

HIGHER EDUCATION IN NIGERIA

by

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The tasks ahead

The great Greek philosopher Aristotle (384-322 B.C.) once remarked that Africa always brings something new. And today it can truly be said that indeed, the black colossus tends to be new in everything, on a grand scale: independent national states, formation of new nations, rapid growth of its specific weight in international relations, a very high initial rate of scientific and technological progress, etc.etc.

But so rapid a development simultaneously in so many fields cannot be, and is not, free from painful hurdles; a number of Gordian knots and humiliations will be inevitable. What, then, is to be done about them? To abandon the plans of rapid development, or to panic? No: the first and foremost thing is to remember constantly that necessity is the mother of initiative and invention: that it is difficulties of growth which show what young nations are made of. The realisation of the fact that Africa cannot afford either to abandon or even to slow down the rate of its development, already gives, and will continue to give, a sound sense of purpose, a perfectly natural motivation for the developing countries to do their maximum best to catch up with the industrialised world in the shortest possible time. The first generation of the Africa of today lit the torch of progress and carried it triumphantly to the present milestone in its post-colonial history. The second generation-men and women who have just entered or are about to enter the catacombs of life-has now the unique mission of leading the black continent towards the summits of modern science and technology. The future of the vast continent is now passing into the hands of those young men and women who are fortunate enough to have the advantages of knowledge acquired in native universities and colleges.

Clear Thinking

But every advantage has its disadvantage. Knowledge is power it gives elegance, an investment in education pays the best interest, yet there is no royal road to this power, it can be achieved only through hard efforts. Moreover, superficial learning gives only shallow knowledge which, as we all know, is a dangerous thing.

In order to succeed in the great task of catching up with the developed world in the shortest possible time the first and foremost educational necessity is to work towards the development of **clear thinking**. And the first essential to such thinking is the ability to "see" the problems facing Africa, to recognise what exactly these problems are and then to stick to them until

they have been dealt with from A to Z.

A person educated in this spirit sets to work to sort out all the relevant facts and factors from others which are irrelevant, and then concentrate on them, keeping steadily in mind the questions to be answered, the problems to be solved the technological things to be created. As a good archer is known not by his arrows but by his aim, so a good university and its graduates will be recognizable by their ability to develop this quality. When this quality is missing, the university, the faculty, the school, the department, the educator, or the learner, or all together, display a vague, muddled, and feeble academic thinking that drifts always from one problem to another; wandering hither and thither; never settling anything completely; quitting each problem in turn as soon as another attracts attention: a "quality" totally unacceptable because it is futile, and, in the specific conditions of black Africa, extremely dangerous.

Genuine knowledge

A clear thinker recognises exactly what it is he wants to know and to achieve, i.e. he thinks always with purpose. And this requires a **sound mind in a sound body**. He who has these two has little more to wish for; for a sound mind is usually a clear and strong mind needed (1) in the Platonic sense, so that men and women can act nobly; (2) in the managerial sense, so that they can play the roles of practising or potential leader-managers; (3) in the vocational sense, so that they can do their chosen jobs well according to the demands of an accelerated growth; (4) in the scientific-technological sense, so that they will not confuse genuine knowledge with beliefs; and (5) in the general cultural sense so that they can carry the torch of enlightenment into the corners of ignorance and material backwardness.

What is genuine knowledge? You have such knowledge always and only when you can give proof or produce a logical reason. If you cannot, you may still have the strongest possible belief, and what you believe may, in fact be true, but you do not know it, therefore you are not a **scientist** but a **believer**, supposing you have never studied higher mathematics. you may still be perfectly certain that by derivative is meant the instantaneous rate of change of a function with respect to the variable; but you do not know it until you have comprehended the relevant theorem; when you do this, you have not merely a higher degree of certainty-you have a different kind of certainty.

An accelerated scientific, technological,

economic, cultural and political development demands such knowledge because the faster the progress the less time there is to observe the stages achieved and to correct the mistakes made. Accordingly, one of the most fundamental tasks of university education in a developing country is the steady elevation of the concept of genuine knowledge to the status of an absolute **conditio sine qua non**.

