

EMBRACING MUSIC INTERVENTION AS STIMULUS FOR CHILDREN'S LEARNING

**Omolara Olasunbo Loko, Ph.D. &
Nkemdirim Olubunmi Adedina, Ph.D.**

Introduction

Music is an integral part of human lives. Its origin could be traced to human speech, communication, mime, singing and environmental sounds which include ocean waves, hammer, anvil and wind just to mention a few. These sounds are produced from animate and inanimate objects. Music is the combination of vocal or instrumental sounds in harmony to create melody pleasing to the ears. Music as an art permits all human societies with the capacity to reflect and affect human emotion. A lot of myths and legend are linked to the evolution of music in different societies based on their cultures. Early forms of music involved use of drums, stones, clapping, stamping of feet as musical instruments. It also developed to traditions used during religious, ceremonious, festivals, rites, rituals and entertainment. Egyptians, Arabs, Romans, Greeks and Africans developed their types of music starting from 4000 BCE. Creation of musical technologies dates back to ancient humans, well before these technology currently appear in the material record (Killin, 2018.) Going by Killin's view, right from the beginning, music has been a communal affair in which individuals and large groups participate. This music plays a significant role in societies where information is shared through traditional songs for social learning. Aristotle's Poetics, (1959) in Killin (2018) sums the role of music in youth training, emphasizing its reputation in three ways; a practice that builds character, affords amusement/leisure and cultivates the mind. In agreement, Plato's similar view was shared in the Republic where musical training is depicted as a potent instrument than any other to import grace and make the soul of him who is "rightly educated graceful" (Plato 2002, p.257).

In view of the above, this study sets out to ascertain the importance of music in children's. Over time, learning has faced many challenges and this warranted series of innovative teaching. Children learn through various ways, therefore, no single method of teaching can satisfy all subject matters. This is why teachers are open to diverse methods of teaching and pedagogical strategies in presenting lessons to children in the classroom. However, prominent among approaches to teaching is, active participation in classroom activities to meet the whole range of learning needs of pupils. This is achieved when learning becomes a two way communication, not dominated by the teacher with little contribution from the learner.

In this study, music has been identified as a life enriching academic subject, with a universal language that triggers emotional responses and propels a chain of creative activities in learning. From literature, there has been an increase in research on the impact of music to children's learning (Weinberger, 2000, Pratt, 1991, Peuterii 2000). Music-centered strategies aid children comprehension in other subject matters in language learning, mathematics, science, social studies among others. Elementary students benefit from music to develop their ability to improve memory and recall during learning (Dyer 2011). Music is "the universal language is an activity that increases learners engagement" to have a positive effect on both cohesiveness and behavior issues within the classroom (Didomenico, 2017, p.7). Apparently, music filled activities reduces regimented learning and increases awareness for effective comprehension.

Conceptual Clarifications

Music: is not just a leisure activity. It is more than verbal counselling. It is a sophisticated cognitive, linguistic, social and psychological treatment. Music creates a fusion for proper functioning of the body and mind and ignites all aspects of child development including, affective, cognitive and psychomotor. When children are exposed to music during early years, it helps them learn sounds and meaning of words. Music accompanied with movement and dance helps to build motor skills and creates an avenue for self-expression and a great enhancer in straightening memory skills. Music cuts across all age range of children from infants to teenagers, that is, ages 0-17. Psychologists do advice pregnant women to listen to soft, quiet or classical music for baby's brain development. From pre-school age, children are greatly influenced by music in motor, language, social, cognitive and academic

abilities. Apart from being a source of enjoyment for children, music is also a means of communication, opportunity for exposure to challenges and multi-sensory experiences to enhance learning abilities and achievements. Onyiuke, aptly describes the importance role of music in the early years of a child “as a foundation upon which future learning rests. Early interaction through music influences positively the life of a child and prepares the child to bond emotionally and intellectually with others.” (2005, p.13).

