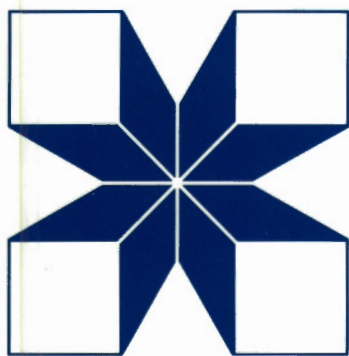


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C A N A D A

UNE STRATÉGIE DU DÉVELOPPEMENT DES RESSOURCES HUMAINES

COMMUNICATIONS DÉCOULANT
DU SÉMINAIRE-ATELIER TENU
À YAOUNDÉ, CAMEROUN,
DU 2 AU 5 FÉVRIER 1988

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Une stratégie du développement des ressources humaines

Communications découlant du séminaire-atelier
tenu à Yaoundé, Cameroun, du 2 au 5 février 1988

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**NIGERIAN UNIVERSITIES AT THE
CROSS - ROADS**

A CASE STUDY OF COLLEGES OF MEDICINE

. BY

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PRESENTED AT

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**THE UNIVERSITY OF YAOUNDE
THE REPUBLIC OF CAMEROON**

INTRODUCTION

I must begin by expressing my gratitude to the IDRC for giving me the opportunity to attend this Workshop. I looked forward to gaining a great deal from the experience, and already I have gained much more than I would be able to contribute.

Let me also say from the beginning that I am neither a social scientist nor a planning expert, I am a mere surgeon with some personal experience in University teaching and administration. Even that experience has been limited entirely to Nigeria. In that regard, I wish it had been possible for Professor Akin Mabogunje to come because he is a social scientist who has had over 20 years involvement not only in the University System but also in national development planning.

Having said all that, there are certain bottom lines concerning which we are all agreed :

1. It is the duty and prerogative of national governments not only to formulate development policies but also to design and execute plans to make development possible whether you consider manpower development, industrial, technological or socio-economic development. Unfortunately in many countries in our sub-region, the national governments have no effective communication link with the local community of scientists, intellectuals and researchers in the University System or outside it. Some are known to be in open "warfare" with their intellectuals. One is therefore not surprised that a lot of national policies are formulated with inadequate data base. Perhaps the intellectuals themselves must find the solution to this communication problem.
2. Development costs money, and many of our countries are poor. Even when all other conditions are equal, lack of funds becomes a significant bottle-neck.
3. Human resources development itself, unless it is done in context of functional needs and functional possibilities, can be a liability rather than an asset.

It costs money to train people, and it costs money to keep people in employment. When human resources development has been successfully pursued in terms of numbers, as has been the case in Nigeria, you may end up with the paradox of unemployment in the presence of severe manpower shortages ; or worse still, you end up with a situation where over 80 % of the budget of an average institution goes to pay staff emoluments leaving very little for the functions of the institution, and less still for information management and research. When economic recession occurs, things practically grind to a halt, unless everyone concerned takes another look. This seminar is an opportunity for some of us to take another look.

It is in this context that my contribution would seek to explore ways in which the University, especially the medical schools system can reorder its priorities in order to be able to function effectively in the face of limited financial resources. I see the functions of these institutions as :

1. Producing high and middle level manpower of the right type, in the right mix, and the right numbers.
2. Engaging in research for national development as well as research to enable them (the University people themselves) do their work better, I mean educational research.
3. Performing national service in form of advice and consultancy to government and government agencies. Among such service must be included the marketing of their research findings. i.e. "transmitting new knowledge and ideas" to policy makers and the industries, both in the organised private sector as well as informal industries.

P R O L O G U E

There is no denying the fact that the Nigerian economy has hit hard times over the last decade, as has in fact been true of that of all nations of Africa, if not of the world. It is also likely that it would take at least another decade to recover, if it ever will. In these circumstances, the message is loud and clear that organisations whose essential objectives cannot be radically curtailed must reexamine their *modus operandi* in order to make diminished and diminishing resources continue to achieve their unaltered goals.

The University System is one such organisation. This essay shall proceed to examine the development and prospects for meaningful survival of this system with the medical Schools as case in point.

