

JOURNAL OF EDUCATIONAL PLANNING AND ADMINISTRATION

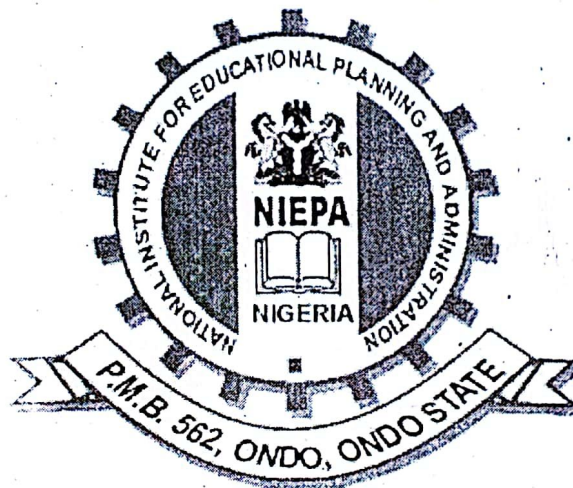


Volume 1, No 2, September, 2016

ISSN: 1119 – 3239

**NATIONAL INSTITUTE FOR EDUCATIONAL
PLANNING AND ADMINISTRATION (NIEPA) NIGERIA,
ONDO, ONDO STATE**

JOURNAL OF EDUCATIONAL PLANNING AND ADMINISTRATION



Volume 1, No 2, September, 2016

ISSN: 1119 3239

**NATIONAL INSTITUTE FOR EDUCATIONAL
PLANNING AND ADMINISTRATION (NIEPA) NIGERIA,
ONDO, ONDO STATE**

EDITORIAL BOARD

Editor-in-Chief

Prof. Lilian I. Salami

Managing Editors

Dr David Shofoyeke

Dr Lara Ogunsola

Editors

Dr. Toun Akinsolu

Dr Olu Famade

Dr O.T. Omotayo

Dr Sunday Adegbesan

Dr O.A Oyekan

Dr S.O. Oyeromi

Consulting Editors

Prof. Joel Babalola

University of Ibadan

Prof K.K Kazeem

University of Benin

Prof A.Y. Abdulkareem

University of Ilorin

Prof Taiwo Edun

Olabisi Onabanjo University, Ago-Iwoye, Ogun State

Prof. R. Alani

University of Lagos, Lagos State

Thamh-Haa Desruelles

Jocynes Hallac

EDITORIAL

Planning and administration is the fulcrum of the entire education system. If this is missed out as the superstructure on which curriculum and pedagogy are mounted, the system will definitely collapse; whereas if the foundation-planning and administration which is the superstructure is solidly laid and nourished, the system will reign supreme!

"Journal of Educational Planning and Administration" is set out to ensure that the foundation of dissemination to stakeholders.

In this edition with the theme **"Educational Planning and Administration for Integrity, Accountability and Development"**, the target audience will receive more education on topics such as managing secondary education for sustainable development in Nigeria, correlates of job satisfaction among lecturers in public universities in Ogun state, planning the re-establishment of Grade II Teachers colleges for integrity, accountability and development in Nigeria, influence of class size on teachers job effectiveness in public secondary schools in Afojio local government Area of Oyo state, and Improving school-based Management committee strategies for the development of basic schools in Northern Nigeria, among others.

The readers are enjoined to read this work and contribute articles to the subsequent editions of this "must have journal" which is one of the major instruments of achieving an aspect of NIEPA's mandate of building the capacity of education sector planners and managers at all the levels of education system.

