

MUSIC EDUCATION IN CHILDHOOD DEVELOPMENT: TOWARDS ENHANCING COGNITIVE DEVELOPMENT OF NIGERIAN PRIMARY SCHOOL CHILDREN

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Introduction

Every unique experience has a role to play in the development of a child. No experience can replace the other as each is vital in its importance, therefore, the need for varieties of experience and programs. Consider Soccer, Computer Games and Classes, Chess, and on and on, today's children have so many activities to choose from. It often seems as if their days are programmed from dawn to dusk. In the midst of all these, is listening to music. Every day, our children are bombarded, as are all of us, with recorded music in stores, subways, from television, radio, and record player and hand phones. A look around the streets, in the cars, buses, in schools, even in markets, the headphone on people's ears says it all. But to the question, why is it that children are not engaged in musical activities, some would ask is there anything that Music has to offer. Researchers have proved that Participation in music instruction has many benefits and outcomes. Has one ever considered what one's life would be like without music? No folk songs, no highlife; no reggae; no symphonies; no carols; hymns or religious songs; etc. Impossible you say; perhaps, but it is in the rare home today which the child learns the folklore of his culture: the rhymes, songs, games, and finger-plays which used to be part of every child's birthright. We are all aware of the crucial impact of music on our mood and general well-being. The love of music is apparent everywhere but no attention has been given to its study. Schools also put emphasis on subjects such as English,

Mathematics, Physics, etc., and music is relegated to the status of 'neglection'. The Nigerian government who included music in the school curriculum is also oblivious of the potentialities of music education in child development. This reflects in the government schools also not offering music, even where some schools do, there are no materials for practical experiences. Yet it all starts and ends at the late primaries.

There is a myopic conception that music education centers on mere singing and dancing and remains an exclusive reserve for the "never-do-wells" in the academic industry and society. The result of this is that children are not exposed to musical activities and are therefore denied the instincts which participation in music programs can give. The impacts of music education in the development of the Nigerian child need to be explored and harnessed. Recent experiments demonstrate that music can enhance reasoning; and that specific music could enhance how one reasons. Musical activities may help children's leadership skills, enhance self-esteem, promote esprit de corps, or foster a work ethic and dedication to duty and excellence. Music is more to the above as it cuts across all aspects of human endeavors. Because of the short sightedness, there seem to be general apathy and neglect to the development of music education thereby causing its inclusion in the school curriculum to be a mirage. It is most difficult to convince people in decision making positions of the aesthetic value of music education if they have not experienced it for themselves. Such values simply cannot be described adequately - they must develop as a result of direct experience. Across the country, music teachers have watched in impotent bitterness and dismay, as school boards cut into the budget for music programs.

The purpose of education is the systematic development of the mind and capabilities of every child. This study decries the myopic views about music education and more importantly to re-awaken people's interest and understanding of the benefits and importance of music education in child development. It highlights the present situation of music education in Nigeria. The recurring question here is whether music has anything to offer. In an attempt to give answer to this question, the paper reviewed the results of empirical studies carried out by early researchers on the reasons for the advocacy of music in the education curriculum. Their research studies which findings influenced their views and comments covered music education, training and performance, cognitive ability and improvement in spatial-

temporal reasoning, piano and computer training, music training and mathematics relatedness. How musical skills affect other academic fields were also looked into. The scope of this study is limited to pupils "between the ages of 5 and 10years. These are children within the second stage of human development or what "Piaget" called "the concrete operational stage of conceptual development. Better put, these are children between pre-school and early-school years.

The Present Situation of Music Education in Nigeria

The Nigerian government adopted education as an instrument "par excellence" for effecting national development. In its National Policy on Education (2004), it stated that "*education should be child -centered and geared towards the acquisition of appropriate skills, maximum self- development, self-fulfillment and self-reliance*"....sec 1 (7) d and (9) d, thus one of the reasons for the inclusion of music in her educational curriculum. But has the curriculum achieved its objective in music education, the answer is simply no. the reason is that music once made a compulsory list in the Nigerian school curriculum even though with little or no attention but the situation today is that many children are not being exposed to an active music program either at home or at school. As a result, they do not enroll into music classes. The consequence of this is that they do not sit for music exams. Most Nigerian Schools do not offer music education in their curriculum. In some schools where music is offered, it is taught in the junior classes. Even at that, it is not given enough periods like other subjects making students to see it as less important to other subjects. Many other people mistake music education for signing and choir practices. There has always been lack of professionals in the area of music education especially in the primary and preprimary schools, and those in the higher classes are handicapped with materials and instruments. This development does not ensure continuity for music education among the few students who happen to study music in the secondary schools. There is a general underestimation of music studies by the education authorities, the Nigerian Schools and the society at large.

