1

Innovations and Transformation in Teaching and Learning in Nigerian Education

By

PROF. P. A. IGBAFE
Department of Arts,
Benson Idahosa University,
Benin City.

The Crucial Role of Education

A considered starting point is an analysis of where we are or the situation of education in Nigeria today as a foundation for the discussion of where we should be and the reforms and innovations needed to take us to re-desired level. In this discussion of Education in Nigeria today, the crucial role of education in societal development and transformation is relevant.

In his foreword to Professor Anthony Osagie's *"Change and Choice: the development of Private Universalities in Nigeria,* Professor Julius Okojie, the Executive Secretary and Chief Executive Officer of the National Universities Commission writes as follows:

> There is now a solid recognition among decision-makers and beneficiaries alike that education is crucial for economic development, human welfare, societal advancement and environmental protection.

Many scholars, writers, public figures and analysts have stressed the crucial importance of education and its preeminence as a necessary tool in moving every aspect of a nation's economy forward. It must be stressed that education is the single most important factor in ensuring effectiveness of labour in making other factors of production yield the desired goals, enabling and implementing change. Education has to be seen as a powerful agent of social transformation and as Fagerlind and Saha argued, education is a key change agent for moving societies along the development continuum'2. It is an instrument for effecting national development. In this process, education generates intense intellectual and critical thinking in individuals. From our uncertain census exercises so far, the population of Nigeria has been put at 120 million; some insist it is up to 140 million. With this tremendous demographic potential to create a dynamic economy, the education system has to be drastically improved. There

is no gainsaying the fact that Nigeria's educational system today is in decay; teachers' welfare has met with only feeble efforts at improvement such that strikes, stoppage of classes by teachers to press for improvement or implementation of agreements earlier reached with government are characteristic. Some confusion abounds in our National Policy on Education. It is clear that 'to arrest the decay in education, efforts have to be concentrated on teachers' training and welfare so that teachers would become self-confident, proud of their profession and live well in the society'[3].

It is instructive and it illustrates the pre-eminent position education plays in the society that its importance should have been so glaringly highlighted by a gathering, not of educationists, but of business magnates and industrialists. In the battle against poverty, unemployment, conflict, violence and illiteracy, the nation has to turn to education. At the Rivers Education Summit 2013, the Nobel laureate, Prof. Wole Soyinka saw 'defective education as the major cause of the reign of terror currently threatening parts of Nigeria'. The leaders thus saw the crisis in education growing to affect the society as a whole and Belo-Osagie frontally attached the problem when he stated, "we do face a crisis in education and it will keep worsening until we view education as a critical national need".

The National Policy on Education

Apart from the defects already mentioned - poor working conditions for teachers and poor funding, the current national policy on education has to be revised and improved drastically as it abounds in weighty defects. Like a confused people, we have moved from the 6-3-3-4 system introduced in 1982 to replace the colonial pre-independence 6-5-4 to the 9-3-4 and later still to the 1-6-3-4 systems. The 6-3-3-4 system was laudable in its conception and anticipated impact but disastrous in implementation and tragic in its consequences. It was meant to introduce functionality into the country's school system by producing graduates who would be able to make use of their hands, heads and hearts (the 3 Hs). It planned for a three-year secondary education, another three years of technical education for those interested in learning a trade or three years of senior secondary school for those more academically inclined. Tertiary education was for the last four years of the system. Property implemented, this system was to reduce unemployment among the youth by equipping them with marketable skills. The system was to launch the country into industrialization but the policy was not implemented to its logical end and the production of lower-level manpower idea under the system turned out to be chimerical. The pre-vocational subjects had no workshops or qualified teachers and students were not equipped to fabricate needed materials as envisaged. In conception and intent, it was a laudable innovation in our educational system but in implementation, it was a tragedy of good intentions. Where the five-year secondary school system was regarded as too theoretical Because those coming out of the system were unemployable, the pre-

vocational three-year Junior secondary school, leavers were supposed to be not only intellectually but also vocationally. In this way the products would be equipped with skills to make them employable, and productive to reduce unemployment in the country among young school leavers.

Apart from the huge sums made from buying equipments that could not be powered and used, the technological aspect of the policy at the Secondary School level did not actually take off. The production of the lower level manpower envisaged by the system never materialized. The new National Policy on Education has not advanced the status of Nigeria to an industrialized nation, neither has it reduced unemployment among the restive youth. Rather it has exacerbated the problems. The disastrous failure of the system was attributed to lack of funds, infrastructures, teaching staff, and everything to make it succeed. Part of the problem was our characteristic poor planning and proper preparation and costing. The system (JSS) which was to give jobs to millions of Nigerian ended up in futility.

