

## Preparing Today's Youth for the Changing World of Technology: The Role of Technical Education Teachers

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**Abstract** *In time of distress, people desire to be in tune with on-going expected technological changes, technical education has always come to help. This work highlights few of those moments in the developmental history of the United States of America and Nigeria. It also discusses expectations today's world projection into what tomorrow's world may look like and what roles technical education teachers should play for the youth to be able to face the new developments that are fast taking over or present ways of doing things. A few recommendations were put forward among which is making teacher education a life long experience and the call for the engagement of serving and retired industrial workers to help in developing the technological know how of youths of tomorrow.*

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### Introduction

In times of national distress, when government seems to be losing touch of the emerging problems of her youths. In times when technological concepts seem to be evolving at a faster than expected rate. Technical Education has always come to the rescue. That was the case on the 20<sup>th</sup> February 1961, when president John Kennedy, as a way to revitalize the sagging morale of the American people. (after the successful orbiting of the earth by U.S.S.R's sputniks in October 1957) reminded the people that the National Technical Education Acts, first enacted by the congress in 1917 and subsequently amended had provided a program of training for industrial agricultural, and other occupational areas. He noted that America's purpose of her technical education effort was sound and sufficiently broad to provide a basis for meeting future needs. He was of the opinion that the technological change, which had occurred in all occupations in the United State of America call for a review and re-evaluation of these Acts, with a view towards their modernization. He therefore requested the secretary of Health education and Welfare to convene an advisory body drawn from the Educational area. Profession Labour, industry and Agriculture, as well as the public to be charged with the responsibility of reviewing and evaluating the then National Technical Education Acts, and making recommendations for improving and redirecting the program. Among the recommendations the panel came up with were that changing world of work, Technical Education must:

- ❖ Offer training opportunities to the 21 million non-college graduates who enter the labour market in the 1960's
- ❖ Provide training or retraining for the millions of workers whose jobs will disappear due to automatic or economic change.
- ❖ Meet the critical need for highly skilled craftsmen and technicians through education and training beyond the high school.
- ❖ Expand vocational and technical training programs, consistent with employment possibilities and national economic needs.
- ❖ Make education and training opportunities equally available to all regardless of race, sex or place of residence.

### Panel of Consultants Report on Technical Education (1963)

In Nigeria Fafunwa (1995) noted that before the civil war many Nigerian educators and parents were concerned about the lack of relevance of the Nigeria education system in meeting the pressing economic,

social and cultural needs of the nation. It was claimed that even after five years of Nigeria's independence, the educational system of the country was not only colonial, but more British themselves. That is to say that the Nigerian schools children were being educated to meet the needs of the foreign culture and were therefore better fit for export than for life in their own country. As a remedy, a national Curriculum Conference was convened in September 1969 to discuss the ways forward. The conference as reported of Aderarlegbe (1972) came out with some heart-warming recommendations among education for living must make children and adult ready to be leaders and followers in the task of nations building. Although it is not especially job-oriented, the school should always aim at giving children basic concepts understanding values, attitude, ability and skills that they will require to enter into world and establish themselves in it, such education must therefore release the spring of personality development, be concerned with the individual child's needs emotions, wants, fears, intellectual spiritual and physical growth into a mature adult capable of self-direction through self-discipline. It must be geared towards national unity, national reconstruction, and social as well as economic progress.

### Teacher Education Curriculum.

The Nigerian Teacher Education Curriculum has been conceptualized as those concepts materials, activities and methods used by Nigeria education system in achieving the objectives of the teacher education programme as clearly stated in National Policy Education (2004). The curriculum as a structured series of intended learning experiences and interacting forces with in the learning environment has failed to translate the hopes and aspirations of the large society into concrete reality and manifestation in the products of various level of learning. Attah (2004) observed that a greater percentage of the products of our various institutions have not acquired desirable learning that can positively change the nation in a sustainable direction, this can be attributed to the failure of curriculum and broad educational policies from where curriculum is evolved.

The content of the training programme obviously determine the success of the teacher education, it is on this note that Udofot (2005) asserts that Nigeria teacher education curriculum aimed at producing qualitative teachers provides for knowledge and skills which the student teacher are expected to acquire through the various subjects offered. The question is are the students in the teachers' institution given the opportunities during the practical teaching sessions for self-evaluation, self-analysis and self-assessment?

The teacher education via curriculum is expected to equip the teacher trainees with the following knowledge and skills-general knowledge from which they acquire through general education specific knowledge. In terms is skills acquisition in the pedagogical area, student teachers are expected to acquire:

1. Interpretative – skills to be able to diagnose learning situations.
2. Performance skills to be able to act on the situation they have diagnosed.

If the student teachers have no opportunities to develop those skills while training, they can not pass on to their students in school what they did not acquire. It is also observed that generally in teachers colleges, there is gap between the training the teachers need and receive that is, there is no balance between the academic and the professional courses. The students teachers study, Hawes cited in Udofot (2005), opined that curriculum of primary school teachers colleges in African concluding Nigeria are overloaded often with academic content, some which may not be useful to the teacher in his classroom.

Another curriculum issue in teacher education is that of relevance. During their training the trainees are mainly guided to relate the academic content of their programmes to answering the needs of the institutional examinations. They generally do not see their training to be preparing them for their teaching assignments and for adjustment to the developmental need of their lives and the society. The innovative methods, the educators in teachers' institutions preach are often not practiced by them. Udofot (1987) observed education institutions are lecture and notes dictation. These are the kinds of methods which tend to hinder teacher trainee from acquiring skill of effective teaching; it must be noted that if the academic content of teacher

education and the way they are presented to the student teacher do not enable them see the relationship of the subject to the problems of the society the curriculum would continue to remain irrelevant to the students teachers.