The Yaba Medical School, which began in 1932 only had the objective of training Medical Assistants to provide medical care for the "natives", even though it recruited its students from among the best brains in the country, and pursued a training curriculum the content and rigours of which compared favourably with that of any Medical School in Britain. As political awareness increased, so did pressures for change. Hence the Yaba Medical School began to be phased out in 1947 in favour of the Faculty of Medicine of the new University College Ibadan which was to become the prototype of university education in Nigeria.

The University College Ibadan was a College of the University of London, and its students took the degree examinations of London as external candidates in special relationship with the parent University. In Medicine in particular, the Ibadan programme went as far as the Preclinical Stage of the curriculum. Students who passed the second professional examination in Basic Medical Sciences, went abroad to various teaching hospitals of the University of London, to complete their clinical training. Quite often, those who "could pass" this (2nd M.B.) Examination were determined by the number of "clinical places" available in these London teaching hospitals. The new University College Hospital, Ibadan opened its doors to patients, teaching staff and students in 1957. Even then, the curriculum and examination continued to be those of the University of London until 1964.

The University and Municipal Services

Apart from its curriculum and examination, the University College, Ibadan also imported a developmental philosophy that provided tertiary education for a small, highly selected elite in the tradition of Oxford and Cambridge. There was an accepted need to insulate these privileged few from the humdrum of their surroundings so as to enable them to devote their undivided attention to the pursuit of knowledge in faithfulness to the Oxbridge tradition of academia and in justification for the huge investment on them. This led to the establishment of Halls of Residence for students and residential estates for staff, thus committing the university to an open ended involvement in municipal services. However, I do not believe that the founding fathers ever dreamt that the University population would exceed some 3000 students and perhaps one thousand staff.

However, increasing political awareness and the national independence in 1960 changed all that. The notion of national freedom brought with it, egalitarianism and, at least, in theory, the right of every one to all the good things in life, paramount among which is education. Universities were rapidly increased in numbers from 1, first to 5 (in 1962) then 6 in 1972 and ultimately 12 in 1978 and 26 in 1983. Each one, as a matter of national policy, embarked on systematic expansion in student and staff population. We now have over 100,000 students in universities in Nigeria. With this expansion went corresponding commitments to the provision of municipal services of roads, housing, transportation, water supply and electricity generation. The extent of these municipal commitments escalated not only by force of tradition (since no new university dared to appear inferior to those before it) but also especially because the regular sources of such public utilities were grossly inadequate and erratic in their performance.

The result has been that over half of the capital expenditure of these universities went to the provision of these municipal infrastructures and over 80 % of recurrent expenditure, not spent on staff salaries, went to support municipal services and over one third of the staff population were engaged, not in teaching and research nor in administration, but in the maintenance of municipal services. As political awareness increased still further, trade unionism became a strong factor in determining the direction of growth and development within the University System. Increasing militancy of both staff unions and student unions combined to ensure a maintenance of the municipal infrastructural services for the welfare of staff and students at the expense of teaching and research facilities especially as the economic recession took hold. Unless there is a bold determined attempt to change this direction; all indications are that it would continue until the University System comes to become more preoccupied with maintaining the welfare of its staff and students than maintaining the pursuit of scholarship. Most Nigerian Universities in the last 5 years have had little money allocated to Research and less still allocated to support attendance at Learned Conferences.

THE WAY FORWARD : The reason for the existence of a University is the pursuit of scholarship and at times of lean and diminishing resources the only sensible thing is a devotion of most of these resources to that primary function. Fortunately, the Ondo State University founded 1983 and the Ogun State University founded 1983 have

successfully demonstrated that this can be done. These two institutions have started with little or no commitment to student or staff housing. Unfortunately the public supply of water, electricity and transportation is still so inadequate and irregular that even these institutions have had to devote considerable resources to the provision of water, electricity and transport to ensure the efficiency of their teaching and research programmes. None the less the achievement of these two Universities with meagre resources has demonstrated that the future road to progress lies in the University System divesting itself as completely as possible from responsibility for its own municipal infrastructural services - housing, catering, transportation, water and power supply, thus concentrating its diminishing resources to the support of teaching research and manpower development. It is recognised that this may not always be completely possible in absolute terms, but significant changes must be made in this direction.

