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# TEACHING AIDS AND PLAYING TOOLS AS LEARNING MEDIA FOR KINDERGARTEN AND PRE-SCHOOL STUDENTS

# Alex Djawa

Adja0561@gmail.com

## Labu Juli

# labujuli@gmail.com

#### **Abstract**

Teaching aids and playground equipment are important for PAUD and TK students. This is important because PAUD and kindergarten age children are still in the stage of growth and development, Physical growth will affect physical, physicological, cognitive, personality and social development. This development will affect the maturity of students. With props and playground equipment, students can develop their imagination. By playing, they can do various things with the tools. There is a critical and creative thinking process in constructing props and playground equipment for cognitive, motor and psychomotor development. In addition, they feel happy and joyful

## Key Word: actively, creatively, fun, exciting

# I. Introduction

The term play is a concept that needs to be well understood. This concept must be understood by parents, teachers and learners. This understanding must build the same perception so that there are no mistakes in assessing activities carried out by adults with children, especially with toddlers. Basically, play activities are activities that children do repeatedly solely for the sake of fun and there is no final goal or target to achieve. So, especially in toddlers, any activity that is done, as long as it makes the child feel happy, can be categorised as play. Play activities carried out by children can use tools or without tools, done anywhere and anytime (Hildayani et al. 2011).

- A. There are theories about play:
- 1. Psychoanalysis Theory

According to Sigmund Freud, play has the same value as fantasia or daydreaming. Through play or fantasising, a person can project their personal hopes and conflicts. Freud believed that

play plays an important role in children's emotional development. Through play children can release all their negative feelings, such as unpleasant or traumatic experiences, expectations that are not realised in their reality. Through play children can take an active role as the initiator and transfer their negative feelings to a substitute object or person. For example, after a child undergoes corporal punishment from his teacher, during play he can channel his feelings of anger by hitting a doll that he assumes is his teacher. The action does not feel threatening to him because it is done in a play situation, and he feels satisfied because he can channel his negative feelings.

In this case, Freud did not propose a definition of play, but rather saw play as a way for children to cope with their problems.

# 2. Cognitive Theory

There are several figures who are members of the cognitive theory, including Jean Piaget, Lev Vygotsky, and Jerome Bruner. Each of these figures provides their views on play.

# a. Jean Piaget

Piaget reviewed play from human cognitive development. Cognitive development progresses through certain stages, until eventually the child's thought process will match that of an adult. In play, children will perform activities that are in accordance with their cognitive development, for example, children aged three to six years will be involved in imaginary play activities. More complex play activities are not yet possible for them because their cognitive and social abilities are not yet adequate.

Table 1 Piaget's Stages of Cognitive Development

Cognitive Development Status	Age of Child
Sensorikmotor	Birth – 2 years
Preoperationa	2 - 7 years
Concrete operational	7 - 11 years
Formal operational	11 to adulthood

(Schunk, 2012: 332)

In line with one's cognitive development, play activities undergo changes from the sensorymotor stage, to imaginary play to social play accompanied by game rules.

Furthermore, Piaget considers play not only reflects children's cognitive development, but also contributes to cognitive development itself. During play, children do not learn something new, but they learn to practice and consolidate newly acquired skills. For example, a child who plays pretend by thinking of a piece of paper as 'money', and pretends to sell 'cakes' with his playmates. In this case, there is a symbolic transformation, where the piece of paper is 'money' and the plastic piece is 'cake'.

From this game, the child does not learn new skills, but learns to practice the skill of representing what he has previously learnt which he acquired not in the context of play. According to Piaget, the role of practice and consolidation through play is very important because newly acquired skills will soon be lost if not practised and consolidated. The development of play is related to a person's cognitive development because the level of intelligence of a child will affect his or her play activities. If a child's intelligence is below the average of their age, their play activities are also not age-appropriate. For example, a child who is classified as moderately mentally retarded, even though he is 6 years old, his play behaviour is equivalent to a three-year-old child. Conversely, a highly intelligent child will display play behaviours that are far above their age (Hildayani, 2011:46).