Prof. Lilian I. Salami

Director General/Chief Executive

NOTES ON CONTRIBUTORS

1. **A. A. Adekunle, (Ph.D)**, Department of Educational Administration , University of Lagos
2. **A. A. Agbonlahor**, Department of Educational Foundations and Management, Federal College of Education, Abeokuta
3. **Adegbesan Sunday, O. (Ph.D)**, Training & Research Fellow, Training and Research Department, National Institute for Educational Planning and Administration (NIEPA Nigeria), Ondo
4. **Adekunle Durojaiye**, Faculty of Education, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
5. **Adetunji, A. Adeniyi**, National Institute for Educational Planning and Administration (NIEPA) Nigeria, Ondo
6. **Adisa Biodun Olubunmi Akanni**, Department of Adult Education, University of Ibadan
7. **Aduloju, M.O. (Ph.D)**, Department of Educational Foundations and General Studies, College of Agricultural and Science Education, Federal University of Agriculture, Makurdi-Nigeria.
8. **Afolabi, Samson Sunday (Ph.D)**, School of Education, National Open University of Nigeria, 14/16 Ahmadu Bello Way, Victoria Island, Lagos
9. **Akinkuowo Folajogun Olawasinbo**, Research Fellow, Training and Research Department, National Institute for Educational Planning and Administration (NIEPA Nigeria), Ondo
10. **Akinloye, M. L. ,** Department of Educational Management and Business Studies, Faculty of Education, Olabisi Onabanjo University, Ago-Iwoye, Ogun State
11. **Akinsolu A. (Ph.D)**, Department of Educational Management, Faculty of Education, Osun State University, Osogbo, Nigeria
12. **Akinwale, Mary Idowu**, Postgraduate Student, Department of Educational Administration, University of Lagos, Akoka;
13. **Akinyosade E.O.**, Former Head of Department of Physics, Tai Solarin College of Education, Omu-Ijebu, Ogun State
14. **Alabi F. O. (Ph.D.)**, Department of Educational Management, Adekunle Ajasin University Akungba Akoko.
15. **Alabi, Christianah Oluwakemi**, Emmanuel Alayande College of Education, Department of Curriculum and Instruction
16. **Alimi O. S. (Ph.D.)**, Department of Educational Management, Adekunle Ajasin University Akungba Akoko.
17. **Aminu Kazeem Ibrahim, (Ph.D)** , National Open University of Nigeria, Jabi-Abuja
18. **Atolagbe, Adedapo Adetiba**, Department of Educational Management, Faculty of Education, University of Ilorin, Ilorin.
19. **Atunde, Martins Olanrewaju**, (Postgraduate Student), Department of Educational Management, Ahmadu Bello University, Zaria
20. **Ayanyemi Adelani Kayode (Ph.D)**, Department of Educational Management, University of Ibadan
21. **Ayanyemi, Adelani Kayode (Ph.D).**, Government Technical College, Ibadan
22. **Ayeyemi. A. A.**, Department of Islamic Religious Studies, Osun State College of Education, Ila-Orangun.

23. **Bakwai, Bala**, Department of Educational Foundations, Faculty of Education and Extension Services, Usmanu Danfodiyo University, Sokoto.
24. **Bamgbose Ruth Yemisi**, Department of Arts and Social Science Education, Osun State University, Osogbo (Ipetu Ijesa Campus)
25. **Bamimore, Paul Oyesiji**, Alayande College of Education, Department of Curriculum Studies, Oyo
26. **Bolatito, Rafiu Omotayo**, Department of Educational Foundations, Faculty of Education & Extension Services, Usmanu Danfodiyo University, Sokoto., Nigeria
27. **Ehinola GB (Ph.D)**, Department of Educational Management, Faculty of Education, Adekunle Ajasin University, Akungba-Akoko
28. **Ejekwu, Princewill Okechukwu**, Department of Primary Education Studies Faculty of Education, Ignatius Ajuru University of Education, Port Harcourt
29. **Eniola Keji Ola-Alani, (Ph.D)**, Department of Adult And Primary Education University of Ilorin
30. **Farinde, M. Olusegun**, Department of Christian Religious Studies, Osun state College of Education, ILa-Orangun
31. **Fasasi Yunus Adebunmi (Ph. D.)**, Department of Educational Management, University of Ilorin, Ilorin, Nigeria
32. **Grace Tolulope Omiyale**, Training and Research Fellow, National Institute for Educational Planning and Administration (NIEPA) Nigeria, Ondo
33. **Hakimi, Muhammad Wadata (Ph.D)**, Deputy Provost Academics, Shehu Shagari College of Education, Sokoto
34. **Iornienge, M. T.**, Department of Educational Foundations and General Studies, College of Agricultural and Science Education, Federal University of Agriculture, Makurdi-Nigeria.
35. **Iyabode Omolara Akewo Daniel, (Ph.D)**, Associate Professor of English, English Unit, School of Arts and Social Sciences, National Open University of Nigeria, Victoria Island, Lagos, Nigeria
36. **Iyorhii, D.C.**, Department of Educational Foundations and General Studies, University of Agriculture, Makurdi
37. **Jeremiah N. Daku, (Ph.D)**, National Institute for Educational Planning and Administration (NIEPA) Nigeria, Ondo.
38. **John Oluyemi, Egbebi (Ph.D)**, Department of Research, National Institute for Educational Planning and Administration. Nigeria, Ondo,
39. **Jonathan. C. Nwosu (Ph.D)**, Babcock University, Ilisan Remo, Nigeria
40. **Jubril Isa Diso (Ph.D)**, Department of Special Education, Bayero University Kano
41. **Julius Adedaja**, Universal Basic Education Commission (UBEC), Abuja
42. **Kaka O.A**, Former Head of Department of Computer Science, Tai Solarin College of Education, Omu-Ijebu, Ogun State
43. **Kareem, Thompson Sola**, Department of Purchasing and Supply, The Polytechnic, Ibadan
44. **Lasun Gbadamosi**; Professor of Educational Planning & Policy, Department of Educational Management & Business Studies, Olabisi Onabanjo University, Ago-Iwoye, Nigeria.
45. **Lukman Adegboyega, Abioye (Ph.D).**, Department of Mass Communication, Lead City University, Ibadan.
46. **M. Abisola Badmus**, Head, Department of Community Health, Ogun State College of Health Technology, Ilese-Ijebu, Nigeria