Furthermore, Music engages cognitive functions, such as planning, working memory, inhibition and flexibility (Dumont et al, 2017). All these foster a child’s mental, physical and intellectual well-being. Children explore music through play by discovering themselves, other people and the world around them thereby strengthening their social and emotional skills. In simple words, music helps children connect to their families and society by fostering a sense of belonging. Continual exposure of children to music makes them happy and excited and creates a friendly environment that produce positive emotions like joy, affection, delight etc.

In a nutshell, music brings alive all areas of children development and makes body and mind work together properly. Music is a great stabilizer that balances children’s emotions, encourages social interaction, improves self-esteem and enhances school readiness. Above all, it creates a bond between the child’s and society through culture, history, traditions and modes of communication, which are vital to human existence. This will create opportunities to build close relationships, encourage teamwork and foster cooperation. These many roles and functions of music in learning is the bedrock for the inclusion of music education into school curriculum. Music education is a field of study in teaching and learning where all domains of teaching and learning is affected. These domains of learning include, psychomotor, cognitive and affective, in particular and significant ways (Concina, 2015).

To properly inculcate the benefits of music in learning, student teachers need to be adequately prepared and trained in instructional content and method. This is part of the six Music Teacher Education (MTE) goals reiterated by Adeogun which include “to produce NCE teachers who are prepared and are capable of benefitting from further education in music; to promote cultural continuity...” (Adeogun, 2015).

By implication, since the school environment is a unifying institution, teachers' ability to relate the curriculum with the diversities of learners will aid their assimilation of an integrated experience giving room for understanding, insight and creativity. They must have an understanding of methodologies and use their music skills as agents of change to make valuable contributions to classroom sessions for useful and relevant learning. Music could be used by teachers "to integrate and create innovative practices in early childhood education through singing and dancing...Children must be exposed to a wide range of educational experiences that will enable them acquire self-worth and confidence which they intuitively transfer during learning activities" (Nwauzor,2013 p. 6)This is because whatever a child goes through at an early stage is used to advance future knowledge in building confidence, behavior and discipline that will enable the child excel and make purposeful decisions.

Theoretical Framework

This study is hinged on Gardner's theory of multiple intelligence as it relates to several fields of study like, Psychology, anthropology, science, genetics etc. Gardner's theory, states that humans possess a set of relatively independent intellectual capacities that they draw from individually or corporately; instead of a single intelligence measured by traditional IQ tests. He further itemized these intelligences to be;

- Linguistic intelligence (analyzing and creating oral and written language)
- Logical intelligence (ability to calculate and solve abstract problems)
- Music intelligence(discerning and expressing different sound patterns)
- Spatial intelligence(perceiving the visual-spatial world and forming mental imagery)
- Bodily kinesthetic intelligence(using physical skills to produce things and solve problems)
- Inter personal intelligence (understanding other people's moods and interacting with them.
- Intrapersonal intelligence(knowing oneself and directing one's actions accordingly)
- Naturalistic intelligence(identifying living beings features of the natural world)

According to Gardner (2013) these intelligences are combined differently in individuals so much that strength or weakness in one does not imply strength or weakness in others. The implication of Gardner's theory to this study is that ideas, concept and skills should be taught in various ways so that as many of the intelligences as possible would be exploited to develop a particular intelligence. In this instance almost all the intelligence were combined in the experiment through the teaching of numeracy, language, social studies and creative arts. Most importantly, the music intelligence was emphasized to help attain a particular level in learning for pupils in primary schools. Music played an important role here in creating a friendly atmosphere, reducing tension and anxiety, increasing self-esteem and arousing positive emotions in learners. Adopting music to appeal to different forms of intelligence was also of assistance to researchers (teachers) who taught new concepts and ideas in diverse subject areas.

Methodology

This is an on-going research that is based on observation and has been classified in different phases to address specific issues. These include the use of music, drama, designs and dance. For the purpose of this study, music is discussed as one of the approaches to learning in a formal environment. The research was carried out over a period of twelve (12) weeks, involved not only the authors of this work but also other research assistants who are NCE teachers in training. The intention was to expose these student teachers to possible challenges in teaching and learning and equip them adequately with available tools that can help meet the ever growing demand in a school setting.