The researcher stood bewildered when a principal lecturer - a PhD holder in my school asked me what I'm reading music for or is it where my papers qualified me. This attests to the fact that even the educated do not accommodate the study of music as a (professional) course. What then do we expect from the illiterate society? As if to support the above, a friend of mine - a businessman asked me; are you

studying music in the Higher institution, did "Warrior" read music but we hear of him?

There is no orientation given to the study of music from the family, to the school, down to the society. The inclusion of music in the Nigeria School Curriculum by the educational authorities seem to be just for the fact of its inclusion in the curriculum of the western continents without insight to the real value it plays in both the realization of the individual and the contribution towards the economic development of the nation. During our days of teaching practice, the writer observed with dismay that only one music teacher was in charge of the twelve music classes covering the JS 1,2, and 3 and whether it continued in the senior classes is a foregone conclusion. A stumble into one of the classes before time exposed there was written on the chalkboard - "MUSIC" - "Most Useless Subject in Class". This is a clear testimony of the pupils and people's perception of and the position of music education in the Nigeria school system. Today Cultural and Creative Arts encapsulate Music, Drama, Fine and Applied Arts, and Work Ethics as one subject. And most schools assign these subjects to one teacher especially the private schools.

Reasons for the Advocacy of Music in the Education Curriculum

The Ancient Greek proverb says that: 'Nothing great can be expected from a man who is ignorant of Music'. It is on this background that Martin Luther said in Kerr (1969):

I wish to see all arts, principally music in the service of Him who gave and created them. Music is a fair and glorious gift of God. I would not for the world, forgo my humble share of music. Singers are never sorrowful but are merry, and smiles through their troubles in songs. Music makes people kinder, gentler, staid and reasonable... I am strongly persuaded that after theology, there is no art that can be placed on a level with music; for besides theology, music is the only art capable of affording peace and joy of the heart.... 2.

If one function of education is to acquaint individuals with their environment, then surely, music must be included, for it is an integral part of the environment.

There- is no phase of man's struggle for existence that has not been accompanied, communicated and extended with music. This is why Plato said in Winslow and Dallin, (1992). "Education in music is most sovereign because more than anything else, rhythm and harmony find their way into the secret places of the soul". Mark (1978) reported how Marson convinced the Boston School Committee (Board of Education) on the need to include music in the curriculum of the public schools as a regular subject. The School Committee report that recommended the addition of music in the Schools justified its action with three reasons: music, like other school subjects already in existence had to meet the criteria of being intellectual, moral and physical. He stated how the report carefully explained how music was beneficial for children in each of the three ways. Among the many other reasons were creation, worship, and discipline. The conclusion of the report states what effects the study of music could be expected to produce: In the language of an illustrious writer of the seventeenth century as quoted by Mark (1978) states:

"Music is a thing that delighteth all ages and beseemeth all states, a thing as reasonable in grief as decent being added to actions of greatest solemnity, as being used when men sequester themselves from action". If such be the natural effects of music, if it enlivens prosperity or sooth social happiness, if it can fill the vacancy of an hour that would otherwise be listlessly or unprofitably spent, if it glides with mild light the chequered scenes of daily existence, why then limit its benign and blessed influence? Let it, with healing on its wings; enter through ten thousand avenues the paternal dwelling. Let it mingle with religion, with labor, with the homebred amusements and innocent enjoyments of life. Let it no longer be regarded merely as the ornament of the rich. Still let it continue to adorn the abodes of wealth, but let it also light up with gladness the honest heart of poverty. Once introduce Music into the common schools and you make it what it should be, the property of the whole people. And so as time passes away, and one race succeeds to another, the true object of our system of Public Education may be realized, and we may, year after year, raise up good citizens to the commonwealth, by sending forth from our schools, happy, useful, well instructed, contended members of society".

Supporting this great writer in his own words, Schumann in Machlis (1977) states that; "Music to me is the perfect expression of the soul". In 1903 America, at the meeting of the National Education Association, Samuel Cole said in Mark (1978);

"The real purpose of teaching music in the public schools is not to make expert sight singers and soloists, I speak from experience. I have done all these things and I can do them again; but I have learned that; if they become an end and not a means, they hinder rather than help, because they represent only the abilities of the few. A much nobler, grander, more inspiring privilege is yours and mine; to get the great mass to singing and make them love it". 8

Stravinsky (1952) pointed out in Machlis (1977) that:

"Art postulates communion, and the artist has an imperative way to make others share the joy which he experiences himself. Adding to what Stravinsky had in mind, Komar (1980) affirmed that:

"Poets interpret the world in verbal configuration; painters depict the world in color, line and texture. Composers are aural - rather than verbal or visual artists who express the vast range of human experience in combination of sounds". This is true of music, but, the education authorities who can enforce the development of music pay lip service to it yet they claim they have interest in it.

