The Music Teacher as a Pawn in the Technological Race of a Nation: The Nigerian Perspective

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Abstract
A child enters a school with little if any attainment in written expression and leaves it capable of learning much from human culture. In the act of teaching there are two parties (the teacher and the taught) who work together in some program (the subject matter) designed to modify the learner’s behaviour and experience in some way. By virtue of his nature as a tool maker, man is a technologist from the beginning, and the history of technology encompasses the whole evolution of man. This article deals with the interaction between the incentives and opportunities of technological innovation on the one hand and the socio-cultural conditions within which the music teacher performs in the Nigerian. To simplify the relationship as much as possible, there are three points at which there must be some social involvement in technological innovation: social need, social resources, and a sympathetic social ethos. In default of any of these factors, it is unlikely that a technological innovation will be widely adopted or be successful.

Introduction
Technology, according to encyclopedia Brittanica (2013), can be defined as the application of scientific knowledge to the practical aims of human life or, as it is sometimes phrased, to the change and manipulation of the human environment. The term technology
is a combination of the Greek words *technē*, “art, craft,” with *logos*, “word, speech,” which meant in the Greek discourse the arts, both fine and applied. In the old English parlance, meant a discussion of the applied arts only, and gradually these “arts” themselves came to be the object of the designation. By the early 20th century, the term embraced a growing range of means, processes, and ideas in addition to tools and machines. By mid-20th century, technology was defined by such phrases as the means or activity by which man seeks to change or manipulate his environment.

Even such broad definitions have been criticized by observers who point out the increasing difficulty of distinguishing between scientific inquiry and technological activity. We have already observed that technology involves the application of reason to techniques, and in the 20th century it has come to be regarded as almost axiomatic that technology is a rational activity stemming from the traditions of modern science. Nevertheless, it should be observed that technology, in the sense in which the term is being used here, is much older than science, and also that techniques have tended to vary over centuries of practice.

On the other hand it is impossible to deny that there is a progressive element in technology, as it is clear from the most elementary survey that the acquisition of techniques is a cumulative matter, in which each generation inherits a stock of techniques on which it can build if it chooses and if social conditions permit. Over a long period of time the history of technology inevitably highlights the moments of innovation that show this cumulative quality as some societies advance, stage by
stage, from comparatively primitive to more sophisticated techniques.

In the light of the aforementioned viewpoints, the role of the teacher comes into focus. Who is he and how is he a pawn in the technological race? The Oxford advanced learners dictionary defined a pawn as one of the chessmen of least value having the power to move only forward ordinarily one square at a time, to capture only diagonally forward, and to be promoted to any piece except a king upon reaching the eighth rank. The second definition of a pawn is one that can be used to further the purposes of another. For the purpose of this paper, the second definition will suffice. A discourse on the role of the music teacher in advancing technological growth will be incomplete without outlining factors necessary for technological growth in any society.

**The Resource of Craftsmanship**

Essentially, techniques are methods of creating new tools and products of tools, and the capacity for constructing such artifacts is a determining characteristic of manlike species. Other species make artifacts: bees build elaborate hives to deposit their honey, birds make nests, and beavers build dams. But these attributes are the result of patterns of instinctive behaviour and cannot be varied to suit rapidly changing circumstances. Man, in contrast with other species, does not possess highly developed instinctive reactions but does have the capacity to think systematically and creatively about techniques. He can thus innovate and consciously modify his environment in a way no other species has achieved. An ape may on occasion use a stick to beat bananas from a tree: a man can
fashion the stick into a cutting tool and remove a whole bunch of bananas.

The sense of social need must be strongly felt, or people will not be prepared to devote resources to a technological innovation. The thing needed may be a more efficient cutting tool, a more powerful lifting device, a labour saving machine, or a means of utilizing new fuels or a new source of energy. Or, because military needs have always provided a stimulus to technological innovation, it may take the form of a requirement for better weapons. In modern societies, needs have been generated by advertising. Whatever the source of social need, it is essential that enough people be conscious of it to provide a market for an artifact or commodity that can meet the need.

The Primed Society and Technological Growth

Social resources are similarly an indispensable prerequisite to a successful innovation. Many inventions have foundered because the social resources vital for their realization—the capital, materials, and skilled personnel—were not available. The notebooks of Leonardo da Vinci are full of ideas for helicopters, submarines, and airplanes, but few of these reached even the model stage because resources of one sort or another were lacking. The resource of capital involves the existence of surplus productivity and an organization capable of directing the available wealth into channels in which the inventor can use it. The resource of materials involves the availability of appropriate metallurgical, ceramic, plastic, or textile substances that can perform whatever functions a new invention requires of them. The resource of skilled personnel implies the presence of technicians capable of
constructing new artifacts and devising novel processes. A society has to be well primed with suitable resources in order to sustain technological innovation. Social conditions are thus of the utmost importance in the development of new techniques.

**The Teacher as a Liberator**

The control of culture (and its production) is seen as far more important than the control of political and geographic borders. Whether he goes by the parlance teacher, tutor, lecturer, instructor, those who help others to appreciate things and improve can be referred to as teachers. Okafor, (2003:3) posited that:

> Those who earn their living by teaching, those whose profession is to teach, have the right to be called teachers. He further stated that those who impart knowledge in offices, workshops, factories, family meetings, churches, philosophical movements or such places that trade in ideas are also validly teachers.