Objectives

The objectives of this research are in three fold.

- First is to address classroom teaching and learning using music strategy
- Second is to assess the extent and level of impact of using music intervention in the classroom
- Third is to attest to music as a universal language can be used by teachers who are non-music experts for classroom activities with adequate training in the field

This was achieved by exploring various avenues that improves learning abilities of pupils in primary four classes. Songs were composed with written lyrics to reflect the topic being taught in particular subject areas like Literature-in-English or African

Languages, using folkloric songs to address classroom teaching and learning process by using music as an intervention and strategy.

Size of Study

The experiment involved four (4) schools in all, within Oto/Awori Local Council Development Area (LCDA). Two, out of the four schools were public while the remaining two (2) were private schools. The reason for choice of Primary schools is to create a balance in the study devoid of bias. These schools were be represented as A¹, A², B¹ and B². Schools A¹ and A² are public schools while schools B¹ and B² are private schools.

Population of Study

The population of study is as shown below;

Schools	Category	Number	Male	Female
A ¹	Public	66	28	36
A ²	Public	71	25	41
B ¹	Private	28	15	13
B ²	Private	22	10	12
TOTAL	4	187	78	102

The total population of one hundred and eighty seven (187) pupils was drawn from primary four pupil classes from the four schools comprising both public and private primary schools between the age ranges of 8-12. The schools were randomly selected as reflected in the population and gender of pupils. This is because, this is not a population or gender research but a study to determine the effect music has on learning irrespective of size and gender.

Process and Procedure

Forty NCE Students, who are teachers in training served as research assistants in this experiment. All of them are already exposed to the practice of education and various approaches that could be adopted to enhance pupils learning. The first six weeks was spent preparing research assistants for the field work through lectures, workshops, hands on experiment, seminars and discussions. They composed and learnt the music, and later taught the pupils the newly composed music. These were grouped into four comprising of ten research assistants per school. After obtaining permission to carry out the research from head of schools, the curriculum for primary

four class for Mathematics, English language, Yoruba and social studies, were released to researchers. Each of the four groups was assigned a subject area and were mandated to prepare lesson notes to cover six weeks (6) in this order. These lesson notes were scrutinized and validated by lead researchers to ensure conformity and that it meets the objective of study.

All the four primary schools comprising of primary four pupils had exposure to music in the classroom. In order to assess the level of motivation and learning acquired, the first week of the experiment was designed to introduce and explain the experiment to them. The last week was then used for verbal evaluation to ascertain level of success through responses from pupils. At this phase pupils were able to answer all questions asked drawing copious examples from music used for each subject. They were able to remember, sing, move and demonstrate the lyrics without writing them on the boards.

Introductory class: first contact with pupils, Purpose of research and learning of theme music

THEME MUSIC

Musical accompaniment: (Clapping)

Learning is fun (2ce) learning is fun for me

I learn daily, I learn real good

I dance and sing, I jump and clap

Learning is fun for me

Teacher: Learning is Fun

Pupil: Learning is fun for me

THEME MUSIC

LEARNING IS FUN

Learning is fun Learning is fun Learning is fun for me I

5
learn dai ly I learn real good I dance and sing I jump and clap

9
lear ning is fun for me

Fig. 1: Musical Transcription of Theme song; Learning is fun

A. Subject: Mathematics

Topic: Addition and subtraction of money for and everyday business transaction

Musical accompaniment: Clapping (This is the way...)

1. Every day I do business, I do business, I do business
Every day I do business, with money that I'm given
I spend some cash, I get some change
I add all up, I take away
This is how I spend money
And my world goes round and round

MATHEMATICS SONG

The image shows a musical score for a song in 4/4 time, written in a single treble clef with a key signature of one flat (B-flat). The melody consists of quarter and eighth notes. The lyrics are: "E very day I do busi ness I do busi ness I do busi ness E very day I do busi ness with mo ney that I'm gi ven spend some cash I get some cash I add all up I take a way This is how I spend mo ney I spend mo ney I spend mo ney This is how I spend mo ney and my world go round and round".