It is a supposition against this back drop that Thereau in Machlis (1977: 556) complained bitterly that: "Men profess to be lovers of music but for the most part, they give no evidence in their opinions and lives that they have heard it. It would not leave them narrow-minded and bigoted". 556. To them that fail to realize the value of music and are confused about it.

Rolland in Komar (1980) remarks that: "Music perplexes those who have no feeling for it; it seems to them an incomprehensible art, beyond reasoning and having no connection with reality". In a bid to provide an answer to the above questions, we shall merge the people's responses, findings and comments under one caption below as the results are interconnected based on the nature of the testimonies and submissions.

Music Education as it Affects the Personal Lives of Individuals and the Business World

The need for the arts, particularly music education as part of the total curriculum in today's schools is becoming more apparent in our society. Apart from developing crucial skills, participation in music programs enhances a child's ability in the transfer of learning. As more studies are being published, the effect of music education as it affects the business world is being revealed. Some influential business and community leaders are noted to have made some remarks about the importance of music education as it relates to the business world and their personal lives. Lawrence A. Hough, president and CEO of 'Sailie Mae', was once referred to as saying, for the future of our children and our communities, people should find new ways to encourage students in the learning process. The arts (*music*) can be a powerful vehicle through which to challenge young people's minds, stir their creativity, instill discipline and build self-esteem. Italics added.

In a similar vein, a one-time U.S. Secretary of Education Richard W. Riley, has also been referred as having said that he has long believed in the important role that music and the arts can play in helping students learn, achieve and succeed. Education in theatre, dance and the visual arts is one of the most creative ways we have to find the gold that is buried just beneath the surface. They (children) have enthusiasm for life, a spark of creativity and vivid imagination that need training... training that prepares them to become confident young men and women.

Talking from experience, the Chairman and CEO, Apple Computers Inc., John Scully is also credited to have stated that the creative arts provide them with a unique and vital perspective about the world. That as performers or supporters of music, dance, art or theatre, with each experience, they have the possibility of being inspired and seeing the world through a different lens. Those experiences he stated, are critical to peoples personal growth because they can play a major role in spurring individual own creativity. He remarked that as a chief executive of a technology company that thrives on creativity, he wants to work with people whose imaginations have been unleashed and who tackle problem as challenges rather than see them as obstacles, and recommends that an education enriched by the creative arts (*music*) should be considered essential for everyone.

From the family diary comes a report from former astronaut and U.S. Senator, John Guean, as cited in Anukam, (2004)

Our family has always enjoyed music and made it an important part of our life together. My biggest musical accomplishment was on appearance on "Name That Tune, but Annie was music major at Muskingum College. I have always believed that music should be something people do together, and many of our family's best memories are times when we shared music with others. I am proud of our countries musicians... from Church Choirs and high school bands to our world famous performers, I am also proud of our music teachers who bring our rich music traditions within reach of all the young people of our nation. (Pg. 20)

In an article titled "Music and Mathematics, Adams (1999) enumerated the relationship, between music and Mathematics. His argument read thus:

Want a Mathematical Challenge? Try writing, reading, and playing music. Not only does it take an ear for music; it requires an appreciation for the principles of Mathematics. Because Jimmy Buffet started his career on raw talent, some of the mathematical aspect of music (counting; forming chords, and so forth) came to him quite naturally. But he realized how important understanding certain mathematical concepts were when he decided to write music called "Don't Stop the Carnival"... Composing music requires knowledge of music theory, which has mathematical underpinnings." Of all "the academic subjects, mathematics is all based on fraction and patterns"... "Where fractions are concerned, music focuses on divisions of time for the rhythm and space for dealing with intervals such as octaves or fifths",

Adams points to the Gregorian chants, "They are based on strict rules of Mathematics", she notes. Adams points out some mathematical concepts underpinning music:

Counting: It is fundamental for playing music. One must count beats per measure and count how long to hold notes.

Patterns: Music is full of patterns - Patterns of notes, chords and key changes. Musicians learn to recognize these patterns quickly. Patterns and "being able to invert them (known as Counterpoint), help musicians for harmonies.