47. **Mando P.N.**, Department of Educational Foundations and General Studies, University of Agriculture, Makurdi
48. **Margaret Funke Faremi (Ph.D.)**, Department of Arts and Social Sciences Education, Osun State University, Ipetu- Ijesa Campus.
49. **Muyiwa Adeyemi (Ph.D)**, Faculty of Education, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
50. **Nakazalle, Nura Usman**, Department of Educational Foundations, Faculty of Education And Extension Services, Usmanu Danfodiyo University, Sokoto
51. **Niyi Adegoke, Ph.D**, Criminology and security studies Unit, School of Arts and Social Sciences, National Open university of Nigeria, Victoria Island, Lagos
52. **Nwachukwu, Kingsley Ezechinyere (Ph.D)**, Department Of Earlychildhood And Special Education, Faculty Of Education, University Of Uyo.
53. **Nwazota, Chinwe C. (Ph.D)**, 3 Bassie Ogamba, Surulere, Lagos.
54. **Obinegbo, Winifred Chinwe (Ph.D)**, Ministry of Education, Akure.
55. **Odeniyi, Olujinmi Adebayo, (Ph.D)**, National Open University of Nigeria, Special Study Centre for Nigeria Security and Civil Defence Corps, Civil Defence Academy, Sauka, Abuja.
56. **Odukoya O. Odunayo**, Department of Arts And Social Science Education, Osun State University, College Of Education Ipetu Ijesha
57. **Oduwaiye, R. O. (Ph.D)**, Department of Educational Management, University of Ilorin
58. **Oduwaiye, R. O. (Ph.D)**, Department of Educational Management, University of Ilorin
59. **Oguntimehin Y. Abiodun**, Department of Educational Management and Business Studies, Faculty of Education, Olabisi Onabanjo University, Ago-Iwoye, Ogun State, Nigeria
60. **Ojeniyi, Florence B. (Ph.D)**, Federal University, Oye Ekiti, Ekiti State,
61. **Ojo, O. J (Ph.D)**, Department of Educational Management, Faculty of Education, University of Ilorin, Ilorin.
62. **Ojo, O. O**, Department of Educational Management, Al-hikmah University, Ilorin, Ilorin, Nigeria
63. **Okemakinde, Timothy (Ph.D)**, School of Education, Emmanuel Alayande College of Education, Oyo, Oyo State, Nigeria.
64. **Oladeji, Abidemi Omotayo**, Department of Curriculum and Instruction, Emmanuel Alayande College of Education, Oyo;
65. **Oladejo, Maruff Akinwale, (Ph.D); AMNIM; MP**, Department of Educational Administration, University of Lagos, Akoka;
66. **Oladejo, Sofiyat Abimbola**, Baptist Community Primary School, Idi'gba
67. **Oladimeji, R. M.**, Department of Educational Management, Al-hikmah University, Ilorin, Ilorin, Nigeria
68. **Oladimeji, Taibat. A. O**, Department of General Studies Education, School of Education, Federal College of Education (Special), Akinmorin, Oyo, Oyo State, Nigeria
69. **Olaolu, Festus Olagoke**, National Institute For Educational Planning And Administration, Ondo
70. **Olatunde O.H.**, Department of Educational Foundations and General Studies, University of Agriculture, Makurdi
71. **Olowo, Gbolagade Muritala, (Ph.D)**, Department of Education Foundations, Federal College of Education, (Special), Oyo
72. **Olumide Rufus Olubunmi, (Ph.D)**, Olabisi Onabanjo University (OOU), Ago Iwoye, Ogun State

