelligence: verbal linguistic intelligence, mathematical logic intelligence, visual spatial intelligence, kinesthetic intelligence, music intelligence, intrapersonal intelligence, and naturalist. Each intelligence can develop optimally simultaneously if it gets a chance to develop. The theory of plural intelligence needs to be understood by teachers, parents and other educators in order to help develop the kinds of intelligence of the child and do not just develop verbal linguistic and logical mathematical linguistics only. Multiple intelligences can be applied in various ways and various aspects of learning activities. Some applications of multiple intelligences include learning planning, development of learning strategies, and assessment development in learning activities.

Playing method "ASYIK" is a new innovation that is good, effective, efficient and relevant to the stages of development and the needs of children. This "ASYIK" Playing Method has unique characteristics, different from other methods, and can be applied to PAUD institutions to improve the quality of learning, especially science learning based on multiple intelligences.



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