There is a need for educational reform at the secondary level which is crucial for the success of the entire system. Proper planning, provision of reliable data, assessment of national needs in relation to any intended reforms will go a long way to strengthen a rickety and blundering system. A special commission for secondary school system, just like the National Board for Technical Education (NBTE) for Technical Education and Polytechnics, National Universities Commission (NUC) for Universities, Universal Basic Education Commission for Primary Education, should be considered. This is important for equipping our youth with desirable skills that will make them employable and marketable as originally envisaged.

Such a Commission will exercise controlling functions like the other commissions at different levels. This may partly salvage the system and revise the national policy on Education along valuable paths including proper funding of secondary education.

The Need for a Re-Evaluation of History

Another aspect of the National Policy on Education needing change is the de-emphasis on History. There is no doubt that over half a century after independence, Nigeria is still struggling to be a nation. The centrifugal forces pulling the peoples apart still cast an ominous shadow over our existence as a nation. The disparate elements in the country have not yet been welded together into a whole for which the people have a pride of belonging. We are suffering under intrinsic integrative problems and nation-building difficulties. Nigeria is noted for its diversity and heterogeneity, cultural pluralism, differences in origins, education, religion and outlook. We cannot therefore create a society that can survive if we deny the possibility of a common heritage which unites all

the people. History and the humanities generally can help us find a common ground in the midst of the competing interests and values in our national life. History plays a special role in explaining our divergences as well as the ties that bind us together. It is indispensable therefore in our nation-building efforts. Yet the national policy on education relegates history to the backwoods of our educational curriculum. It has been substituted with amorphous subjects like social studies, citizenship education, civics etc: it has been virtually removed from the list of subjects in the primary and secondary school syllabuses. But in this country's educational policy goals it is stated that there is need to "give citizenship education as a basis for effective participation in and contribution to the life of the society" and "mould the character and develop sound attitude and morals in the child".4 Yet the claim of history in developing these attitudes has been completely ignored and passed over. In the primary education syllabus where there should be a need to "catch them young" and acquaint pupils with a starting knowledge of their roots of identity and prepare them for future civic activity, history has been conspicuously omitted.[5]

At the junior secondary school level, the situation is hardly improved upon. The education policy recognizes the need to "foster national unity with an emphasis on the common ties that unite us in our diversity". In spite of this recognition, history is again omitted. In its place, "social studies" and "citizenship education" are provided for as was done in the primary school level. In the pre-vocational elective courses where students are to choose one subject, history is not provided for.

At the senior secondary school level, there is a reluctant concession to history where students have an option to choose one from English or History or Geography or religions studies. The chances are (one to four) 1-4 that a child will choose history. In the vocational electives in the B Group of courses the list does not include history. In the Group C electives, provision is made for history out of 16 subjects with a choice of one. The chances of a student choosing history are 1:16.

While the educational policy recognizes the need to "foster a sense of national belonging" the claim of history as the best avenue for a realization of this objective seems to have eluded those in charge of policy 'implementation7. Perhaps there is here a dichotomy between policy enunciation and policy implementation. This creates a situation which is threatening to "Kill" history at the tertiary level. The subject is now struggling against death at the university level.

History is no longer considered as a subject for the award of Federal Scholarships even though the implementation blueprint for Federal Scholarship awards stipulates "Arts and other subjects with Education" as well as liberal Arts/Social Management Sciences". Similarly, History has been gradually withdrawn

from public examinations. Thus History has been consigned to a peripheral or no role at all in our educational system.

This is a pitiable defect of our educational system for if we do not know where we are coming from, how can we know where we are and where we are going? As R.V. Daniels writes,

> History is the memory of human group experience. If it is ignored, we cease in that sense to be human. Without History we have no knowledge of who we are or how we came to be, like victims of collective amnesia groping in the dark for our identity. It is the events recorded in history that have generated all the emotions, the values, the ideals that make life meaningful, that have given men something to live for, struggle over, die for[6]

I have spent a great deal of time on this defect of the national policy on Education because of the pivotal role which History plays in nation-building.[7] Developed nations like the United States are spending huge sums of money to sustain the humanities for they realize that science and technology are harnessed for humanity and are anchored on the support base of the humanities. The National Endowment for the Humanities (NEH) Programme and the National Endowment for the Arts (NEA) are designed to strengthen, fund and maintain the humanities in the United States.

Thomas Jefferson was on very solid ground when he canvassed for the teaching of political history to enable his countryman learn "how to judge for themselves what will secure their freedom"8. It was in this vein that the renowned British historian, Hugh Trevor-Roper, wrote that "a nation that has lost sight of its history or is discouraged from the study of it... is intellectually and perhaps politically amputated. But that history must be history in the fullest sense".