# b. Lev Vygotsky

Vygotsky believed that play has a direct role in a child's cognitive development. At first, children are unable to think abstractly because meaning and objects blend together. As a result, children cannot think about an object without seeing the actual object. For example, children cannot understand the concept of 'horse' without seeing a real horse. When the child engages in imaginary play and uses an object (pencil) as a substitute for another object (aeroplane) then meaning starts to separate from the object. The substitute object (pencil) is used as a 'separator' between the meaning of the plane and the actual 'plane'. Thus, eventually the child is able to understand the meaning separately and the object that represents it. Thus, imaginary (symbolic) play plays a very significant and crucial role in abstract thinking.

Play is a self help tool. Children's engagement in play activities automatically results in progress in their cognitive development. Play advances a child's Zone of Proximal Development (ZPD), helping them to reach higher levels of functioning to reach their potential. According to Schunk (2012: 341) the zone of proximal development is 'the distance between the actual level of development determined through independent problem solving and the potential level of development determined through problem solving with adult assistance or cooperation with more capable peers. Potential within the ZPD is a transitional state where children need special assistance (scaffolding) to achieve what they can achieve. Scaffolding is generally in the form of help from more expert people (friends, teachers, parents, siblings) (Hildayani, 2011: 47).

### c. Jerome Bruner

Bruner emphasises the function of play as a means to provide creativity and flexibility. In play, what is more important to the child is the meaning of play and not the end result. During play, children do not think about the goals to be achieved so that they are able to experiment by combining various new and 'unusual' behaviours. This is not possible in a stressful situation.

By trying out new behaviours, children can use their experiences to solve problems in everyday life. Behaviours that are routinely practiced and learned repeatedly in play situations will be integrated and useful for establishing behavioural patterns in everyday life.

# B. Benefits of Play

Play activities are very popular with children during the preschool period and in general most of their time is spent playing. Scientists have conducted various studies and found that play has great benefits for child development, both in the physical, motor, cognitive, language, social and emotional domains (Hildayani, 2011: 48).

# a. Benefits of play in physical development

One of the characteristics of toddlers is that they love to move and are physically very active. Through play, he can channel the energy of his moving body so that he has satisfaction and does not feel restrained. By moving up and down stairs, running around the room, jumping, jumping, skipping, climbing, playing slides, playing swings, and so on, the muscles of his body become strong and his body becomes healthy.

Ada manfaat ganda yang diperoleh anak dari kegiatan fisik semacam ini, ia akan merasa lebih percaya diri karena mampu melakukan berbagai gerakan dan memudahkan untuk berbaur dengan sesama anak. Batas antara dirinya dengan orang lain akan hilang karena anak-anak ini melakukan kegiatan yang menyenangkan, ia lupa bahwa yang baru dijumpainya di lokasi bermain adalah orang asing (Hildayani, 2011:48).

# b. Benefits of play in motor development

The contribution of play to motor development, both gross and fine motor, is very clear. If we notice a child before the age of two playing with small runs, then later at the age of three years the child is already skilled at running. Unlike children who are not given the opportunity to do this activity, their running movements appear awkward even though they are three years old. This also applies to other activities that require gross motor movements, such as jumping, skipping, climbing, jumplatin. If these children are given the opportunity to do so, they will undoubtedly be agile.

In terms of fine motor development, children can be trained in skills through various activities that support them. Some supportive activities include doodling on paper, which will develop into scribbles of tangled threads, then into straight lines, curves, and so on. Although motor maturity has a big role, without training through play, motor development does not develop rapidly (Hildayani, 2011: 49).

# c. Benefits of play in cognitive development

Cognitive aspects are related to memory, attention span, ability to understand information, knowledge, reasoning power, analytical power, imagination, and creativity (Reber in

Hildayani, 2011: 49).