THE UNIVERSITY SYSTEM AND MANPOWER DEVELOPMENT

Somehow Nigerian Universities since National independence, appear to have established a tradition based on the following assumptions

- (1) That every University lecturer should ultimately become a Professor.
- (2) That the surest, perhaps even the only way to achieve this goal is to publish a large number of papers.
- (3) That if you don't become a professor, you are essentially a failure no matter what else you have achieved.
- (4) Finally, your income is perpetually tied down to your promotion prospects.

As part of international development in academia, many journals have sprung up, both locally and internationally. Many of them have adopted a purely utilitarian objective of "disseminating information" sometimes without the intention (often without the ability) of ensuring the quality of the information they disseminate.

This development has been a catalyst to the ambition of the average Nigerian academic to make the grade of professor by publishing. It has therefore become possible to make publishing itself a goal, rather than research and scholarship. The main preoccupation has been to find the journal willing to publish what you have, rather than to work hard enough to produce what is worth publishing, by any standard, anywhere.

The results of this set of circumstances and the traditions developing from them have been

- (1) The true pursuit of scholarship has suffered, as many academics, in a bid to make progress have devoted more attention to publishing than to real research, certainly than to teaching and, in the case of medical College academics, than to the practice of medicine. Yet the ultimate reason de tat of academic medicine itself is the continual improvement of medical practice,

the achievement of which ensures that our patients get the best care, and also that what is taught to our students is continually changing for the better.

(2) We now have many university departments in which there are more professors than there are lecturers and, in quite a few, more professors than there are postgraduate students.

The administrative structure of the University System is such that usually only one of the numerous professors has the responsibility for leadership. Quite often, the others, especially when they are senior to the incumbent Head of Department tend to function outside (sometimes above) the system. Many look for legitimate extra university political or professional assignments with national or international bodies, or huzzle for higher administrative posts, such as Vice Chancellors, yet others simply spend most of thier time on their private concerns.

(3) Most Universities spend more money paying the salaries of staff than they provide for reseach and academic development.

(4) In practice, the objectives of the University System appears to have been reordered as follows for many Universities and academics.

(1) To ensure progress if possible, rapid progress for every member of the academic staff, and hence to create as many professors as possible in every possible field of endeavour.

(2) To produce as many graduates as possible in every possible field of endeavour. Development is often interpreted to mean expansion of student intake or approval of new educational programmes.

(3) Academic reseach designed for the advancement of professional knowledge and practice, or the betterment of human life and environment has been reduced to a poor 3rd place and often is completely shelved at times of economic hardship such as now.

Unfortunately we have had economically hard times for so long now that this 3rd order objective has almost been completely forgotten, certainly in many Medical Schools in the country. Even if economic situations do improve, there is a danger that the search for the advancement of professional practice may stay forgotten unless a deliberate effort is made to reorder the objectives of the University System so as to restore academic research to its rightful place, and return the struggle for self-advancement among academics to its rightful Secondary or even 3rd order position.

SOLUTION

Surely a labourer deserves his hire and an academic, like every other citizen has a right to aspire to success both economically and professionally, but it goes without argument that the primary preoccupation of an academic should be the pursuit of academic distinction. Our University System must be reordered to make this possible.

(1) The first step towards this reordering is to separate economic success from academic/professional success for the academic by restructuring the University salary system so that everyone does not have to struggle to become a Professor in order to make ends meet economically. If such were the case, many would remain Lecturers - Senior Lecturers for most of their academic careers, and continue to do very meaningful work in research and teaching as well as public service. In other countries, many of those who taught us 20:30 years ago are still Senior Lecturers or Associate Professors in the United Kingdom or United States of America. They are making contributions. They are respected in the academic world, and they are contented men and women economically and socially. There exists no obsession to become professors with them.

The establishment of intramural private practice from which both the academics and indeed the teaching hospitals and the university departments benefit is a vital component of this development. Because the practice is intramural - within the teaching hospital - the question of teaching hospital doctors not being available because they are away in their private clinics would not arise. Furthermore such intramural practices, against the background of improved infrastructural facilities, would be considerably enhanced in standard.