73. **Olusegun Samuel Olaniyi**, Educational Management Department, College of Applied Education and Vocational Technology, Tai Solarin University of Education, Ijebu Ode, Nigeria
74. **Oluwalola, Felicia Kikelomo (Ph.D)**, Kwara State Polytechnic, Department of Office Technology and Management, Institute of Information and Communication Technology, Ilorin
75. **Omirin Fadekemi Funke, (Ph.D)**, Department of Arts and Social Science Education, Osun State University, Osogbo (Ipetu Ijesa Campus)
76. **Omotayo O. Taiwo, (Ph.D)**, Research Fellow, Training and Research Department, National Institute for Educational Planning and Administration (NIEPA Nigeria), Ondo
77. **Oparinde, Olayiwola Raheef**, Department of Educational Management, Faculty of Education, University of Ilorin, Ilorin
78. **Oresajo, N. Olasunkanmi**, Research Fellow, Training and Research Department, National Institute for Educational Planning and Administration (NIEPA Nigeria), Ondo
79. **Osawe, D. E.**, Department of Educational Management, College of Applied Education and Vocational Technology, Tai Solarin University of Education
80. **Oshinyadi, Peter O.**, Department of Educational Management, College of Applied Education and Vocational Technology, Tai Solarin University of Education
81. **Osifila, Gboyega Israel (Ph.D)**, Department of Educational Management, Adekunle Ajasin University, Akungba-Akoko, Ondo State
82. **Oyejola, Esther**, Department of Education, Babcock University, Ilisan-Remo, Ogun State
83. **Oyekan, Opeyemi Aderonke, (Ph.D)**, Training and Research Fellow, National Institute for Educational Planning and Administration (NIEPA) Nigeria, Ondo
84. **Oyelade Authonia Ayobami (Ph.D)**, Department of Arts and Social Science Education, Osun State University, College of Education, Ipetu Ijesha Campus
85. **Oyeromi Samson (Ph.D)**, Training and Research Fellow, National Institute for Educational Planning and Administration (NIEPA) Nigeria, Ondo
86. **Oyinloye, Comfort Adebola (PhD)**, Department of Education, Babcock University, Ilisan-Remo, Ogun State
87. **Popoola, Bolaji Gabriel**, Department of Curriculum and Instruction, Emmanuel Alayande College of Education, Oyo
88. **Prof. (Mrs) R.O. Olubor**, (Professor of Educational Planning), Institute of Education, University of Benin, Benin City
89. **Prof. Abdulkareem, Adedayo Yusuf (Ph.D., MCCEAM, MNAEAP, FNIM)**, Director, Institute of Education, Deputy Vice Chancellor, University of Ilorin, Ilorin, Nigeria
90. **Prof. Ogundipe, M. A.**, Department of Educational Management, College of Applied Education and Vocational Technology, Tai Solarin University of Education
91. **Prof. Taiwo Edun**, Dean, Faculty of Education, Olabisi Onabanjo University, Ago-Iwoye, Nigeria
92. **Professor Kayode Ajayi**, Educational Management and Business Education Department, Faculty of Education, Olabisi Onabanjo University, Ago Iwoye, Nigeria
93. **Racheal Moyofolu Titiloye, (Ph.D)**, Lagos State University, Ojo, Faculty of Education, Department of Educational Management
94. **Sani Dantani Manga, (Ph.D)**, Department of Educational Foundations, Faculty of Education & Extension Services, Usmanu Danfodiyo University, Sokoto
95. **Sani Dantani Manga, (Ph.D).**, Department of Educational Management, Faculty of Education and Extension Services, Usmanu Danfodiyo University Sokoto
96. **Sarkin-Kebbi, Mukhtar**, Department of Arabic and Islamic Studies, Faculty of Arts and Social Sciences, Sokoto State University, Sokoto

97. **Shambirnaah Godiya**, Modibbo Adama University of Technology (Moutech) Yola, School of Science and Technology Education Department of Technology Education, P.M.B. 2076, Yola Adamawa State
98. **Sotannde, Rabi Adewale**, Federal College of Education, Osiele, Abeokuta
99. **Tyokyaa, C.I**, Department of Educational Foundations and General Studies, College of Agricultural and Science Education, Federal University of Agriculture, Makurdi-Nigeria.
100. **Umaru H.A. (Ph.D)**, Department of Educational Management, Faculty of Education, University of Ilorin, Ilorin, Nigeria
101. **Yisa, Habib Madami**, Department of Educational Management, Faculty of Education, University of Ilorin
102. **Yusuf, Aishatu**, Department of Educational Foundations, Faculty of Education and Extension Services, Usmanu Danfodiyo University, Sokoto

DEMAND AND SUPPLY OF HUMAN CAPITAL IN NIGERIA: A CONSIDERATION FOR EFFECTIVE MANAGEMENT

By

Bamimore, Paul Oyesiji

Alayande College of Education, Department of Curriculum Studies, Oyo

&

Oluwalola, Felicia Kikelomo Ph.D

Kwara State Polytechnic, Department of Office Technology and Management

Institute of Information and Communication Technology, Ilorin

Doctoroluwalolagmail.com

Abstract

The paper examines the demand and supply of human capital in educational system and a consideration for effective management. Specifically, the paper looks at the issue of demand and supply of teachers in Nigeria. The paper also looks into teacher planning and manpower planning, factors determining the rate at which teachers should be recruited. This paper equally examines teachers' outflows and inflows. Equally discussed is the consideration for effective management. Recommendations were offered and conclusion was made.

Introduction

The planning of teacher demand and supply is a central concern of educational managers. To be sure the ultimate concern and focus of educational management which is a key aspect of it should be the learner and his learning. Nevertheless, even where modern gadgetry has been brought in to improve the effectiveness of learning, we still find that in every school system the direct personal contact between student and teacher remains the linch pin of the educational process. The effect of the new technical devices in education has thus been not to abolish the role of the teacher, but rather to assist it to evolve in a creative way from that of authoritative instruction to one of facilitation and guidance of the learning process. Indeed, the teacher has a crucial role to play in organizing and 'orchestrating' the use of the media and learning aids, to give the greatest educational benefits.