Geometry: Music students use geometric shapes to help them remember the correct finger positions for notes on chords (more than one note played simultaneously). For instance, guitar players' fingers often form triangular shapes on the neck of the guitar.

Ratios and proportions/equivalent fractions: Reading music requires an understanding of ratios and proportions. For instance, a whole note needs to be played for twice as long as a half note, four times as long as a quarter note, and so forth. In addition, since the amount of time allotted to one beat in a given time signature is a mathematical constant, the duration of all the notes in that place are all relative to one another and are played on the basis of that constant.

Finally, different frameworks of time with which musician's work are based on an understanding of fractions and multiples... for example, understanding the rhythmic differences between $\frac{3}{4}$ and $\frac{4}{4}$ time signatures.

Sequences: Music and mathematics are also related through sequences, particularly intervals. Although a mathematical interval corresponds to the difference between numbers, a music Interval corresponds to the ratio of frequencies of the tones. That underlines all musico-mathematical relations. An Arithmetic progression in music corresponds to geometric progressions in mathematics. That is, the relation between the two is logarithmic. Commenting on the need for music in child development, M. Greene (personal communication, February 24, 2002) remarked that:

"Music is a magical gift we must nourish and cultivate in our children, especially now as scientific evidence proves that an education in the arts makes better mathematics and science students, enhances spatial intelligence in new born, and let's not

E. Ahanotu, C. Ajambe & F. Anukam: *Music Education in Childhood Development: ... forget that the arts are a compelling solution to teen violence, not certainly the cause of it".*

Udeh (2003) made mention of the U.S. Department of Education (1997) as listing the arts as subjects that College-bound middle and junior high school students should take. He referred the education report as stating that:

"Many colleges view participation in the arts and music as a valuable experience that broadens students understanding and appreciation of the world around them, it is also well known and widely recognized that the arts contribute significantly to children's intellectual development". [a classroom discussion on Mus. 114]

Speaking in "The case of Sequential Music Education in the Core curriculum of the public Schools", Venerable (1989), reported that: "The very best engineers and technical designers in the Silicon Valley industry are, nearly without exception, practicing Musicians". Michael E. Debakey, who is the M. D.; leading Heart Surgeon, Baylor College of Music, postulated as cited in (Anukam, 2004. Pg.26) that:

Studying music encourages self-discipline and diligence, traits that carry over into intellectual pursuits and that leads to effective study and work habits. An association of music and mathematics has, in fact, long been noted. Creating and performing music promotes self-expression and provides self-gratification while giving pleasures to others. In medicine, increasing published reports demonstrate that music has healing effects on patients. For all these reasons, it deserves strong support in our educational system, along with the other arts, the sciences, and athletics.

Music is one way for young people to connect with themselves, the division of labor and work ethics a bridge for connecting with others. Through music, children can be introduced to the richness and diversity of the human family and to the diverse rhythms of life.

Affirming the need for music education in child development, the U.S. Secretary of Education, Riley (1999), in an interactive session with students on carrier day has it with these words:

"Casals says music fills him with the wonder of life and the incredible marvel of being a human. Ives says it expands his mind and challenges him to be a true individual. Bernstein, says it is enriching and enabling. To me, that sounds like a good cause for making music and the arts an integral part of every child's education. Studying music and the arts elevates children's education, expands student's horizons, and teaches them to appreciate the wonder of life".

Responding to this wide debate on the role of music education in the development of the child, a statement is attributed to former President of the United States of America, Gerald Ford, as saying that Music education opens doors that help children pass from school into the world around them—a world of work, culture, intellectual activity and human involvement. And that the future of their nation depends on providing their children with a complete education that includes music.

Recounting war experience, Schwarzkopf, a retired U.S. Army General was mentioned in Anukam (2004) as saying that:

"During the Gulf war, the few opportunities I had for relaxation, I always listened to music, and it "brought me great peace of mind. I have shared my love of music with people throughout this world, while listening to the drums and special instruments of the Far East, Middle East, Africa, the Caribbean, and the Far North and all this started with the music appreciation course that I was taught in a third-grade elementary class in Princeton, New Jersey. What a tragedy it would be if we lived in a world where music was not taught to children". Pg. 28

On music education and child development, a former American President - Bill Clinton, was once said to have mentioned music as about communication, creativity, and cooperation, and that by studying music in school, students have the

opportunity to build on their skills, enrich their lives, and experience the world from a new perspective. In a similar vein, with respect to the intrinsic value of music in education, it was mentioned at Project Zero, an arts program of the Harvard Graduate School of education, that Music like Mathematics, Physics and poetry, is an essential part of our culture. Children improve their future immeasurably by gaining a deep understanding of its structure and its beauty. It is of the belief that this is justification enough for music in our schools.