The dangers of accelerated development

Accelerated development means, for example, that there is neither time nor need to teach how to re-invent the wheel. In many cases, if not in all, the need is to start at the level of the best modern achievements. Instead of re-inventing the railway, the right approach is to teach how to build modern railways; instead of wasting time and resources on the re-invention of the jet engine, the task is to teach how to introduce the modern jet propulsion systems into practice, -and so on, and so forth.

Unfortunately, however, these wonders of technology are very complex and very costly, and their introduction requires precise knowledge, reinforced by solid technological experience. But the average developing country lacks such experience. Hence the difficulties facing engineering education in an African university, therefore the profound importance of clear thinking. Technology is the knowledge about and of, the methods and means of production processes, the totality of science-based production and use of everything that makes life civilised. It is this which gives mankind industrial plants, trade, commerce, communications, towns, food stores, medicaments, universities, etc. Therefore a "sudden" introduction of all this in a technologically still undeveloped country cannot be imagined without the ability to distinguish between the more important and the less important more urgent and less urgent-the ability to think clearly. It follows, then, that African syllabuses and methods of education cannot-and should not-be copied blindly and mechanically from those in Europe and North America: they have to be extremely selective and carefully tailored.

Staff seminars

Needless to say, there are no simple remedies to overcome these and other difficulties. But there are avenues of promise to those eager to explore them. To begin with, although it would be dangerous to copy mechanically the European and American methods and techniques of education, it is necessary to continue bringing in those of them which are relevant to the specific conditions of Africa. It remains highly desirable to continue inviting foreign scholars of distinction, but now the time is ripe to begin inviting also practicing engineers and technologists whose up-to-date industrial experience would be invaluable.

It should, however, be remembered that these activities alone will not solve the complex problems. No good-will and assistance from outside, however valuable and necessary, will ever drop complete

solutions from the sky on a parachute. Experience shows that the only really developed countries are self-developed countries. Which bring us to a very important matter: African universities, faculties, schools and departments should, I think, make it an absolute academic rule to have regular staff- and Student-Seminars TO DEBATE THEIR PROBLEMS. What should we teach, how and why?; what should be the topics of final-year projects?; what laboratory facilities are needed, and why?; what are the most up-to-date developments and trends in this or that discipline? Questions like these could be excellent subjects for discussion, which, in turn, would produce new ideas and solutions. Activities of this nature, if organised properly and taken seriously, would enrich both the academic staff and the students to an extent not realised without them.

The problem of mass enlightenment

No man was ever wise by chance, and no amount of knowledge possessed by anyone group of people ever made any nation wise or civilised. To put the matter differently, knowledge restricted to small groups leads to an elitism, and history is full of examples of how elitism often leads to undesirable social consequences. It would, indeed, be unhealthy, to say the least to have a rapid progress in some centres of a nation, and no progress beyond their fringes.

Therefore, one of the imperative tasks facing the universities of the developing countries is to cultivate a spirit of mass enlightenment an acute of realisation that national progress requires national participation, which would be an impossibility without mass literacy. So long as the university campuses and industrial centers remain surrounded by illiterate and materially backward masses, no achievements can hope to produce what they are expected to produce: equality of opportunities for all, social justice, political tranquility. And when these are in doubt both the academics and the students cannot have the much needed peace of mind.

For any student or group of students, but particularly for students' unions, it would be honorable, patriotic, humane, to undertake the task of teaching at least a few men and women to read and to write, of making them understand and appreciate the basic principles of modern science and technology, to spread to them the commonsense of hygiene and medicine, to help them to grasp the essential ideas of more productive work. This is so important to any developing nation that the younger generation cannot be indifferent. Almost everything that is great has been done by youth- I appeal now to you, the youth of the African campuses make the days of your youth the days of your glory in this humane problem. Remember that you are in the focus of attention of the world; remember that no-one will drop you freedom, democracy, civilization, the well-being of your people on a parachute. Remember the motto of my generation: NO-ONE KNOWS WHAT HE CAN DO TILL HE TRIES.