In mounting any new, changed or expanded educational programme, therefore, we find that one of the highest priority concerns is securing the necessary teachers for it. Teacher supply has to be planned well ahead. Recruitment for teacher training course may have to be undertaken as much as five or six years ahead of the time that trained teachers will be needed in the schools if the teacher training programmes themselves have not yet been established, it may require an additional two or three years to build colleges recruit training staff and design and mount the training courses.

Careful planning of teacher supply is as vital to qualitative as to quantitative change in education. New language policies, revised curricula involving changed approaches or different subject emphases, new equipment and teacher aids all have implications for and in turn may depend upon a country's teacher training and teacher retraining capacity. Realistic curriculum

planning is intimately bound up with questions of teacher needs and teacher availability.

Particularly in periods of rapid educational expansion, the teacher-training system may itself come to account for a significant part of educational effort and expenditure. It is not unknown for teacher training to absorb as much as 10 or 20 percent of the ministry of education budget, and to account for a high proportion of enrolments at secondary or tertiary levels.

Thus, teacher supply becomes an important consideration not just as a key input for the expansion and improvement of primary, secondary and tertiary levels of education, but also itself a major competitor for the resources available to the education sector. Such resources being scarce, there may be conflict between the demands for spending on schools and for spending on the teachers' training system. This may be seen as representing the classic economic problem of choosing between present benefits and future benefits or choosing between consumption and investment.

In seeking the optimal allocation of resources between schools and teacher-training institutions, the following kinds of issues must be broached. Are capital and teachers needed more urgently in schools or in teacher training institutions?

For countries with acute manpower shortage what is the trade off in terms of national, social and economic advantage in allocating the best qualified students between teachers' Training Colleges on one hand, and courses leading to the university and other higher professions on the other? Planning concerns choices for the future, and in education some of the most difficult decisions concern the proportion of current resources to be invested in securing future teacher supply.

A further reason why teacher demand and supply are so central to the concerns of educational planners and managers is the cost of employing and managing teacher. Their salaries account for an extremely high proportion of recurrent expenditure on education, particularly at the primary level. Changes in the qualifications of teachers or in the pupil-teacher ratio can have enormous impact on the level of the education budget. Both the demand and supply of teachers will be closely affected by financial considerations. On the demand side, the number of teachers required will of course be the product of enrolments and the pedagogical arrangements, expressed through the pupil-teacher ratio. But these are not autonomous variables, they are dependent on public policy and in fact, public policy towards levels of school admission and pupil-teacher ratios will largely reflect the level of education costs in relation to the total amount of funds that a country is ready to devote to the educational budget. The cost to parents of sending their children to school may have an important bearing on enrolment levels and hence on teacher requirements. The distribution of educational costs in the public school system between the public authorities and parents is also largely the outcome of public policy issues. Because education is labour intensive, and teachers form such a high proportion of the labour force in education, teachers' salaries account for a high educational budget. The cost to parents of sending their children to school may have an important bearing on enrolment levels and hence on teacher requirements. The distribution of educational costs in the public school system between the public authorities and parents is also largely the outcome of public policy issues. The salary bills for a teaching force of any given size depends on three factors: the level and gradient of the various salary scales applying to teachers, the distribution of teachers between scales, and the distribution of individuals on each scale.

Teacher planning and manpower planning:

Teachers represent a category of skilled manpower and one can regard the planning of teacher demand and supply as a branch of manpower planning. That part of manpower planning which is known as manpower forecasting has gone out of fashion since its heyday in the late 1950s and 1960s.

In the manpower requirements approach to the planning of education, manpower needs are often derived from the overall national output target, normally laid down in a country's development plan. This target is broken down into separate sectoral targets of output for the different economic and social sectors. The target level of output in each sector is then converted by applying an output labour ratio into a manpower requirement, consisting of numbers of workers in each occupation required to produce the output.

The ratio used for the calculation may reflect existing practice in the country's employing establishments as revealed by manpower surveys with some adjustment based on observed trends in labour productivity or on comparisons with technologically advanced industries or countries to take account of expected future technological developments. In this way, one can translate a target level of output into future required stocks of workers in various occupations in each sector.

The manpower needs in the different sectors are then totaled to show requirements by occupation for the whole economy in successive future years. These target stock figures must then be converted into required recruitment of new workers during the plan period. The number of recruits needed has three main components. There will be first an overall growth factor representing the difference between the target numbers and the present numbers in each occupation; second provision for regular attrition due to resignation, retirement, death; and third, any allowance for replacement of any existing workers who are regarded as temporary or under qualified.

