

The integrity of music education in a child development

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Abstract: *The overall aim of this paper is to demonstrate, drawing from many studies, that children have developmental learning needs which go hand in hand with a rapid expansion of activity in early years. Music plays an important role in the life of a child. Besides the large and formal body of work revolving around traditional aspects of music education, music is increasingly being investigated in its broader context as an influence on the cognitive, emotional, behavioural and social aspects of children's lives, as a support or even entry point into other topics of learning and as an aid to personal development. There is a growing body of evidence linking music making to various aspects of child's development. Although the impact of music and music making on a child's development has gathered quite widely, our understanding of young children's music capabilities and the ways in which these capabilities interact with opportunities children encounter is patchy. There is therefore much work still to be done on the utilization of music for developmental purposes in the early years, which is a challenge to music educators in the 21st century.*

I. Introduction

There is no doubt that music plays vital role in the education of children from birth to five years of age. At this time all Kendergarten Music Activities – listening, singing, moving to rhythm, and exploring with instruments – should be centered in the child and his/her world. This demonstrates that children within this age phase have particular developmental learning needs and that all those providing their care and education would be wise to approach their work developmentally. According to Gammon (2003), music education was something that passed itself off as the learning of facts about music rather than something resulting from musical engagement. This message needed to be delivered with absolute clarity unencumbered by doubts or reservations. In helping the child to learn effectively and enjoy a balanced musical development, there is a need to study his characteristics at different ages, interests, basic needs, feelings, emotions, habits, understandings and values. The challenge of the music teacher in using music to impart on a child's development is for him to see his role not as introducing the child to the riches of the various practices of music through musical experience but rather as “didactic caretakers” of a culturally defined body of valued knowledge. Lave and Wenger (1991) argue that in such circumstances a pupil is not seen as co-participant in practice but as a person to be changed. According to Reimer (2003), music is universally sought and cherished by all humans, irrespective of race for the value it adds to life. Such values according to the author are as follows:

- Music is powerful at the level of the social group because it facilitates communication which goes beyond words, induces shared emotional reactions and supports the development of group identity.
- Music is powerful at the individual level because it can induce multiple responses – physiological, movement, mood, emotional, cognitive and behavioural.
- Music has powerful therapeutic effect's which can be achieved through listening or active music making.
- Music can promote relaxation, alleviate anxiety and pain, promote appropriate behaviour in vulnerable groups and enhance the quality of life of those who are beyond medical help.
- Music can play an important part in enhancing human development in the early years.
- Active involvement in music making in children may increase self-esteem and promote the development of a range of social and transferable skills.
- The easy availability of music in everyday life is encouraging individuals to use music to optimize their sense of well-being.
- Music can influence our behaviour in ways which are beyond our conscious awareness. Knowledge of these effects can be used to manipulate our work and purchasing behaviour.
- Music should be taught in schools to enhance the child's ability to feel and to read to stimuli.
- Music is culture oriented and as part of African lives, there are many cultural needs of music education.
- Music makes an important contribution to social life outside the school. It contributes to the life of the home; similarly, it provides a common ground for worship in the congregational sense both in Church and School.
- Music is a refuge in times of trouble and a moulder of good character. The idea has been put forward that music develops flexibility in thinking because it draws on so many different attributes. Music contributes

enormously towards traditional education and the integration of Nigerian children into society. Since whatever they learn at this early stage of life is well registered in their subconscious mind, music is purposely utilized in most learning experiences organized for pupils to help them discover and develop their personality.

- Children need cultural education not only in their homes but also in schools (Okoye, 2004).

In the pursuit of Music in the primary education of the child, the Nigerian government accepted to develop pupil's cultural arts embedded in performance experiences such as music, dance and drama practices in her educational institutions. This was formalized in the NPE (2004), and music was recognized as one of the core subjects at the primary level in the school curriculum. According to Howard Gardner (best known for his theory of multiple intelligences), "music training is an effective way, not only to enhance the conceptual-holistic-creative thinking process, but also to assist in the melding and merging of the mind's capabilities" (Gardner, 1884, as quoted in James R. Ponter, 1999). Research data indicates that those who study music, particularly beginning at an early age show neurological differences when compared to those who have not had much training. Research strongly suggests that early musical experiences imprint themselves on the brain as do all learning experiences that have the potential for changing brain organization. For example, studies done by Rauscher, Shaw, Levine, Wright Dennis & Newcomb (1997) indicated that music and music instruction play a positive role in enhancing spatial reasoning – the brain's ability to perceive the visual world accurately, to form mental images of physical objects, and to recognize variations of objects. In specific terms, results showed that listening to Mozart's Sonata for Two Pianos in D Major K. 448 enhanced spatial-temporal performance in what has become known as "The Mozart Effect". The importance of this finding lies in the fact that there is growing evidence for the positive influence of music on children's development and behaviour in schools (Scripp, 2003).