E very day I do busi ness I do busi ness I do busi ness E very day I

do busi ness with mo ney that I'm gi ven spend some cash I

get some cash I add all up I take a way This is how I spend mo ney I

spend mo ney I spend mo ney This is how I spend mo ney and

my world go round and round

Fig. 2: Musical Transcription of Mathematics song

B. Subject: English Language

Topic: Guided Composition (Motor Park)

Musical accompaniment:

Motor park, motor park (4ce)
You take me places I don't know
Driver drive safely
Dad and mum, I'll be back soon
Right on time for moonlight tales

MOTORPARK

Mo tor Park Mo tor Park Mo tor Park Mo tor Park You

3
take me pla ces I don't know Dri ver drive safe ly Dad and Mum I'll be back soon

6
right on time for moon light tales

Fig. 3: Musical Transcription of Guided composition; Motor Park

C. Subject: Yoruba

Topic: Omoluwabi; Ikinilede Yoruba (Greetings in Yoruba Language)

Musical instrument: gangan drum

1. *Bayi la se n kirawa(2ce) Nile wa*
Bayi la se nkirawa(2ce) ledewa
2. *Ma dobale ki baba pe, e karo*
Ma dobale ki mama pe, e kasan
Ma dobale ki egbon pe, e kale
Ma dobale ki gbogbo 'le pe, o daaro
3. *Ma kunle ki baba pe, e karo*
Ma kunle ki mama pe, e kasan
Ma kunle ki egbon pe, e kale
Ma kunle ki gbogbo 'le pe, o daaro

Meaning

This is how we greet (2ce) in our land

This is how we greet (2ce) in our language

I will prostrate and greet father, good morning

I will prostrate and greet mother, good afternoon

I will prostrate and greet elders, good evening

I will prostrate and greet everyone, good night

I will kneel and greet father, good morning

I will kneel and greet mother, good afternoon

I will kneel and greet elders, good evening

I will kneel and greet everyone, good night

(As the music is rendered, male and female pupils comply with the postures of prostrating or kneeling while greeting)

OMOLUWABI

Ba yi la nse ki r'a wa Ba yi la nse ki r'a wa ni le e wa

4
Ba yi la nse ki r'a wa yi la nse ki r'a wa le de wa ma do ba le ki Ba ba pe

8
E k'a a ro ma do ba le ki Ma ma pe E k'a a san ma do ba le ki egbon pe

12
E k'a a le ma do ba le ki gbo gbo 'le pe o da a ro ma kun le ki Ba ba pe

16
E k'a a ro ma kun le ki Ma ma pe E k'a a san ma kun le ki egbon pe

20
E k'a a le ma kun le ki gbo gbo 'le pe o da a ro

Fig. 4: Musical Transcription of Omoluwabi; Ikinilede Yoruba

D. Subject: Social Studies

Topic: Roles of Family Members

Musical accompaniment: tambourine and clapping (I love Jesus, he's my friend)

1. I love my family (2ce)
Here is why, here is why
My daddy pays the bills, my mummy cooks and cares
I love them both, I love them both

2. I love my family (2ce)
Here is why, here is why
My sister sweeps and cleans
My brother washes and dusts
I love them both, I love them both

3. I love my family (2ce)
Here is why, here is why
I always tidy my room
I help with all house chores
I do my best, I do my best

Roles of Family Members

The image shows a musical score for the song "Roles of Family Members". It consists of ten staves of music in a 4/4 time signature with a key signature of two flats (B-flat and E-flat). The lyrics are written below the notes. The score is divided into measures, with measure numbers 5, 8, 9, 13, 16, 17, 21, and 24 indicated at the start of their respective staves. The lyrics describe various family roles: father (pays bills), mother (cooks and cares), sister (sweeps and cleans), brother (washes and dusts), and the child (helps with chores and does their best). The song concludes with a double bar line at measure 24.

