

## TEACHING OF MUSIC APPRECIATION IN BERETON SCHOOL APPLYING PIAGET'S THEORY OF COGNITIVE DEVELOPMENT

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### Abstract

This study is centred on applying Piaget's theory of cognitive development in teaching music appreciation in Bereton Montessori School Port Harcourt. The aim is to discover the effectiveness of Piaget's theory of cognitive development to learning and the development of children's thinking and reasoning which is the key to understanding childhood growth. The method adopted in this study is a survey research design. The population of the study comprises twenty (20) children in two classes of Nursery 3 which they call transition class. Data were gathered by observation method. The result of the study clearly shows that the learning behaviour of children agrees with Piaget's theory of cognitive development. Based on the findings, it was recommended that teachers should assess the ranges in the concept formation of children and encourage active participation to assess their concept formation.

**Keywords:** Teaching, Music appreciation, Bereton Montessori School and Piaget's theory of cognitive development

## **Introduction**

Developments in a child are those changes that occur from birth to adolescence. A lot of changes take place during this period and some of the abilities and characteristics developed during childhood can last a lifetime. Some developments in children are similar. They learn to focus, sit, crawl, and walk at comparable ages. One can predict this aspect of development, but other aspects of development vary according to individuals. A child that will be shy, outspoken, intelligent, energetic, dull etc. cannot be predicted at birth. Some factors influence a child's development. Peer group, community, family members, school, environment influences the child's thinking, socialization, and self-awareness. As children grow, they try to understand their environment, respond to people around them, and choose their friends and so on thereby contributing to their own development. Psychologists have devised themes to explain their observations in child development over the years. Among these theories is the cognitive theory. Cognitive theories focus on the development of thinking and reasoning as the key to understanding childhood growth. The well-known theory of cognitive development was developed by Swiss psychologist Jean Piaget and he theorized that children pass through four distinct stages of cognitive development:

- |                               |               |
|-------------------------------|---------------|
| 1) The sensorimotor stage     | 0-2 years     |
| 2) Preoperational stage       | 2-7 years     |
| 3) Concrete operational stage | 7 - 11 years  |
| 4) Formal operational         | 12- adulthood |

## **Purpose of the Study**

The purpose of this study is to examine the effectiveness of Piaget's theory of cognitive development on children at their stages in Bereton Montessori School, Port Harcourt.

## **The Problem**

It has been observed that most teachers do not apply the theories of learning in classrooms; some of them do not even know that there are theories for teaching and learning and they do not see the need to attend training for teachers. It is the responsibility of the teacher to motivate or stimulate the child to want to learn. This study will encourage teachers to understand that every level of a child's development has its teaching strategy that will ensure effective learning when applied (Onwuekwe: 2021, Lecture note on Psychology of Music).

## **Methodology**

This study adopted a survey research design. Nworgu in Esimone (2015) defined "survey" as a research design by which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to represent the entire population (p.173). Bereton Montessori School is made up of early years (Nursery), primary, and secondary school. It is among the schools in Port Harcourt that give priority to every subject including music and they have a well-equipped music room. This research was carried out in Bereton School through the help of the music teacher who spoke to the school management and they gave their consent by releasing a full teaching week for the researchers to use. The music teacher also participated in the lesson by observation. Two classes were used for this study out of the three transition classes and each class is made up of ten children. Two periods in a week was used for each class (Transition A and B) which happened to be their music period on the timetable.

## **Theoretical Framework**

Piaget's theory of cognitive development is adopted in this study. Views on the nature of cognitive development have been greatly influenced by the work of Piaget. Jean Piaget a Swiss origin (1896 -

1980) made a systematic observation of children's behaviour, thinking and knowledge acquisition. He aims to discover by analyzing performance the quality and nature of children's concept attainment at a particular time in their lives.