These skilled manpower requirements are then converted into educational equivalents, signifying the amount and type of education and training that worker in each occupation should have. Finally, the total educational requirements have to be turned into an educational plan specifying enrolments in and outputs from the various education or training courses in each year of the plan period; and the necessary investments of buildings, equipment and teachers have to be programmed and budgeted.

The aim of the manpower requirements approach to educational planning is to ensure that educational output matches the occupational needs of the economy as closely as possible. If successfully applied, it ensures on the one hand that manpower bottlenecks, in the form of an unforeseen lack of trained workers, do not impede development, and that from a manpower point of view all the plan targets are realizable; and on the other hand that the education system does not over produce categories of educated or trained personnel unable to obtain employment.

One can see how this model can be applied to teacher planning. The 'output target' for the education sector is frequently expressed in terms of a desired level of enrolments. It is not difficult to apply the established pupil-teacher ratio education's version of the output labour ratio in order to calculate total future teacher requirements, and to convert these into educational requirements by using the current teacher certification rules.

The demand for teachers:

Basically, the total size of the teaching force can be represented as the product of two factors, which are the number of learners to be enrolled and the teaching technology in use, resulting in a pupil teacher ratio. Neither of these factors is altogether technically predetermined; each is largely amenable to policy decision with a range of alternative choices available to the policy-makers. The choices made will reflect the social and cultural values of a society and the strength of different interest groups and they may be influenced by the climate of international opinion. They will depend on economic factors the cost of educational inputs and in particular, of teachers' salaries, the share of the total cost of education that government is to meet from public resources, and the size of the private sector in education; the overall resource availability, but public and private, for educational purposes; and the assessment made of the contribution that education will make to economic growth.

Number of learners to be enrolled:

This is the product of three key variables that is the ages and length of attendance prescribed; the population of school going age; and the enrolment ratio. The ages and length of attendance are prescribed by a country's school structure and its educational laws and regulations. Practice on these matters varies enormously between countries. Some countries have only three grades at the primary stage (e.g. Nepal) and others have as many as eight (e.g. Malawi); the age of entry in some countries is 5, in others 6, 7, or 8 while many countries in practice permit entry at many different ages; some countries have compulsory school attendance e.g. Nigeria, others not; and the length of compulsory education varies enormously. The population of school going age sets a theoretical ceiling on the level of enrolments in that stage. In practice, however, this ceiling may be exceeded if there is under-age or over-age enrolment or if there is much repeating.

The enrolment ration represents the proportion of the relevant age-group which is actually enrolled in school. It reflects both the intake rate and progression (promotion, repeater and drop out rates). These are importantly affected by government policies of two kinds. First, there are policies to determine or influence the demand for education e.g. whether education is to be made compulsory, whether legal provisions regarding compulsory are actually to be enforced, whether education is to be fee-free for students or not. The second sets of policies are those on the supply side, affecting the number and type and distribution of places actually made available. Included among these supply policies are the rules ministries of education make about under-age and over-age entry, and about repeating.

However, enrolment ratios reflect at least equally importantly the response of parents and pupils to the opportunities available for education. Factors causing a weak response that is low enrolment, include economic difficulties (direct costs and labour services or wages foregone through school attendance, cultural and language barriers, problems of physical access, unattractiveness of the education offered, and so on. Because of non-entry and drop-out, net enrolment ratios (proportion of children of 'correct' age attending school) are often below 100 percent even where sufficient places are available for all to attend school. Conversely, however, as is well known, gross enrolment ratios which relates all pupils enrolled in a school stage regardless of their age to the size of the population of 'correct' age may exceed 100 percent if there is wholesale repeating or under and over-age entry.

Technology of education and pupil-teacher ratios:

The educational technology in use is the key to the output-labour ratio in education (pupil-teacher ratio) and enables one to calculate teacher requirements from pupil enrolments. In the present context, 'educational technology' does not refer nervously to equipment, devices and gadgets; rather it embraces the broad areas of curriculum content, pedagogical method and educational organization. Curriculum content defines what is to be taught and learned, and the pattern of experiences devised for the child. Pedagogical method indicates how teacher learner interaction is conducted in the different curriculum areas of knowledge and experiences e.g. through lecture, self-study with or without supervision, group/individual tutorial, discussion, project work among others. The pedagogical method is closely interrelated with learning materials, but we are concerned here only with the teacher demand implications of different pedagogical methods. It is educational organization which effectively converts curriculum content and pedagogical method for a given number of learners into teacher requirements.

