ENHANCING COMPUTER EDUCATION: AS A MEANS TO SELF- RELIANCE.

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Abstract

Enhancing computer education in any developing nation is of vital importance. This is because the world is becoming more computer driven. Acquisition of computer science knowledge and skills has been a gateway for any individual who wants to be self reliant, because it provides employment opportunities as well as enhances the economy of any country. This paper outlined the meaning of computer and computer education, the position of computer science education in NPE/school curriculum, the need for computer education, the relevance of computer education for self reliance. The way forward was also recommended.

Introduction

The world today, lives in a technology and information age. Computer is an aspect of technology and means of getting, producing, and transmitting information. It is highly involved in the style and standard of our lives today than any other technology ever was. Presently the use of computer to produce, manipulate, store and disseminate information has profound effects on our modern society all over the world and will continue to have and be sought after by those who have need for it.

Computer had played a greater role on humanity than any other technology known to man. For one to be useful in a given society, one needs to acquire specific skills in order to contribute to the development of the society. In the National Policy on Education of 2004, computer education was explained as an aspect of Technical and Vocational Education that leads to the acquisition of practical and applied skills as well as basic scientific knowledge. Computer Science Education is defined as the knowledge, skills, and abilities to manipulate and interpret the language of computer, it is also the knowledge one acquires in operating a computer (InKang, 2002).

The impacts of computer technology and computer education are so great to the society, which imparts to individuals, skills that enable them to be usefully and gainfully self- employed and goes a long way in alleviating unemployment saga and also enhancing the economy for the nations of the world, in this way enhancing computer science education will go a long way in creating job opportunities for the jobless youths in the society and also sanitize the country for better.

Meaning of Computer/ Computer Education

The origin of computer can be traced to the time abacus came into existence, but the first ever commercial computer was evolved around 1940s after many years of research. Then Computer was defined as a tool for representing and manipulating data to obtain information. Data on the other hand is referred to as raw fact or material while information is referred to as product of the raw material. In this write up the definition of computer above is deceitful, in the sense that other tool like slide rule, pocket calculator, pen and paper can as well be used for the same purpose. Instead computer system can be defined as a fast and accurate electronic manipulating system designed to automatically accept and store data, process the data, and produce output under the direction of a stored program of instruction (Williams,1999).

Computer has brought revolutionary changes in the nations of the world, given us a new form of civilization in all aspect of life including education, health, business, recreation, news, among other things. More so, in National Policy of education (NPE 2004) computer education was defined as the acquisition of knowledge, skills and abilities to manipulate and

interpret the language of computer. InKang (2002) also defined computer science education the same way with NPE. Computer science education is skill and craft oriented, it is work-based learning which perceived learning as a continuous process grounded in experience (Olinya, 2004). In a nutshell computer education is education for self-reliance. It is the training of an individual in the acquisition of computer principles, practices and utilize the principles effectively to the benefit of the livelihood.

The Position of Computer Science Education in NPE / School Curriculum.

The philosophy of National Policy on Science and Technology is aimed at developing the people and creating mass awareness of people to embrace science and technology. Computer has already set a greater impact on humanity than any other technology known to man (Ngwu, 2004). In the NPE 2004, computer science education was explained as an aspect of technical and vocational education that leads to the acquisition of practical and applied skills as well as basic scientific knowledge. It was grouped under vocational elective subject for junior secondary school, but not as a core subject in NPE, and also not examinable subject in external exams as WASC, JAMB and the like.

The National Computer Science Education Curriculum for primary school was developed by the Nigerian Educational Research and Development Council (NERDC) in 2002. Until now, computer studies courses are based on some unapproved document or compilation of topics that lack pedagogical basis and structure in few schools where it is taught. Different publishers now arrange with some school heads to sell their compilations that lack guidelines. Some secondary schools where computer studies were being offered before have displaced computer education for civic studies. I observed this through my children school result report. The teachers that handle computer studies in the schools where it is offered are not experts in computer science. They read what they see in the compilation they have without impacting the knowledge to the students, thereby making nonsense of whole thing.