Reform and Innovation

From what has been said so far, it is clear that there is need for reform in Nigerian educational system under the current national policy on Education but reform is related to innovation in terms of the intensity of the changes involved. Reform implies making changes in something, especially an institution, so as to effect improvements while innovation implies changing something already established by introducing new methods, ideas or products. Both reform and innovation imply change and our educational system is in need of both. Paulston views innovation as a "relatively isolated technical or pragmatic alterations or as low-level change" whereas reform involves normative, national and broad structural change".10 Educational innovation can reflect changes in the society which means that the changes may be introduced when major changes in the society occur or when there is a realization of the need to make education more utilitarian so that educational resources like instructional facilitates, personnel, finance etc can be maximally employed. In addition,

there can be innovation when there is a realization that a gap exists between the reality on the ground and the desired circumstances. This generates a need to close the gap. This is often the situation where systemic inadequacies or defect become so glaring that changes are inescapable. One of the problems affecting the occurrence and need for change is the availability of resources which constitutes a major problem in any change situation. Herein lies the role and importance of Authority or Government. The absence or presence of resources can influence the structural mechanism or content and direction of the innovation contemplated.

Reasons for Innovation

Innovation, involving change is the characteristic of every living or dynamic entity. With all the defects, the Nigerian educational system needs to be saved from stagnation, or further deterioration and the usual reasons for innovation include the following;

(i) to make education more utilitarian and responsive to national values, needs and expectations

(ii) to enable products of the system situate themselves in the contemporary setting to be able to contribute meaningfully to the development of the country

(iii) to avoid a situation of "motion without progress" for reform signifies some movement. This has to be matched by definite progress along defined lines. This implies proper planning and sound implementation;

(iv) to promote students ingenuity and imagination, producing graduates who will be able to make use of their hands, heads and hearts (the 3Hs). This will introduce functionality into the school system,

(v) to maintain a child or student-centred system hence the need to constantly review the methods, reform the curriculum in the light of experiences and situate the students in the 21st century

(vi) to introduce technology into the educational system.

Technology in Education

The world today is technology-driven and technology is all pervasive in the home, office, industry and even in the in the classroom. It is here that our educational system in Nigeria is most deficient for there is an abysmal lack of technology infrastructure for e-learning in our schools, instructional techniques, computer-base^ learning, instant messaging, digitalized communication and networking, computer-mediated communication for interaction between students and their teachers. It must be mentioned that computer-based learning can unlock a whole world of opportunities for students. Educational Technology

(EdTech) is the umbrella term used to describe the tools which may be helpful in advancing student learning. Technology can refer to material objects of use to humanity such as machines or hardware. It can also refer to broader themes, systems methods of organization as well as techniques. Some of these tools include overhead projectors, laptop computers, calculators and of recent, smart phones and games all of which have good learning potential. Educational technology includes the techniques of the educator.

Apart from a few private secondary schools, most of the secondary schools in Nigeria and their pupils do not have technological environment.

The students have no laptops and are not computer literate. Even the teachers are not computer literate. This means that a whole world of modern learning is closed to our students. In the developed countries, every child in the secondary school has a laptop and computer-based learning is the rule. Lectures are posted on students' laptops; examinations are done through laptops and results are posted on to the laptop. This new world of educational technology is shut to our students. Digitized communication and digitized networking in education has reached an advanced stage in developed countries and the use of the internet in education has had a positive impact on the students, the educators as well as the entire educational system. Positive attitudes towards technology as a learning tool should be cultivated by parents, teachers, and students. If we are to move our students to the 21st. Century, there is no alternative to the infusion of educational technology into the learning and teaching process.

The use of internet sources has several advantages both for the learner and teacher. Information which students could not previously access come within their reach just by a click. Students of different ages can connect, learn and share information on a global scale. Students self esteem is heightened by success in performing difficult technological tasks. Internet makes it possible to accommodate the students' different learning styles. The use of computers or other forms of technology can give students practice on the core content of courses and skills while freeing the teacher to work with other students, conduct assessments or perform other tasks. Lessons can be more effectively organized and presented. Overall, technology has improved and advanced how students learn, how teachers teach and how educational services can be delivered efficiently and effectively. Computer-based learning makes online resources available to students and promotes active student participation, giving them more time at home on various aspects of what they may be learning in school.

In an age of digital technology information is available at any time and multiple organizations can be accessed through devices like Facebook which provides the link. Professional information can be posted on Facebook, making it possible for

group members to respond and interact with other members. Learning communities can collaborate through social net-working sites and this promotes shared experiences.