Onyiuke (2006) noted:

*From the childhood stage of development, the child learns to develop his moral attributes to live harmoniously with his fellow men. In the family and school, the child learns songs that teach morals like songs that emphasize respect for elders, the dignity of labour, kindness to all, hard work, cleanliness and many others. Here learning comes naturally and does not need to be memorized with stress (p. 59)*

The primary, secondary and tertiary reactions built on the reflex activities of babies, the role of imitation and internalization of actions to become thoughts and the place of language as a mediator in intellectual growth and learning skills are a few of his most important suggestions which are pointers to learning processes.

A baby from the point of birth responds to the surroundings by reflex activities which are not acquired. As time goes on the baby begins to react to surrounding in a way of purposeful behaviour where the baby seeks the mother's nipple, grasping objects that come in contact with the palm of his hand and general body movement begins to show signs of co-ordination. The process of incorporating new perceptions either to form a new purposeful behaviour or integrating them into existing ones was termed assimilation by Piaget and when the child can modify existing behaviour to meet new environmental demands, it is said to experience accommodation. Piaget considered that conceptual growth occurs because the child is attempting to adapt to the environment organizes actions into purposeful behaviour through the process of assimilation and accommodation.

## **The Four States of Piaget Theory of Cognitive Development**

(Jerome Bruner 1962:37). Woolfolk (1993) explains that:

*Piaget believed that young people pass through four stages as they develop: the sensorimotor, preoperational, concrete operational and formal operational. In the sensorimotor, the infant explores the world through their senses and motor activities and work towards mastering objects performance and performing goal-directed activities (p. 59).*

The sensorimotor stage is between the time of birth to 2 years where the child is concerned with material, objects and physical reflexes. From birth to 8 months, the child is limited to activities around his body like sucking, grasping whatever meets his body but from 8 months to 2 years the child directs activities towards objects outside his body. The movement here is directed towards achieving a goal. Children can imitate and represent an object in their absence like using something to make a car and pushing it or backing an object as a baby.

The preoperational stage occurs between 2 - 7 years of age. This is an active stage of exploration where the child manipulates his environment and internalizes behaviour and actions. Egocentrism predominates because the child does not like to view things from another person's angle. As they grow, develop, and reach the age of formal schooling, they begin to learn numbers, letters, and objects. They also learn through music and by doing so they are improving their gross and fine motor skills which get them interested in art, craft and all kinds of ride-on toys. The most important mode of learning at this point is playing. Make-believe play of all kinds is attractive and fosters the development of language, socialization and creativity. They also like to build out of items around the house ([childdevelopmentinfo.com](http://childdevelopmentinfo.com)).

The concrete operational stage which falls between 7 - 12 years is the beginning of logic where the child begins to clarify objects by similarities and differences, concepts of time and numbers and logical mental processes. The formal operation stage occurs from 12 years and above. Here, there is the orderliness of thinking and mastery thoughts.

Abeles Hotfer and Klotman (1994) refers to Piaget's theory as directly relevant to music education, shedding light on the development of musical concepts and providing insight into the development of musicality and also the application of both his clinical and experimental techniques to the study of musical learning and concept formation.

### **Applying Piaget's Theory to Teaching of Scales**

Most music educators support the teaching of children with play, props, toys, from known to unknown. Carl Orff quoted: "Since the beginning of time, children have not liked to study, they would have rather play and if you have their interest at heart, you will let them learn while they play, they will find that what they have mastered is child's play". He further quoted that "Elemental music is never just music. It's bound up with movement, dance and speech and so it is a form of music in which one must participate, in which one is involved not as a listener but as a Co - performer"[<https://libquotes.com/carl-orff/quote/lbs3k8>]

The two classes that were used for this study consist of ten (10) pupils each. Some of the teaching aids used were gathered from the school's resource room such as a chart containing a ladder, building blocks, keyboards etc. Voice was also part of the teaching aids.