The Need for Computer Education.

Computer education is skill and craft oriented training. It is work-based learning which perceived learning as a continuous process grounded in experience. According to Dokubo (2002), current emphasis on the knowledge of facts that corresponds with the classical ideals of erudition, scholarship, should be augment by a focus on skills or competences. Computer education provides opportunities for on-the –job experience and research activities (Chime, 2004). In fact, computer education is education for self-reliance. It is becoming obvious that the rapid and sustainable growth in any nation hinges on the abilities to harness computer resources (Lawal, 2000). The western countries are controlling the whole world today because of their competence in the use of computer and its resources. Maybe that is why InKang (2002), emphasized that, there is need for everyone to be conversant with the new technology-the computer. Computer education is therefore a powerful gateway for creating competent opportunities for sustainable self-reliance in any nation.

Relevance of Computer Education for Self-Reliance.

Computer can be used in all aspects to evaluate, develop, and deliver tasks. Knowledge of computer is fast becoming the prerequisite for employment in all fields of human endeavour. More so, it is now taking center stage in skill acquisition that leads to self- reliance.

Self-reliance may be seen as ones relying on one's abilities , effort, confidence for making his or her own earnings and not depending on anybody for employment. With unemployment

problem in the country, acquisition of computer skill through computer education will help individual to be self-employed by opening their own computer center, typesetting documents for their clients. They can also start training for individual who wants to be computer literate. According to Abimbade (1997), the intention of government appears to center around the need to ensure that every individual is computer literate, by opening of self owned computer training schools, they can be instructors in the center and help the government in actualizing the goal. Internet services can also be rendered to the public through individual owned shops, thereby unemployment problem will be alleviated, economy will be enhanced, crime will be reduced in our society for better health for the citizenry.

Conclusion

To be self- reliant in this nation, a solid base in computer education is needed. This will help to create skill and abilities on individual to be independent and job creation is also made possible. Establishing computer studies in our tertiary institutions will better train our citizenry to fit into the larger society. The important role of computer in job creation is recoganised worldwide, therefore computer studies should as a matter of urgency be given its rightful place in the National Policy on Education for enhanced economy and better self-reliance to be achieved.

Way Forward.

1. The policy maker in education should revisit and enhance the curriculum in computer education. It should be consider as an important subject and made compulsory for every students because of its necessity in the present dispensation.

2. The examination bodies like West African Examination Council (WAEC) and National Examination Council (NECO) should include computer studies as one of the subjects to be taken in their examination. Joint Admission and Matriculation Board (JAMB) should make computer studies compulsory for at least those majoring in computer science related discipline. This will help to achieve the objective of NPE on science and technology education.

3. Computer education if possible should start from nursery schools through primary to secondary level both in government and individual owned schools. This will help the students to have solid background and also improve their knowledge and understanding in computer usage and in solving their problems like now registration of JAMB and other related examinations are on- line.

4. Every tertiary institutions should be encouraged to start off computer education programme where more graduates of computer education would be turned out to help in teaching computer studies in primary and secondary schools.

5. Government should make enough budgetary allocation to education in order that enough funds will be mapped out in procurement of equipment, maintenance of laboratories and replacement of non -functional parts and out- dated equipment when necessary. These will motivate and encourage computer teachers and enhance learning conditions.

6. Conditions of services for computer teachers should be considered. The government should provide working conditions comparable to what professional colleagues are enjoying in other areas like paying hazard allowance to computer instructors among others. This will induce to take up teaching jobs.

7. Any graduate of computer education should be given automatic employment. This will help in solving the problem of insufficient

personnel in teaching of computer education, because when students are taught by experts they would acquire the skill needed of them to be on their own when they leave school.

8. Conferences, Seminar, Workshops should be organized for computer teachers, these will help to up- date their knowledge, skill and perspectives that is required of them because computer is a fast growing and changing technology that requires attention every time for maximum result, because weapon of yester years cannot be used to fight the battle of tomorrow.

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