Factors determining the rate at which teachers should be recruited

There are three main factors of change to be taken into account. These are:

- Growth or decline of the total teacher stock reflecting change in the size and composition of the school population and or change in policies affecting the scale of provision of teachers for any given number of pupils that is element development demand for teachers. Changes in the size of the teaching force, arising from growth or decline in enrolments or from changes in the way teachers are used in the education system, constitute development demand. Such changes may normally be expected to result in increased demand for teachers, because of population growth and higher participation rates in education, and because countries as they develop hope to improve staffing ratios. But there is of course no inherent reason why the changes should be in that direction
- Planned change in the nature and composition of the teacher stock itself, for example the deliberate phased replacement of particular categories such as poorly qualified teachers or of expatriates. This might be termed 'special replacement' may mean not summary dismissal, but being given the opportunity to enter teacher Training Colleges, National Colleges of Education, National Teachers Institute or they may be offered part-time in-service course by correspondence, to upgrade themselves to qualified status while teaching. This process of gradual 'internal promotion' of unqualified teachers to qualified status is a recognized feature of the system. It necessitates rather careful accounting of teacher flows, since such teachers may change status without ever leaving the teaching service. In drawing up the replacement programme the crucial question to be decided is the length of the period over which replacement is to take place; this determines the required annual flow of new teachers for this purpose. A final point to note on replacement programmes is that the desirability of complete replacement of temporary categories of teacher is not wholly self-evident. Quite apart from the possibility that they may be cheaper to employ, temporary teachers are also often more willing to serve in difficult posts. To keep a pool of temporary appointments in a teaching force can provide a much needed flexibility in responding to changes in demand arising from unpredictable trends such as population shifts. There is much to be said for planning a teacher force with only 85-95 percent permanent and pensionable employees, rather than aiming for the full 100 percent.
- Change in the individual composition of the teacher force due to regular causes of attrition such as death, retirement, designated 'normal replacement' demand. The stock of teachers is liable to 'natural wastage' even when there is no development demand and no special replacement programme, it will still be necessary to recruit new teachers to

maintain and renew the stock. Otherwise death, retirement, resignation and illness will take their toll and the number of teachers will decline.

The supply of teachers

The supply of teachers should be considered under stocks and flows. The stock of teachers is another name for the teacher force: teacher flows include both outflows (wastage from various causes) and inflows (new recruitment, re-entry).

Basically, the supply of teachers at any moment in time consists of the teachers serving in the schools, plus those who are on the payroll but on temporary release for in-service training or approved leave. The total supply of teachers does not necessarily equal the demand, for schools and colleges may be short-staffed and have vacancies. Alternatively, there may be oversupply, with educational institutions staffed above their norms; the fact that teachers are employed does not necessarily prove manpower 'need'. It is essential for sound planning that the educational authorities have at their disposal full information about the size and characteristics of the existing teaching force and its distribution between different types of school. This is so for several reasons.

In the first place it makes possible a comparison with demand and allows the adequacy of existing supply, and the efficiency with which it is used and distributed, to be assessed. Second, to the extent that the teaching force in fact consists of several sub-populations each with characteristics of its own, future supply both overall and in sub-categories can only be projected at all accurately if calculations are made on a disaggregated basis. Third, the annual budget projection about teacher stock. All this may seem obvious, but it is nevertheless surprising how poor the state of teachers' records and of statistical data about the teaching force is in a great many countries. The two main sources of information on the teacher force are the annual statistical returns from the schools and the personnel records kept on individual teachers.

Teacher outflows and inflows

Teachers outflow: The teacher stock is subject to deterioration and loss. Teachers die, wear out and fall sick, grow older and have to retire. They also become unproductive and if personnel inventories could record the effectiveness of teachers it would be found that the majority of teachers were in need of 'reconditioning' through in service courses and retraining. The teaching force is a wasting asset, subject to constant depletion of a number of distinct kinds. The most obvious are death, retirement and resignation. In considering the relative attractiveness of teaching, the factors that a teacher is likely to take into account include conditions of service, promotion prospects, professional support and personnel administration. In a similar way one must distinguish between teacher turnover and wastage. Turnover refers to the annual rate of teachers leaving their particular school post. Thus turnover would include not only wastage, but also the lateral movement of teachers between identical posts in different schools. This is extremely important from the point of view of stability of school staffing and the sense of permanence that a school community may have. From the point of view of the learners, the reduction of turnover, with all the distressing discontinuities it implies, is a matter of priority. But it is a phenomenon distinct from wastage, loss or attrition; even though it may have some similar causal roots.

Teachers' inflows: It is just possible to conceive of an education system which was running down at such a pace that the existing teacher stock, continuing from year to year on a depleted basis, constituted a sufficient supply to meet diminishing demand. In that case, no new recruitment would be necessary. There are many examples of individual educational institutions which have been allowed to 'die' in this way by being forbidden to take on new staff; but probably no complete educational system has operated on such a basis for more than a year or two at a time. Even where the size of the system and of the teaching force is contracting, the annual fall in the required stock of teachers would normally be less than annual teacher wastage; so that some new recruitment would still be necessary. Most education systems are not in such a state of contraction, they are experiencing a strong development demand for teachers, stemming from their plans for both expansion and improvement. This, together with replacement needs, gives rise to a large requirement of new recruits.