(2) The Professorship should be restored to its rightful position. Each University should only have one university Professor in each specific discipline. This should not only be a recognition of the academic who indeed has arrived and has made a specific contribution, but it should also carry a responsibility of academic leadership. The era of the multiple professors many of who neither have administrative nor leadership responsibility to the system ought to be left behind us.

This provision should not rule out the possibility of an endowed professorship to which a distinguished scholar may be appointed perhaps long before he is due to get a University chair - provided

- (1) that his academic work merits such an honour, and
- (2) most importantly, that an outside source of funding exists to sustain such an honour.

A Scholar holding such an endowed Professorship has a responsibility to continue to work productively in the area in which he earned his honour. The endowment should naturally be such as to guarantee that he is able to do so by making the funds available through the proceeds from the original donation. If, for some reason, his research potential dries up and/or the fund endowing his chair dries up, he reverts to his basic status of Senior Lecturer or Reader until he can rightfully become a University Professor.

A University department may thus have as many endowed chairs as it is able to solicit and for which it is able to attract endowment. One of the responsibilities of the University Professor, in consultation with his Vice Chancellor, would be to look for

viable sources of such endowment. This proposal gives a potential venue for enabling the private sector to get involved with University funding.

A University Professor remains in undisputed charge of his department until retirement provided he continues to give desirable leadership and to get results - in terms of

(a) Teaching, especially postgraduate students,

(b) Active research and

(c) generation of funds to support research and development, which provision should compel a measure of contemporary relevance in the academic pursuit of the department he leads.

The majority of Lecturers will naturally never become Professors in this system. The Salary structure should however be such that they can make a decent living and have the job satisfaction of being successful academics without having to "publish or perish" or more correctly, publish and perish. Their tenure however should be sustained on their teaching and research contributions, not simply hang on the fact that they are confirmed to retiring age.

Furthermore, every academic has the potential and the opportunity to work for recognition such as to enable him to attract an endowed Professorship. Such an endowed Professorship becomes an asset to the Department and the University, bringing in extra funds as well as conferring recognition for the work being done by its academics. While a department is financially committed to the maintenance of one University Professor, it may in fact end up with a lot more, each of the others bringing in a considerable amount of money to support on going research, rather than being a drain on its meagre resources.

Yet another advantage of this system is that it would encourage lateral mobility of academic staff. Senior Lecturers and Readers would more readily elect to seek University Professorship in other Universities while the chair in their own university is occupied. This will also effectively correct the existing maldistribution of Senior academics in the Country.

THE UNIVERSITY SYSTEM AND CURRICULUM ADMINISTRATION

In the traditional system, the medical curriculum is subject oriented, and each department consisting of subject experts contests for a share of the students' time with every other department. In this allotted time, efforts are expended to impart to the weary student as much knowledge and skill as possible in the teachers' own particular subject, often with little or no indication as to the significance or relevance of such knowledge and skill in the job requirements of the graduate doctor in real practice situation.

In recent times, radical departures from this traditional to the Integrated curriculum have been tried here in Yaounde (1969) and at Ile - Ife, Nigeria (1972). The basic tennets of both these departures were

- (1) To operate an integrated curriculum with body organ systems as the organising principle. Courses were to run across the traditional boundaries of preclinical and clinical programmes as well as the subject specialists departmental boundaries.
- (2) The application of the Science of Education in the planning and delivery of courses based on predesigned objectives, and using all modalities that facilitate student learning.
- (3) The teaching of different professional students together as members of the Health team - doctors, nurses, physiotherapists, medical laboratory technologists etc., with a view to facilitating their cooperative interaction in the health care arena on graduation.
- (4) The teaching of laboratory disciplines in multi- disciplinary laboratories with a view to limiting capital costs and encouraging team work among teachers.
- (5) The teaching of clinical - community Health in the context of comprehensive health service for a defined community through the agency of :

Basic Health Units providing Primary Care

District and General Hospitals providing secondary Care and

Referral Medical Centre providing Tertiary Care.