The impact of music on a child's development

Research strongly suggests that early musical experiences in Music education can be a positive force on all aspects of a child's life. Music education is an art of developmental activity and the goal of music education at the elementary stage of life of individual child should be towards his balanced development. Farrant (1980) states that:

The child is constantly changing. As he develops new feelings and attitudes, new habits and skills, and new knowledges and understandings, these form his behaviour pattern interest, success, and satisfaction are essential factors in determining the direction of growth behaviour change is one evidence of growth that has taken place within the child.

Musical growth takes into account developmental sequences such as powers of sound discrimination, musical taste and feelings, recognition of familiar melodies, learning to sing, learning to dance, learning to sing and dance in a group, learning to play certain musical instruments of his choice, love for certain musical activities, learning to differentiate between traditional and popular music, music appreciation, perception and conception, labeling of music, identification of musical instruments, and so on. Music is a developmental activity in the cultivation of the senses and of expressions. It is the most effective vehicles for child growth and development. A study showing an association between rhythmic ability and reading prompted the examination of the relationship between musical ability and literacy skills. A further pilot intervention study showed that "training in musical skills is a valuable additional strategy for assisting children with reading difficulties" (Rauscher, Shaw, Levine Wright & Newcomb, 1997). Music used as a therapeutic intervention is known to have a number of positive effects. Amongst others, it is reported that music therapy can help children with learning difficulties to focus their attention, increase their concentration span and, over time, improve vocalizations, looking behaviour, imitation, and initiation of ideas (Hargreaves, 1986).

In improvised musical play, music and lyrics have been used to facilitate social play between developmentally delayed and non-developmentally delayed children in mainstream settings. Furthermore, there is a substantial body of research showing that music can be effective with children with learning difficulties when it is offered as a reward for particular behaviour, for instance, to develop attention, reading or numeracy skills or reduce the incidence of aggression or maladaptive behaviour (Hargreaves, 1986).

In the review of research on the benefits that music has for humankind titled "The power of Music," Hargreaves (1986) notes that "children receiving additional or regular classroom music lessons have shown increased social cohesion within class, greater self-reliance, better social adjustment and more positive attitudes. These effects are particularly marked in low ability, disaffected pupils. These effects are supported by other researchers who report that "there is growing evidence for the plosive influence of music on social-emotional development and behaviour in schools" (Scripp, 2003).

Given the impact music can have on children's education, there is need to support every effort being made to bring music into their classrooms. The question that arises is, what age should children be introduced to various kinds of music lessons? It depends partly on the maturity of the child. In general, children at age 3 are

ready for simple keyboard practice. Children will often be out of tune, but that is fine at this stage. This is because young children's brains are forging novel neural networks and need a high amount of exposure to a wide variety of sounds. Researchers at the University of Montreal used various brain imaging techniques to investigate brain activity during musical tasks and found that sight-reading musical scores and playing music both activate regions in all four of the cortex's lobes; and that parts of the cerebellum are also activated during those tasks (MacDonall, Sergent, Tenial, and Zuck, 1992).

Playing a musical instrument reshapes the brain. This doesn't mean it actually changes the overall shape of the brain but rather than coordinated use of the fingers can alter the brain's ability to distinguish touch input from different fingers on the same hand. To appreciate this fact, and its astounding implications, we need to understand how the brain normally processes touch (tactile) input from the skin. Briefly, different parts of the body surface send information to different parts of the somatosensory system, which is concerned with touch. Adjacent places on the skin project their information to adjacent places in the brain, resulting in a "map" of the body inside the brain. One can find a "map" of the hand and its individual digits, with neighbouring brain cells receiving information from neighbouring fingers. (<http://www.musica.uci.edu/mrn/V713FOO.html#tells>).