Exploring the neurobiology of music, researchers discovered direct evidence that music stimulates specific regions of the brain responsible for memory, motor control, timing and language. For the first time, mental activity linked to emotional responses to music. The latest findings presented at a meeting of the Society for Neuroscience in Los Angeles, underscore how music... as an almost universal language of mood, emotion and desire... orchestrates a wide variety of neural systems to ease its evocative spell. "Undeniably, there is a biology of music", said Harvard University Medical School neurologist; Mark Jude Tremo (n.d). "There is no question that there is specialization within the human brain for the processing of music. Music is biologically part of human life, just as music is aesthetically part of human life". (Anukam, 2004. p. 31)

Speaking eloquently during a paper presentation at the Grammy Awards on (Wednesday, February 24, 1999), Michael Green, President/CEO of the National Academy of Recording Arts and Science, Inc. had it that:

Music is magic, music therapists prove every single day that music is powerful medicine, Tearing down the walls of silence and affliction of Alzheimers, depression, Parkinson's and autism. And did you know that kids, who study the arts, do an average of forty points higher in mathematics and Science? Yep. And that music education is superior to even computer instruction in enhancing early childhood mental capacity and spatial intelligence... Because the arts provide self-esteem, self-reliance and instills hope in these very places where hope and dreams are in short supply. So let's fight for the arts because the arts advance our society, they speak to the soul, they bring different

E. Ahanotu, C. Ajambe & F. Anukam: *Music Education in Childhood Development: ... cultures together, and now we know they just make us a lot smarter.*

In view of the above remarks, this paper wants to ask if there are further evidences needed to convince one that yes music has something to offer and that investment made in exposing a child to musical activities is a worthwhile investment. The issue now should be on how we can correct the above anomalies. The recommendations below might be of little help.

Recommendations

In an effort to effect a change of attitude towards the study of music, the writer hereby makes the following recommendations that:

The Federal Ministry of Education and the State Education Authorities should provide materials necessary for teaching music in Schools. Alongside Mathematics and Sciences, music education should be made compulsory in the school curriculum to harness its potentials. Principals and head teachers should allocate equal opportunities to music instruction in their school time tables. Parents should stop suppressing the innate musical urge inherent in their children which they express when they gather materials within their reach as musical instruments. Music education covers enough ground, and each topic in music is an alternative to practical.

Therefore, more time should be allotted to it. Having proved that music, dance, piano and Musical instruments enhances the development of the three domains in child development, as well as help the child in creativity and in integrating him to the School environment and the outside world, music education should be made to continue in the senior classes. This would guarantee continuity at the tertiary level. Music education should begin early in life, preferably starting in preschool. This will also help the child realize his potentials early enough. Qualified music teachers should be employed to ensure effective teaching of music in our Schools. Since the need for music in child development has been justified philosophically, practically and economically, a change in attitude within the profession is stressed; cuts in music programs in schools cannot and should no longer be accepted.

Conclusion

Concept formation is of major importance in early childhood development. Concepts are the nucleus of a child's thinking process. They represent his attempts to organize his own personal environmental experiences into relationship invested in meaning for him. Concepts can be formed, clarified, and extended by provision for direct experiences, multisensory impressions, motor manipulation, problem solving, creating and questioning. Through involvement in music, recordings, dances, games and rhythmic activities, young children's early beginnings of concept formation will grow in fertile ground.

In relating childhood development to intellectual growth, it is observed that these are the years when curiosity impels a child to reach out into his environment - to try to know. His primary strategy for intellectual growth is active, manipulative and sensory. He utilizes materials and active intercourse to build his conceptual scheme of the world.

Children find music extremely helpful as an aid in learning. Music aids in the education both of the mind and of the emotions. Music sharpens a child's sensibilities and familiarizes him with his emotional resources. Music gives him a sense of order which the outside world does not supply.

Music converts the animal in him and transforms him into an affectionate child, sublimates his feelings of hurt and revenge into love and devotion. Music can help the child's auditory awareness and listening skills. Music can help in both the development of his speech and the remediation. Music can teach concepts, colors, animal sounds, counting, sequencing, geography, etc. Music could help the children learn the memorization of passages of books more easily than if they tried to memorize the words alone. The Psalms is an example. Music integrates the child into his immediate environment and the outside world. The role of music education in child development is quite enormous.

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