This was to enable students to train in facilities similar to those in which they would ultimately practice, and to enable both staff and students to execute and evaluate health care programmes within the target population. Unfortunately, the protagonists of the new programme were in head on collision with earth-bound traditionalists among their staff as well as in the rest of the University System. It required almost totalitarian discipline to achieve anything. Within a decade both schools abandoned most of the basic tennets and reverted to traditional format in varying degrees.

The problems were

- (1) The failure of medical educators to accept that education itself is a science, that thrives on experimentation and change.
- (2) The failure of the rest of the University System to support the protagonists of change and hence create an atmosphere in which change is accepted as part of growth.

(3) The failure of the National Health Service Organisation itself to embrace the change and hence create a demand for the graduates of the new curriculum in the national job market.

(4) Perhaps, most crucially, the failure of the protagonists of change to communicate effectively with policy makers and their own colleagues.

The Solution : Perhaps the single most important reason for the failure of the Yaounde and Ife experiments was lack of National acceptance. If there was national acceptance, there would then be the necessary reorganisation of the national Health Service in such a way as to create a demand for the graduates of the new programme, as well as to provide job satisfaction for them.

Another bottom line requirement was failure of the medical educators themselves to accept that even though they are experts in their chosen medical fields they do need to learn and practice the science of education as well. Then, may be many more would approach educational innovations with objective appraisal rather than outright opposition and rejection.

Against this background, there is no doubt that all would agree that there is a need to emphasise the inter- relationship of different parts of the curriculum to one another and to the expected competences and skills of the doctor on graduation. This suggests a need to relate the curriculum not to different scientific disciplines/subjects like Anatomy, Physiology, Pharmacology, Surgery or Medicine in the traditional way, but to the human body as it may be affected by disease or degeneration and require health care. This is the basis of the integrated curriculum using the body organ systems as organising principle and relating every major aspect of the course to identified patient problems and hence the students' major motive for entering the programme.

It is suggested therefore that the medical curriculum of the future would start to introduce the student to patient care from the very beginning. The student would learn the basic and clinical sciences clearly in the context of their contribution to his understanding of the patient's problems and the intervention required in their solution. Contrary to popular criticism, this approach does not, by itself, preclude the students from acquiring indepth knowledge of Basic Sciences, provided such indepth knowledge is deemed essential to the achievement of his educational objective. The only things it insists on are

(1) the eradication of the artificial separation of the Basic Science and Clinical parts of the curriculum.

(2) the preplanning of the objectives of the training programme - Institutional objectives as well as the objectives of the component courses. - Course objectives.

(3) the fashioning of both the course contents and the examinations to be in consonance with these objectives.

(4) the periodic evaluation not only of student performance, but also of the effectiveness of the course contents and delivery modalities, through in-course and certifying examinations as well as other evaluation techniques.

Furthermore in order to facilitate the administration of this integrated curriculum based on body organ System., the role of programme coordinators and Course coordinators whose functions cut across departments should be established with statutory responsibilities and authority from the beginning. The experience of institutions that have tried to run integrated curricula without such statutory demarcations has hown a consistent proneness to self-destructive conflict. A method of institutionalising the role of Programme Coordinator without threatening the authority of the traditional departmental heads has been dubbed the "Lattice work" organisation adapted from the structure of the McMaster University School of Medicine. It is described here for the sake of completeness.

THE LATTICE-WORK ORGANISATION

The lattice-work organisation is a system that not only effectively shares out responsibilities and authority but achieves much more beside. It basically operates on committees.

DEPARTMENTS - VERTICAL PROPS

In this organisation, the vertical props of the lattice-work are represented by the departments. Each department represents a discipline defined as clearly as local conditions would permit. For instance, it is possible for all of pathology to be defined as one department. Similarly pathology can be seen as three, four or even five departments depending on the availability of manpower representing the different shades of the discipline, on the orientation and attitude of the men on the ground and on the availability of funds for intensive development of the various shades of the discipline. Basically it is essential that a department should contain men and women with similar background, engaged in similar activities and committed to similar objectives. The leadership should, without undue strain, be able to hold the team together without polarisation. As soon as polarisation develops or the strain of maintaining a depolarised state becomes excessive, it is time to create a second department out of the one. This has been the natural history of the development of departments as we know it, Paediatrics from Medicine, Ophthalmology from Surgery etc.