### **Procedure**

#### **Step One**

The teacher started the lesson by displaying the picture of a ladder on the board and asking the children questions like:

- What is that picture on the board?
- Have you seen a ladder before?
- What is it used for?
- How do you climb a ladder?

The response from the children led to the introduction of the topic (scale) and the definition of scale as "A ladder where musical notes climb".

### Step Two

The teacher shared the building blocks to the children and they were guided to build a ladder with them.

### Step Three

The teacher took the children outside the classroom where the staircase is to demonstrate the ascending and descending of a ladder. At this point, the stairs were labeled 1- 8 on one side for ascending and 8-1 on the other side descending. This is to demonstrate the law of exercise by Edward Thorndike which says that the learner must DO to LEARN. He must exercise, participate, think, demonstrate, explore, write, ask a question, dance, and sing to learn. It encourages active and not passive learning.

### Step Four

The teacher thereafter detaches the numbers on the stairs and replace them with the tonic solfa: "d r m f s l t d<sup>1</sup>" (ascending and descending). The children were guided to sing the tonic solfa ascending and descending until mastery takes place. Here, Thorndike's law of effect was also established which is the feedback or the effect of the exercise performed.

## **Findings**

The result from the classes shows that the learning behaviour of the children conforms to the characteristics features of Piaget's stages of cognitive development. It indicates that children at this stage of development learn by internalizing behaviour and actions. The lesson was taught in each of the classes for two periods in a week and each period lasted for thirty (30) minutes.

At the end of the lesson, learning was achieved because the teacher took time to assess the children one after the other during the second period. In the course of assessing them individually, the teacher found out that Transition A performed better and the goal was achieved but three (3) out of ten (10) children in Transition B couldn't memorize the tonic solfa, especially, singing at the correct pitch.

## **Discussion of Findings**

Learning indeed was achieved by the end of the lesson because more than 90% Of the pupils learnt and memorized the tonic solfa. Some of the pupils learnt immediately during the first period and some during the second period which shows that the learning ability of the children is not the same.

When the pupils were interviewed, it was found out that the majority of those that learnt during the first period already have knowledge of tonic solfa, some of them also have keyboards in their homes. The second set of pupils that learnt the tonic solfa during the second period did not have any knowledge of the tonic solfa before that time. The three (3) pupils from transition B that could not learn properly even at second period were proven to be going through some health challenges so the teacher pasted the flashcards containing the tonic solfa ascending and descending on one corner of the classroom and



encouraged the pupils to continue rehearsing with it until mastery takes place.

### **Educational Implications of Piaget's Theory**

There are educational implications of Piaget's theory that can serve as a guide to teachers and music educators. They are:

1. Teachers should have some awareness of the ranges of possibilities in the concept formation of the children they are teaching.
2. The idea of active participants is in keeping with Piaget's view that concept formulation arises from the internalization of actions.
3. Teachers especially at the upper school level should begin from concrete considerations, building up where applicable to more abstract reasoning.
4. Verbalization is very important. Language aids internalization and consequently the formation of a concept. The verbal interchange between teacher and children or parents and children constitute an important communication channel.
5. Teachers can use the pattern of development in each child as a means of assessing attainment both in respect of the child's progress and about the expectations of his/ her mental age group.

### **Conclusion**

A child can only learn when he/she is made to participate in the process of learning. Sensation plays an important role in the process of learning where a child is stimulated through one or more of the sense organs. Sensation makes a child turn his attention to a particular situation (the topic) and paying attention depends on if the topic meets his interest, needs, wishes etc. This does not guarantee that learning has taken place, it leads to perception and learning begins when perception is achieved. All the children in a class may not learn and understand with the same method of teaching; some of them will require extra or combination of two or more teaching methods to be able to learn. It

now behooves the teachers to understand and be aware of ranges of possibilities in the concept formation of each child they are teaching and apply the suitable teaching method for the age and stage of that child for effective learning.



Children making a ladder with building blocks



The researcher teaching scale in the classroom

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