### Attitude of Student and Teachers

The attitude of some teachers their subject areas leaves some work to be desired. Some believe that the unwholesome attitude exhibited by some teachers were borne out of utter neglect and shoddy treatment meted to them by their employers. Others share the view that the quest for materialism is an endemic factor. The quest for materialism is apparently function of the former non-payment of teachers' salary and other benefits used to be a house hold topic during the civilian administration. One wonders how someone can perform effectively with his basic rights, are denied him we, the illusive impression created by students and society that technical and vocational course are inferior to literary arts and classic still looms with us.

Fafunwa (1974), in his recognition says it is small wonder than that training for unqualification other their degree especially in technology is not popular contribution further, he noted some of the missions in the last century introduced farming brick laying carpentry as these skills were not seriously regarded by pupils and parents as an integral parts of western education and the practices of virtually died out before the turn of the century.

### Recent Technological Developments and Excepted Roles of Technical Education Teachers

Since the various observations and recommendations were made. Knowledge and technological developments have grown beyond all expectations. Fafunwa (1992) noted that discoveries of fundamental importance are occurring in all science at an incredible rate. The development, he created a new body of knowledge that has affected all mankind. The computer he highlighted, with its enormous power and speed has acted as a great catalyst to scientific discovery. It has become an amplifier of human thinking the role of complex problem-solving and the repositions for huge quantities of the world's data, information and knowledge. He also observed that we are in an age in which that amount of knowledge accumulated doubles itself every ten years. The textbooks and the teachers, he said are rapidly be coming antiquated purveyors of information. Goro (2003) opined that an assessment of the state of the computer and technological literacy should be a cause for concern to teacher educators in Nigeria and the African Continents. This according to him, is because to function in a world dominated by technological innovations. Our teachers need to be knowledge in technical developments for effective instructional delivery. Goro (2003) noted that most teachers today's schools have not had any training or background in the film projectors the overhead or the opaque projectors which are common, not to talk about the computer a new training device. He observed that the rust to embrace the micro-technology by every sector of government and non-governmental organizations has lost a number of questions unanswered with regard to education. Some of the questions he said are:

- i) How should the present student teachers to trained for the purpose of using these new training technologies effectively.
- ii) How will the average practicing classroom teacher today be trained use modern teaching aids in public school curriculum? It was therefore not surprising when Akinsende (1990) harped on the fact that the need for professional growth of teaches is as a result of the challenges and concerns caused by knowledge explosion and professional obsolescence in almost all fields of human endeavour. He also cited break-through in equipment material and methods as reasons why teachers will want to be abreast with recent happening in the filed of technology. The aforementioned were reiterated in Erema (1999) where he attested to the fact that for a teacher to be able to teach a skill, he is expected to be vast in what he intends to teach. Technical education, he noted is a field of study where new ways of doing things are always evolving for the

must be ready to keep abreast with recent trends in the field of technology. Olawepo (1992) listed computers, lasers, robots and numerical controls as a few examples of technical education's changing content base. Technical educators he advised must cope with the rapid changes and introduce the new technologies into the classroom.

## Conclusion

No teacher can successfully teach what he does not know, for the teachers to be abreast with the technological changes that are currently being experienced they must be in tune with recent trends of developments in the field of technology. There may be no better ways of achieving this than the teachers to identify what they need to be productive and go in for training or retraining.

## Recommendations

- 1) Education for technical education teachers should be a life-long exercise. As a result every school or ministry of education must devise a functional in-service training programme for all teachers that belong to that aforementioned field of study.
- 2) The industrial work scheme for technical teachers as suggested in the Nigeria national policy on education should cease to be just a theoretical concept but an idea that is practicable.
- 3) There may be a need to engage serving or retired industrial workers to help out in the imparting of current technological knowledge to the young ones.
- 4) New ways of doing things should be taught in schools. For this to be a reality, school workshops or science laboratories must be equipped with modern and up-to-date machines and equipment.

## References

- Adaralegbe, A. (1972) A philosophy for Nigerian Education: report of the national curriculum conference Lagos, Heinemann
- Akinseinde, S.T. (1990) Professional growth of vocational and Technical Teacher: Challenges, Benefits and concerns Nigeria Vocational Journal (3)\_ 31-37
- Amadi R.N. (1997). Teacher education Objectives, How Important. How well Achieved? Agaba journal of educational studies 1 (1) 43-45.
- Ezema, F.R. (1999). Effective Teaching of Technical education subjects in A.M Wokocha et al (ed) Emerging Issues in Technology Teacher education in Nigeria (pp. 157-164), Omoku Federal College of Education (Technical).
- Fafunwa A.B (1992). The teacher and the 6-3-3-4 System in A. Aderalegbe (ed) Education in Nigeria Teachers Education for Education (pp. 10-19) Lagos: The Nigerian Academic of Education.
- Fafunwa, A.B (1995). History of Education in Nigeria. Ibadan: NPs Educational (Publishers Limited, Trusthouse, Babangida way.
- Goro, C.A. (2003). The Technological Classroom in Nigeria. issues and Challenges. Journal of issues in Technical Teacher Education. Potiskum: Federal College of Educational (technical) 2 (2) 78-83.
- Olawepo, A.A (1992) Appropriate Technology and the High Technology Implication for Vocational Education Educators. Education Today. Lagos: Mbeyi and Associate (Nigeria)
- Panel of Consultants Report on Vocational Education (1963) Education for Washington D.C. U.S Government Printing Office.