Functions of a department

The functional essence of a department in this system is to pursue intensive research or service in the discipline represented by the department. An overall departmental objective guides their activities and every member has a significant role to play in the achievement of such an objective. The need for additional staff is primarily dictated by the emergence of a new facet to the research or service objective that needs to be pursued. This way the staff strength of a department has a limit set by the functional objective of the department.

Responsibility of Departmental Head

The primary responsibility of the departmental head is to provide leadership and guidance not only for the team as a whole but also for each individual member of the team as he or she fulfills his or her role within the team. The departmental head, by the same token, has authority to assess the response of each member to his leadership in this respect. This assessment contributes to (but does not exclusively determine) the academic progress of the staff member within the College.

PROGRAMMES - HORIZONTAL LINKS

The horizontal interlinks of the lattice-work are represented by a number of interdepartmental (multidisciplinary) activities or programmes. These activities, as the simile suggests, represent the group activities that operate across departmental boundaries within the College. These activities may be the integrated educational programmes - be these undergraduate, postgraduate or vocational programmes. They may be research activities, or they may be service activities. The number and variety of such interdepartmental (multidisciplinary) activities depend, among other things, on the staff strength, the general orientation and competence of the staff, the institutional objectives or general commitment of the entire College and, of course, the availability of funds and facilities.

The place of individual staff in the horizontal programmes

Each member of staff within the College participates in, and contributes to one or more interdepartmental activities, according to his own skill, knowledge and commitment, irrespective of his departmental affiliation. Provided that once a horizontal activity has been adopted by the system, every member with relevant competence must be available to contribute to its success. It stands to reason that no new "horizontal" activity may be adopted unless there is a consensus that available staff can competently cope with it without letting it or other commitments, suffer neglect. Sometimes the necessity to support a desirable new "horizontal" activity may dictate to a departmental head the need to recruit additional staff into the department. It is clear however that "horizontal" programmes cannot and should not generate or support staff without a "vertical" departmental home base.

For administrative co-ordination, all staff members participating in a horizontal activity or programme form a unit under the leadership of a programme director, or Coordinator, or subdean. The programme Coordinator has the responsibility to provide leadership and guidance for all involved in the execution of the programme. By the same token, he also has the authority to assess the response of each participant to this leadership in form of the consistency and effectiveness of his or her contribution to the programme.

This assessment also contributes to (but does not exclusively determine) the academic progress of the staff member within the College.

The unique advantage of this lattice-work organisation becomes obvious at this point. That is, every member of the College has the advantage of at least two, sometimes more, independent primary assessments at all times. This tends to neutralise the influence of personality conflicts in the assessment process. This advantage increases of course if a staff member participates in more than one horizontal programme. There is however a danger of diminishing productivity if he spreads out into too many "horizontal" activities. Young academics would need advice and guidance in this regard. By definition, of course, no one is expected to belong to more than one vertical departmental home base.

Finally, it is also obvious that this system puts an objective ceiling on the expansion of staff strength, which ceiling is related to the functions, activities and facilities of each department. If, in the clinical areas especially, the staff strength is further related to the patient load - the number of beds, out patient clinic facilities as well as operating facilities, we would have an effective peg on inordinate staff expansion and the seemingly inevitable under utilization that currently exists in many universities.

In summary, this presentation has dwelt on a few key problem areas in university-based health manpower development in Nigeria, namely :

1. **The excessive and altogether unnecessary commitment of higher institutions to municipal services for staff and student welfare.**
2. **The unhealthy emphasis placed by staff and management of higher institution on self-advancement through the "publish or perish" process and the emphasis on promotion as the only means of increasing income or status.**
3. **The reluctance of academic staff to accept the challenges of Education as a Science.**
4. **The lack of institutional support (in form of administrative reorganisation within the higher institutions) for innovative ideas, which lack of support has usually guaranteed the still birth or infanticide of such ideas.**
5. **The inadequacy and ineffectiveness of communication among academics and between academics and policy makers that is largely responsible for 3 and 4 above.**

It is suggested that these problems must necessarily be resolved if manpower development programmes are to meet the challenges of increasing demands inspite of diminishing resources.

Thank you.