Since teachers influence the course of life and open the doors to newer worlds, it will be an absurdity to leave the teacher (character moulder) out in a discourse such as the one under investigation. Banton, in Egwu, (2006: 8), observed that Education is the only solution to backwardness, underdevelopment and a pointer to technological growth of any society (Nigeria). Through education men acquire civilization of the past and are enabled to take part in the civilization of the present and make the civilization of their future. The teacher as a liberator in an educational set up helps to produce a creative, innovative, skilled and indigenous people. A good educational system should produce people who can soar
above mundane things of the world to solve the real problems of the society. We must therefore strive to produce music graduates who can satisfy the yearnings of the Nigerian society or else we shall fall below standards when measured in a technological scale of our nation. We cannot talk of technological growth without highly skilled teachers, well trained and highly motivated. Good education that is modeled to meet the needs of its host society must be pursued and implemented because when all other legacies die, education; the cultivation of the mind remains indelible. The three patriarchs of the three major tribes in Nigeria, namely – Rt Hon. Dr. Nnamdi Azikiwe, Chief Obafemi Awolowo, and Sir Ahmadu Bello all had visions of technological growths through education. Little wonder they invested in developing adequate manpower. The drive for indigenous skilled manpower led to the establishment of University of Nigeria, Nsukka in 1960, the University of Ife, now (Obafemi Awolowo University) and the Ahmadu Bello University, Zaria in 1962.

Technological growth without careful planning and without all the needed apparatus both human and material has been the bane of the Nigerian society. Lack of systematic planning of our educational system has led to the production of half-baked graduates who cannot fulfill the yearnings of the society. The present alarming rate of technological backwardness in the Nigerian society may largely be attributed to a situation where people who are in the job market have inappropriate skills and abilities, or they have none at all. The Nigerian educational system when compared with the rest of the world leaves much to be desired. In a recent survey of the best 200 universities in the world did not feature any university from Africa. In a similar survey, only University of Ibadan came 60th among the Best 100
universities in Africa and is about the 7000th in the world ranking Egwu, (2006: 13). A good teacher must be objective in the light of scientific truth prevalent at a given situation. A good teacher is like a midwife, he harnesses the potentials, prospects, talents, knowledge and innate abilities of his student.

The Quintessential Music Teacher
We had earlier defined pawn as one that can be used to further the purposes of another. A teacher cannot be an effective pawn in a technological world if he falls short of what is required of him. The Nigerian music teacher at any level must be equipped with relevant knowledge required of a teacher in the 21st century. Education involves freedom of choice and the full appreciation of all the alternatives involved. A quintessential teacher helps to impart skills and ideas necessary for the economic and social life of a nation. Teachers must therefore be trained and retrained to be relevant to the society. Music is a human undertaking to comprehend tonal beauty. Technology is equally a human undertaking through trial and error and through the utilization of accumulated knowledge on some giving subject matter or learning experiences to fashion out more refined method of addressing problems of producing of gadgets and end-products that facilitate the enjoyment of social goods derived from the subject matter. So, while education makes for greater awareness of certain particulars, technology produces gadgets and procedures for their appreciative benefits Mbanugo, (1999: 236). Sandwíched between education and technology is the pawn - the effective music teacher. Music permeates all facets of life in the Nigerian community and is practised as a social event. Okafor, (2005) observed that:
In modern world, music is closely associated with religion, technology, engineering, medicine, politics, social mobilization, patriotism and social movements. The study of music is a way of preparing those who will have a hand on the levers of human emotions and the economic (p.44).

**The Music Teacher and Information Communication Technology (ICT)**

Perhaps, the most important development in the electronic media is the use of ICT. There is the need for music scholars and the student alike to have basic computer courses. Information wants to be free in a globalized world. Time and space has been conquered by recent technological innovations and information communication technology (ICT). The breakdown of time and space is best illustrated by the influential “global village”. The music teacher cannot afford to be left behind. Computer applications make distant learning faster; transcription is now easier and neater through the mastering of music software like Sibelius and finale. Transcribed works can be played back and corrections effected. Illustrations are now easier with power point presentation. Digital library and the use of the internet make research easier. Adedeji, (2004:5) acknowledged the need for music scholars to look into the area of Wide Area Network (WAN) and Local Area Network (LAN). The use of the World Wide Web (WWW) has facilitated research tremendously in breaking new grounds instead of making use of obsolete materials which ensure a vicious circle movement. For the Nigerian music teacher to remain a relevant pawn in a technologically growing society, the curriculum of music learning in Nigeria must be revised to accommodate basic computer courses Onuora-Oguno, (2009:9).
Conclusion
Societies, traditional or modern usually design their educational systems to meet their needs and satisfy their aspirations. Functionalism, self-reliance, social and political participation and stability were the ultimate outcomes and were predicated on industry, resourcefulness, creativity, and obedience to God and society. Technological growth is not possible without appropriate and effective education to support it, follow, research into it, evaluate it, direct and redirect it. It is difficult to think of technological development without it germination from a peoples culture and world view. The environment informs the educational content because what a child is taught depends on the factors of his environment and the needs of the people which are created by such environment.

Curriculum of our educational system at all level must be reviewed to meet the dynamics and development of life in the modern world. The training and re-training of teachers cannot be neglected if we are to compete among the committee of nations. While we borrow and adapt to foreign influences, we must not lose our cultural identity. The retention, perpetuation, and promotion of Nigeria’s heritage in a technological world are tasks for all especially those in the music academia.

References


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