Through play children will learn various basic knowledge and concepts. Knowledge of concepts is much easier to obtain through play activities, because the attention span of toddlers is still limited. Moreover, they are still unruly, difficult to sit quietly for more than fifteen minutes. The best and most appropriate way to introduce basic knowledge and concepts is through play. For example, introducing the concept of colour can be done by throwing a ball into a basket that is the same colour as the ball being thrown. Several colours of balls and baskets can be provided and the rule of play is that blue balls are thrown into blue baskets and so on. Inventiveness can be developed through constructive play. The child is asked to arrange a number of blocks or plastic pieces to form something or draw a picture based on their imagination.

Knowledge of the surrounding environment can be introduced through plants, animals, insects that live in the child's neighbourhood. While playing in the garden or field, they can gain knowledge about their environment. Thus, children do not only gain knowledge from the teacher's story in the classroom or from the books they read, but through direct experience by seeing, observing, hearing, holding, touching, and smelling these objects directly (Hildayani, 2011).

# d. Benefits of play in language development

According to Vygotsky, language is an important factor for humans to master because a child's intellectual development is related to language. Language helps children direct their thoughts, sharpen their memories, categorise and learn new things so that their thinking ability increases. At the age of four years, children are expected to be able to use more than a thousand words and at the age of six years use about 2600 words and be able to understand 20,000 words (Owens in Hildayani, 2011).

# e. Benefits of play in social development

At preschool age, children need to learn to separate from their parents or caregivers. Separation from parents or caregivers will not be felt by the child if it is done in a playful situation. On the other hand, through play, children will become more adept at socialising with other people and their peers. Socialising is defined as a person's ability to blend in with others, adjust to group activities and customs, and with all kinds of people who have unique characteristics. Children also learn to share with others, wait for their turn, and learn to be patient. The ability to solve everyday problems related to the child's life will also be discovered. For example, how to find a way to keep things that belong to them from being taken away by other children, and vice versa. How the rules of the game should be made so that quarrels can be avoided. Through play he will learn to communicate with fellow friends, both in terms of expressing his thoughts,

opinions, feelings, and understanding what is conveyed by friends so that relationships can be fostered and children exchange information with each other (Hildayani, 2011).

f. Benefits of play in emotional and personality development

Play is an activity that already exists naturally in every child and has become a necessity for them. Through play children can release the tensions they experience because of the many restrictions they have to face in everyday life. At the same time, it can fulfil the needs and urges from within that cannot be satisfied in real life so that at least it will make children feel relieved and relaxed.

From playing with friends, they can assess themselves. What are his strengths so that it can help the formation of a positive self-concept, namely having self-confidence and self-esteem. Children will learn how to behave in order to cooperate with others, be honest, generous, and sincere (Hildayani, 2011).

From the explanation of the definition of play and the benefits of play, it will be discussed about the importance of teaching aids and playground equipment is a very important medium for learning in schools, including in Early Childhood Education (ECE) and Kindergarten (TK). Preschool and kindergarten children are children who are not yet able to learn formally. They are not yet able to sit still and maintain their attention on something for a long time as expected of children above the age of 6. Imagine how uncomfortable it is for toddlers to be told to sit still for more than 15 minutes to listen to explanations from adults, in this case the teacher (Hildayani, et al. 2011).

Given the importance of play activities for early childhood learning in PAUD and TK, it is very important to pay attention to learning media in the form of teaching aids and play tools. Teaching aids are learning media used indoors, while playground equipment is media used outdoors. With the existence of teaching aids and play tools as a medium that conveys information or messages makes learning that takes place interesting. Learning media are people, materials, or events that build conditions that enable students to acquire knowledge, skills, or attitudes (Gerlach & Ely (1971 in Asyad, 2013).

Briggs (in Dwiyogo, 2013) said learning media is a physical means to convey learning content/materials such as: books, films, videos, and so on. Gagne defines media as various types of components in the student environment that can stimulate students to learn. Heinich, Molenda, Russel (1996) stated that 'A medium (plural media) is a channel of communication, examples include film, television, diagrams, printed materials, and instructors.' (Media is a channel of communication including film, television, diagrams, printed materials, and instructors. (Media is a channel of communication including film, television, diagrams, printed materials, and instructors).

Learning media are people, materials, or events that build conditions that enable students to acquire knowledge, skills, or attitudes (Gerlach & Ely (1971 in Asyad, 2013).