The integrity of music education on a child's development

Research involving music and human development has multiple perspectives. Beside the large and formal body of work revolving around traditional aspects of music education, music is increasingly being investigated in its broader context as an influence on the cognitive emotional, behavioural and social aspects of children's lives, as a support or even entry point into other topics of learning (mathematics and literacy) and as an aid to personal development. The field of early years education as a whole is in a state of flux and developing at a fast pace. This development goes hand in hand with a rapid expansion of activity in early years music (Pound & Harrison, 2002). Although the impact of music and music making on a child's development has gathered quite widely, our understanding of young children's music capabilities and the ways in which these capabilities interact with opportunities children encounter is patchy. This shows just how complex and interesting the field of early years music is, for example, the prime developmental characteristics of the years of a baby and toddlerhood is the close relationships with primary caregivers. It is within these relationships that meaningful development takes place. To take an individualistic view of development and then only later to consider the role of adults as an "add on" is to separate out the key dimension of practice with the very young. While pockets of research overlap, at present these do not necessarily provide a comprehensive and coherent framework for understanding the impact that music has on human development or clearly define the mechanisms involved. Research review projects undertaken by local and international bodies to build an overview of findings indicate that there is much ground to be covered. It is true that clear, well-supported correlations have been found between music instruction or musical experience and cognitive/neurological development, academic improvement, and social/emotional/personal development. However, researchers are cautious about drawing conclusions about music actually causing these results. Findings are regarded as inconclusive and in at least one case, have been criticized as being "somewhat desperate effort to prove that music has an effect on schoolwork or social adjustment" (Swanwick, 2001). An area that seems fairly well-researched and documented is that of learning through the arts programmes in schools throughout Canada and in some schools in Australia and the USA. In these project efforts have been made to integrate music instruction with the rest of the school curriculum. These programmes provide clear evidence for the effects of music on children's development. This means that in child development process, there are several areas of concern for music educators as they draw up a music programme or curriculum. Such curriculum should systematically address itself to the physical, social and emotional needs of the child in relation to the kinds of musical activities and musical experiences that will lay the musical foundation and select musical experiences that can mould and shape his musical behaviour, and expectations. This is the challenge of music educators in the 21st Century.

Social aspect

Music is essentially part of the living process. It constitutes a strong effective dimension with respect to what Nzewi (2003) calls "music-event", which means music created solely for entertainment objectives. In addition, music encourages good social relations, celebrates the general well-being, and maintains the moral norms of a community. Ekwueme (1983) observes that some sacred or secular song practices have today been carried further into the office-setting, traditional and contemporary activities, market and other public centres where people perform the social function of providing entertainment and aesthetics.

Music is a vital force in societal development, which constitutes an expressive medium that helps society to disseminate critical issues at any given time. Many Nigerian communities couch moral expectations in songs to educate members and control their social behaviours. Thus, the creative impulse of many Nigerians helps them compose songs which are not only useful in inculcating socio-cultural values in the citizenry but also

in establishing social relationships amongst individuals and communities, strengthening social bonds and generating patriotic feelings. It therefore ensures social conformity, and reconstructs and moulds better societies for the nation of Nigeria.

Confirming this fact, Nzewi (1980) asserts that indigenous music is an ubiquitous society organizer, which supervises the operation of established government, checks the abuse of the machinery of government and assists in the maintenance of the laws of the land.

In addition, many societies in Nigeria keep together through dance-music performances that have sensitized their citizenry into achieving things for their communities. In numerous quarters, dance groups have raised funds for providing the society with such facilities as school blocks, market stalls, civic centres and other public amenities.

Creative Song Activity

In the early years music of children here has been recent growth in researching connections between biological social and psychological roots of early infant musicality. The work of Trevarthen and Malloch (2002) has been fundamental with extensive research into early play between mother and child recognition of babies being born with inborn rhythmic coherence across different expressive modalities.

Encouragement and a happy environment are conditions needed for successful creative song activities. The children are ready for these experiences when they can sing reasonably in tune. The teacher needs to encourage the children to sing about some of these adventures:

- Sing about what you saw on the way to school.
- Sing about all the ways in which you can help mother.
- Sing about your trip this summer.