I love my fa mi ly I love my fa mi ly here is why here is why

5
my Da ddy pays the bills my mu mmy cooks and cares I love them both I

8
love them both

9
I love my fa mi ly I love my fa mi ly here is why here is why

13
my sis ter sweeps and cleans my bro ther wa shes and dust I love them both I

16
love them both

17
I love my fa mi ly I love my fa mi ly here is why here is why

21
I al ways ti dy my room I help with all house chores I do my best I

24
do my best

Fig. 5: Musical Transcription of Roles of Family Members

Roles of Family Members

The musical score is written in a single system with a key signature of two flats (B-flat and E-flat) and a time signature of 4/4. It consists of nine staves of music. The lyrics are written below the notes. The melody is simple and repetitive, using quarter and eighth notes. The lyrics describe the roles of family members: father (pays bills), mother (cooks and cares), sister (sweeps and cleans), and brother (washes and dusts). The song concludes with a final line: 'do my best'.

I love my fa mi ly I love my fa mi ly here is why here is why

5
my Da ddy pays the bills my mu mmy cooks and cares I love them both I

8
love them both

9
I love my fa mi ly I love my fa mi ly here is why here is why

13
my sis ter sweeps and cleans my bro ther wa shes and dust I love them both I

16
love them both

17
I love my fa mi ly I love my fa mi ly here is why here is why

21
I al ways ti dy my room I help with all house chores I do my best I

24
do my best

Concluding Class:

Going over all music learnt and evaluation of music with content of each lesson

Each group of research assistants specialized in only one subject and topic which was taught weekly in rotational form in all the primary schools selected. So, at the end of the experiment all four groups had visited and taught in all the four schools as well.

Research Instrument

Music was used as research instrument to teach topics in Yoruba, Social Studies, Mathematics and English Language. Songs were composed for each topic to enable pupils easily comprehend and sing along. Some of the songs were accompanied with musical instruments like drums, tambourine, gong and clapping of hands. The lyrics were simple and short and were introduced to pupils at different stages of learning. Some were at the beginning to set the mood, while others came halfway through the class for buttress and emphasize. Others were taken at the end of the learning in conclusion of the lesson. The lyrics of the composition were boldly written on the boards for pupils to sing along.

Observations

During the course of the six weeks period of teaching and learning, a lot of discoveries were made on the effects of using music as an approach to teaching primary school pupils and will be highlighted below;

- Learning with music allows pupils to express themselves individually
- Using music helped to facilitate socialization and enhance interpersonal interactions of pupils
- Music created a learner friendly environment
- Pupils participatory level improved gradually as new topics were taken in selected subjects
- Pupils attention span was enhanced at each sessions as a result of variety introduced in music used
- Pupils were actively involved in singing and bodily movement to the songs taught during learning
- Some learning sessions in largely populated classes were rowdy and noisy during music

- Pupils were motivated to learn as the topics were simplified with songs
- Not all pupils enjoyed the music sessions.

Conclusion

As inferred from the study so far, the intervention programme was discovered to have introduced music to all four subjects that affected pupils' disposition to learning. The outcome of the experiment showed that music played a significant role in pupils' retention, creativity, participation and involvement during teaching and learning sessions. The outcome of the experiment further indicates that music is a strong force in creating an enjoyable, inspiring, friendly, and conducive learning atmosphere for young learners. They were receptive and well-disposed to learning all the topics in the subject areas without being disenchanted, impassive or indifferent in their attitudes. Also, outcome of the research shows that music has great impact on learning.

Therefore, it should be incorporated into lessons for all subjects by teachers for all primary school pupils. There is need for regular workshops, seminars and hands on experiments in music for NCE student teachers and employed classroom teachers to improve their skills at music approach to learning. The study further shows that, apart from composing songs, teachers can also adopt audio gadgets with pre-recorded music that is connected with life experiences outside the school walls. In views of this, the Pupils should be allowed to sing along, dance and handle musical instruments in class to encourage their musical abilities and interests.

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