Meanwhile, Dwiyogo (2013: 3) says media is anything that can be used to channel messages and can stimulate the mind, can arouse the enthusiasm, attention, and willingness of students so that it can encourage the learning process in students. Teaching aids and playground equipment are media that can attract students' attention to learn actively, creatively, fun, and exciting.

### II. Methods

A learning method is a model or way that can be used to organise teaching and learning activities to run well (Rahyubi, 2012: 236). Teaching methods, especially in motor learning, are actually very numerous, but in teaching and learning that prioritises demonstration of props and play tools, the demonstration method is used.

The demonstration method is a teaching method by demonstrating items, events, rules, and sequences of doing an activity, either directly or through the use of learning media relevant to the subject matter or material presented.

The demonstration method can also be defined as a teaching method using demonstrations to clarify an understanding or to show how a process works or the working steps of a particular tool or instrument to students (Rahyubi, 2012: 239).

### III. Results and Discussion

#### 1. Results

According to our observations and interviews with teachers, with the presence of teaching aids and playground equipment, students are more active, creative, and happy to take part in lessons. Teaching and learning becomes better and more interesting. Teachers and students are more active and creative. Students love to play.

Therefore, play activities are very fun and exciting for students. The developmental benefits of play include physical development, motor development, cognitive development, language development, social development, and emotional and personality development.

Play is an activity that children need. Through play children can release the tensions they experience because of the many restrictions they have to face in everyday life. At the same time, they can fulfil their inner needs and urges that cannot be satisfied in real life so that at least they will feel relieved and relaxed.

### 2. Discussion

Teaching aids and playground equipment are excellent learning media to convey knowledge, information and messages that make it easier for students to learn actively, creatively, fun and

exciting.

The specific characteristics of learning media differ according to purpose and grouping. The characteristics of the media can be seen according to its ability to stimulate the senses of sight, hearing, touch, smell, and taste in students. So, the general characteristics of learning media are that the media can be touched, seen, heard, and observed through the five senses. In addition, the characteristics of the media can also be seen according to its price, target scope, and control by the user.

Each media has characteristics that the user needs to understand. In choosing media, people need to pay attention to three things, namely:

- 1. Clarity of purpose and purpose of the selection.
- 2. The nature and characteristics of the media to be selected.
- 3. The existence of a number of media that can be compared because media selection is basically a decision-making process about the existence of alternative solutions demanded by the objectives.

Meanwhile, Gerlach & Ely (in Arsyad, 2013: 15) put forward three media characteristics which are clues as to why the media is used and what the media can do that teachers may not be able (or less efficient) to do. One of these characteristics is the fixative property. This feature describes the ability of the media to record, store, preserve, and reconstruct an event or object. An event or object can be sequenced and arranged with media such as puzzles, wooden clocks, puppet stages, traffic signs, day names, month names, animals, vehicles, fruit, and so on. This feature is very important for teachers because events or objects that have been recorded or stored with existing media formats can be used at any time.

# Benefits of Media in Learning

There are many experts who express their views on the benefits of learning technology (including learning media), among others:

Kemp & Dayton (in Arsyad, 2013: 25) said the positive impact of using media as an integral part of classroom learning or as the main way of direct learning as follows:

- 1. Message delivery becomes more standardised. Every learner who sees or hears a presentation through the media receives the same message. Although teachers interpret the lesson content in different ways, with the use of media the variety of interpretations can be reduced so that the same information can be conveyed to students as a basis for further study, practice, and application.
- 2. Learning can be more interesting. Media data is associated with attracting attention and

can keep students awake and paying attention. The clarity and conciseness of the message, the attractiveness of changing images, the use of special effects that can arouse curiosity cause students to laugh and think, all of which indicate that the media has motivational aspects and increases interest.