These short sentences may be sung to any tune the child makes up. The more tunes with which he has become familiar in the past, the more material he will have with which to create his own melodies. Some first-grades can and will make up tunes to go with well-loved poems and stories. If any kind of creative activity is to be successful, we must accept each child's uniqueness – whether he responds or not. Action Songs and Singing Games is also very important for first-grades. It provides movement involving both the large muscles and the finer muscle coordination of the fingers. Often these activities make it possible for some children to participate who might not otherwise. Here are some song texts which first-grades find appealing:

Go to bed early

Go to bed early – Wake up with joy
Go to bed late – Cross girl or boy
Go to bed early – ready to play,
Go to bed late – Moping all day,
Go to bed early – no pains or ills;
Go to bed late – doctors and pills;
Go to bed early – grow very tall;
Go to bed late – Stay very small.
Teacher – Sings this poem and
Children – Sing after her in groups
s : s l : l s : s : m : f : m : r :
s : s l : l s : s : r : m : r : d ... etc.
Favourite – Nursery-Rhyme
By Cathay-Books

Time for School

7:30 is the time for School
7:30 is the time for school
Boys and Girls are Coming to School.
7:30 is the time for School.
d : r : m : f : s : s l l s
s : s l : s : r : m - f . s s .
d : r : m : f : s : s l . s : m
s : s l : s : f : m : r : r : d . ||
The song is in Key C Major

Cultural aspect

Prior to independence traditional dance performances, folk opera and other artistic dimensions in the Nigerian cultures were found in traditional festivals or cultural celebrations of individual communities. In such situations, the dance styles and formations, costumes, instrumentation, orchestral techniques, song patterns and styles of the particular culture are learnt by the younger members of the society through direct exposure and active participation. After independence, this practice has been generated for integration as well as for inter-cultural participation. New dimensions were added to the spectrum of Nigerian culture. These have been made manifest through the institution of some innovations such as the National *Mmanwu* (spirit-manifest) festival, the National festival of arts and culture, musical jamborees, carnivals, performance tours and involvement in international cultural festivals such as “Festac 77”.

Whereas cultural ideas, styles and materials are exchanged amongst communities while participating in these cultural activities, many Nigerian artistes and performing groups have scored beautiful chances of traveling wide, broadening their performing experience, and projecting the country’s rich cultural heritage.

II. Conclusion and Recommendation

While many studies have shown that music-making has the power to change significant psychological conditions such as mood, concentration, stamina, state of motivation, etc, and even the improvement of important factors in mental abilities, such as those shown in studies relating to the Mozart-effect (Frances Rauscher), these provide examples of short-term effects of music or musical activity. From these kinds of results it cannot be assumed that music can change things in the long term. That was why Spychiger (1998) stated that we should not be simplistic about the positive outcomes of music education. She identifies 5 qualifying statements that need to be applied when considering conclusions on the positive effects that music has on children’s ability to learn.

- (a) Short-term and long-term effects of music and musical activity need to be distinguished from each other.
- (b) Positive (long-term) effects on the cognitive domain are not necessarily direct outcomes of music and musical activity. (Rather it may be a result of more creative teaching methods or spill-over effects such as improved social connectivity and communication between programme participants).
- (c) The effects in the social domain are stronger/more direct than in the cognitive domain (“music tuition is, more than other subjects, based in social interaction and shared activity, and it depends on the ability to listen to each other, including trusting, being patient, tolerant, and kind).
- (d) It depends on the quality of the teacher (“Good teaching has been the strongest factor in the conclusiveness of the findings of positive extra-musical outcomes from (extended) music education.”]
- (e) The transfers are specific (Not just any musical activity will be beneficial to other... abilities and capabilities; rather, the musical activity and the topic of the extra-,musical improvement have to be similar.”

In a study done by Honrad J. Burdach & Sylvia-Gioia Caesar in 1979, “they used two different music programmes in two groups and received different extra-musical outcomes for the two groups. The one focusing on creativity and social activity had effects on social factors such as aggressivity and inhibition, but not on concentration or other school subjects. The other programme, concentrating on music theory, Solfège (a way of assigning syllables to names of the musical scale, i.e. Do, Re, Mi, Fa, etc) and notation, had positive impact on achievement in general, but not on social factors” (Psychiger, 1998). From the research data related to music and children’s development, it is clear that there is robust evidence concerning the links between music and the cognitive development domain, including, but not limited to, neurological development, spatial reasoning, academic gains in the areas of mathematics and literacy, and the therapeutic use of music with children that have developmental delays or learning difficulties.

However, while the current data provides support for music programmes contributing significantly to education, it does not necessarily follow that simply having arts programmes within a total programme will in itself guarantee benefits. According to Gardner (2000) positive outcomes areas likely to depend on “good design based on what is already known, good learning, and continued research, and development of understanding of the factors involved and related theory”. Much evidence has been put forward indicating the positive relationship between music instruction or musical experience and cognitive development. It is recommended that strong attention should be paid to making certain that students not only appreciate but also skill in the arts. As such, music instruction that is aimed at giving children notational skills or music reading ability should be designed so as to cater for the development of individual child.

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