The Digital Divide

The use of educational technology, it must be emphasized, will save our students from being victims of what may be called the Digital Divide. Integrating technology into the curriculum may create a gap between those who have access to a computer and the internet (i.e. the "digital haves") and those who do not (i.e. the "digital have-nots"). This could be a barrier to innovation. The socio-economic status of a school and its students will determine whether resources will be available. It is important to realize that those schools that are able to provide technology within the classroom will put their students into advantageous position vis-a-vis other students who are not equally exposed to the new means of learning. As a matter of policy, therefore, the Government should take on the duty of modernizing the means of learning and teaching in the secondary schools as a way of pushing the country along the line of technology. The digital divide raises the issue of training the teachers for the students of teachers who are not well equipped and confident in utilizing educational technology, will miss out on gaining the valuable skills which are compelled by today's society. The use of technology may cost a great deal of resources but the alternative is to be left behind while the developed community continues to advance. Students who have grown up in a digital environment can easily adapt to ever-changing technology but the teacher must learn the use of educational technology like the computer and internet before he can integrate technology into the curriculum and into the classroom.

The teachers must learn to keep abreast of the ever-changing technology in education like the internet and its range of applications if they are to be current in the use of technology in the classroom.

Technology in the Classroom

The starting point here is a computer in the classroom which teachers can use to demonstrate new lessons, or present new materials and show new websites. The development of class website to facilitate the posting of homework assignments, student work etc will help students to learn how to use the computer to navigate their way through a website. Wireless classroom microphones help teachers overcome noisy classroom environments; enable students to hear the teacher better and more clearly. The teachers are saved from usual voice strain and tiredness at the end of the day.

Teachers who have a mindset in favour of the traditional education system may find my discussion in favour of joining the computer bandwagon frustrating and tedious. But innovation typifies progress. It enables us to be part of the global movement for computer usage.

Barrier to Technology-Based Innovations

There are several barriers to technology-based innovation existing in the colleges and universities. The first is teachers' clinging to academic traditions of the faculty-centred lecture which may make the professors reluctant to adopt alternative instructional strategies using the computer and telecommunication devices. The second is the enormous cost of technological applications. Many resource limited institutions will find the adoption of educational technology cost prohibitive. There could also be limited support to help faculty members take full advantage of technology. There is also the difficulty of helping faculty integrate information technology into their teaching. At the bottom of all these is the provision of adequate user support.

The teaching and learning process is being changed most dramatically by technology. Traditionally, professors used much of their time in class with students to disseminate information through lectures and follow-up discussions in areas where students lacked foundation in the basic concepts and principles of a given area of study. In an era of advanced technology, this approach to instruction now appears archaic and inefficient. This is because computers and web-based resources can disseminate basic information more efficiently and more cost effectively than human beings Technology facilitates active engagement in learning instead of students sitting passively listening to lectures.

All the writer is saying here is that traditional form of instruction is labour-intensive and that technology can transform the teaching and learning process. Professors/teachers can use technology to prepare for classes, conduct research, deliver instruction, and keep in touch with the students and colleagues in far away locations. Electronic mail, fax machines, computerized data bases and high tech classrooms where these are available can transform the work of professors.

Conclusion

The writer has argued here that the educational system is in decay. Inadequate funding has led to the shortage of space and resources yet new institutions are being established rather-than strengthening the existing ones in order to reap the benefits of the economies of scale.

Industrial action by university staff to press for higher pay or government compliance with and implementation of agreement earlier reached have often led to the closure of institutions. The national policy on Education needs a review in line with nation-building imperatives and the need to make the Junior Secondary School achieve its objectives. To move our children into the 21st Century, learning and teaching in our educational system need to embrace educational technology and its wide-ranging applications. The huge cost implication of this innovation and reform must be borne

squarely by the Government if our educational system, the students and institutions are not to be left behind in the race for progress.

References

Julius A. Okojie in Foreword to A.V. Osagie's Change and Choice: The Development of Private Universities in Nigeria. Rawel Fortune Resources, Benin City.

Fagerlind, I. & Saha, L. J: (1983) Education and National Development: A Comparative Perspective. Oxford

Belo-Osagie at the meeting organized by the Nigerian Economic Summit Group, sponsored by Etisalat to discuss ways of improving the Nigerian economy, March 29, 2013.

F. R. N (2004), *National Policy on Education*, NERDC Press, Yaba, 4th Edition, 2004. Ibid.

R.V. Daniels, (1972) *Studying History. How and Why?*

I have dealt with this topic elaborately elsewhere. See P.A. Igbafe; Before the Axe Falls: History and the Humanities in our National Life.

1st Valedictory Lecture, University of Benin, August 10, 2006. University of Benin Press.

Quoted in James W. Loewen: Lies my Teacher Told Me. Simon and Schuster, 1995 p.318. Ibid.

Paulson, R.G., (1976) Conflicting Theories of Social and Educational Change: A Typological Review. Pittsburgh, The University Centre for International **Studies.**