- 3. Learning is more interactive with the application of accepted learning theories and psychological principles in terms of student participation, feedback and reinforcement.
- 4. The length of learning time required can be shortened because most media only require a short time to deliver a considerable amount of messages and lesson content and are likely to be absorbed by students.
- 5. The quality of learning outcomes can be improved when the integration of words and images as learning media can communicate elements of knowledge in a well-organised, specific and clear way.
- 6. Learning can be provided whenever and wherever desired or required especially if the learning media is designed for individual use.
- 7. Students' positive attitude towards what they are learning and towards the learning process can be enhanced.
- 8. The role of the teacher can change in a more positive direction; the teacher's burden to explain repeatedly about the content of the subject matter can be reduced or even eliminated so that he can focus on other important aspects of the teaching and learning process, for example as a consultant or advisor to students.

Dale (in Arsyad (2013: 27) suggests that audio-visual materials can provide many benefits as long as the teacher must be present to present the subject matter with the help of any media so that the following benefits can be realised:

- 1. Increase mutual understanding and sympathy in the classroom;
- 2. Leads to significant changes in student behaviour;
- 3. Shows the relationship between the subject and the needs and interests of the students with increased motivation to learn;
- 4. Bringing freshness and variety to students' learning experiences;
- 5. Makes learning outcomes more meaningful for a range of student abilities.
- 6. Encourages meaningful utilisation of the subject by engaging imagination and active participation resulting in improved learning outcomes;
- 7. Provide necessary feedback that can help students discover how much they have learnt;
- 8. Provides rich experiences with which meaningful concepts can be developed;
- 9. Broaden students' horizons and experiences that reflect nonverbalistic learning and make appropriate generalisations;

10. Convincing oneself that the sequence and clarity of thought that students need if they are to build meaningful concept structures and systems of ideas.

According to the Encyclopedia of Educational Research in Arsyad (2013: 28) the benefits of educational media are as follows:

- 1. Laying concrete foundations for thinking, therefore reducing verbalism.
- 2. Enlarge student attention.
- 3. Laying important foundations for the development of learning, therefore making the lesson more stable.
- 4. Provide real experiences that can foster self-employment among students.
- 5. Fosters regular and continuous thinking, especially through live images,
- 6. Provide experiences that are not easily obtained in other ways, and help more efficiency and diversity in learning.

Learning media has practical benefits. Experts have agreed that educational media can enhance the teaching and learning process which in turn is expected to increase the learning outcomes achieved. In general, the benefits of learning media are as follows:

- 1. Clarify the presentation of messages so that they are not too verbalistic.
- 2. Overcoming the limitations of space, time, and sensory power such as (1) Objects that are too large can be stopped with reality, pictures, film frames, films or models. (2) Small objects are assisted by micro projectors. (3) Natural events such as the eruption of a volcano or processes that in reality take a long time such as the process of a cocoon becoming a butterfly can be presented with recording techniques (video, film, slides, or computer simulations).
- 3. By using learning media appropriately and variedly, it can overcome the passive attitude of children because the media can create excitement for learning.
- 4. Can overcome the difficulties experienced by teachers due to differences in the background and experience of different students while the curriculum and educational materials are determined to the students are the same.

According to the Encyclopedia of Educational Research, some of the benefits of learning media, namely:

- 1. Magnifies student attention
- 2. Laying important foundations for the development of learning
- 3. Provide real experiences that can foster self-employment among students

- 4. Fosters regular and continuous thinking especially through live pictures
- 5. Helps the growth of understanding which can help the development of language skills.
- 6. Provide experiences that are not easily obtained in other ways, and help more efficiency and diversity in learning (Dwiyogo, 2013: 11).

# IV. The conclusion of the benefits of learning media are:

- 1. With learning media makes students more active, creative, happy, and fun.
- 2. Reducing teacher verbalism in learning.
- 3. Presentation of lesson metres is more focused.
- 4. Learning becomes shorter, effective, efficient, and interesting.
- 5. Improves co-operative, collaborative and problem-solving learning.
- 6. Fosters students' interest and motivation to search, discover, compile, and form knowledge based on thoughts and experiential experiences.
- 7. Foster students' positive attitude towards learning materials.
- 8. Fosters continuous organised thinking.
- 9. Provide a common experience of the diversity of learning materials.
- 10. Overcoming the limitations of the senses, space, and time.

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