In trying to achieve balance, the planner will strive to ensure not just a balance at one particular period of time in the future, or in other words a static equilibrium, but also the best possible continuing or dynamic equilibrium between supply and demand over successive years. Achievement of dynamic balance creates few problems when the size of the teaching force is projected to change at a steady rate, with a more or less constant rate of annual teacher wastage. It is much more problematical, however, when growth of enrolment is not expected to be steady, or when there is a special replacement programme which will be completed by a particular date.

To take the first case, of irregular trends in development demand for teachers, one can think of several sets of circumstances in which such irregular growth might occur. For example, policy decisions to introduce universal primary education to increase the enrolment ratio in secondary education, to add to grade to one of the stages of the system might all have the effect of unleashing a considerable extra demand for teachers in a particular school year, thus creating a discontinuity in the trend of annual requirements for teachers. A rather sudden acceleration of output might have to be planned.

Consideration for effective management

An important area of human resource planning is the evaluation of the demand for human resources. The factors that affect demand should be adequately considered and basic forecasting tools employed for predictions. It should be noted that human resource demand is affected by an organizations environment, the changing organizational requirements, work-force changes, among other factor. Apart from considering the demand aspect of an organization for human resource, the supply of same should equally be examined in the planning process for balanced activities. In doing this, both internal and external factor affecting supply of teacher should be looked into.

To do this effectively, job analysis will be of paramount importance. All in all, job analysis married both demand and supply of human resources in order to assist an organization has clear ideas regarding the activities and responsibilities required in the job being filled. Job analysis can then be described as an early step in the recruitment process when human resource in educational system is planned. The staff (teachers) must be managed in such a way that they will remain in the job. Apart from planning the needed manpower, the education system must ensure the right quality of graduates in terms of inculcating appropriate skills, attitude and commitment of the people. To achieve this, the head teacher must use a

participatory management, democratic leadership styles must be employed so that teachers can put in their best in the system. Educational managers and planners should make use of modern management techniques to reduce teachers' outflows.

Recommendations

- Governmental authority both at national, state and local level should set in order the system of collecting, recording and analyzing data on the current teacher force, and on movements within into and out of that teacher force. Unless there is an adequate data base in respect of teacher stocks and flows attempts to plan will be futile.
- Particular officers who are to have responsibility for regular analyses of teacher requirements and the making of projections must be identified either in planning unit of the education authority, or in the body/section responsible for the teachers' service.
- Some regular consultative machinery must exist between those who make education policy, those who employ and use teachers, those who train teachers and the teachers themselves.
- Estimating subject teacher demand and supply to know how teachers are actually used, and the extent to which actual supply (actual teaching assignment) represents potential supply.
- Equal geographical distribution of teachers should be made/ensuring fair teacher distribution.

Conclusion

There is no denying the fact that human resource (teacher) is the most important and crucial of all resources available to schools. To this extent, adequate human resource planning is vital to the achievement of educational goals/objectives. This is done through effective situational analysis by the government that will make government employ the right people both in quantity and in quality. To fail to plan the human aspect of the educational systems therefore is to plan to fail such an establishment as a whole. The planning of teacher supply should involve far more than determining annual intakes to the training college system; in addition to the wide range of alternative sources of recruitment that can be tapped, the factors affecting the retention and utilization of teachers will be just as central to the planner's concerns.

References

- Adeyemi, M & Osisanya (1979) Planning Human Resources in organization in Tella, L and Gbadamosi, L. *Groundwork organization of Educational Management*. Triumph Publishers Ijebu Ode.
- Chesswas, J. (1969) *Methodologies of educational planning for developing countries* 2 vol. (Paris, UNESCO: IIEP)
- Dashen, A.N (2001). Personnel Recruitment and Human Capital management. A conference paper presented at NAEP Benin. October 29-November 1.
- Freeman, R.B. (1977). The over educated American. New York, Academic Press.
- Osiki, J. (2001) Effects of Remedial Training Programme in the Management of Learning Acquisition on Defectiveness and poor study habit problem of selected subjects in community Grammar School. Nigeria Journal of Applied Psychology 7 (2).
- Pereto mode, V.F (2001). *Educational Administration. Applied Concepts and Theretica perspective*. Joja press Ltd.
- Stoner, J.F, Freeman, R.E and Gilbert (jr) D.R (2002). Management Prentice-Hall Limited. New Dehi
- Watson, C; Quazi, S & Jones, R (1972). The elementary teacher: a study of the characteristics and supply/demand relations of ontorio teachers. Ontario *Department of Educationa Planning of the Ontorio Institute for studies in Education*.
- Williams, P (1997) planning teachers demand and supply. Fundamentals of education planning international institute for educational planning. UNESCO. Paris.
- World bank, (1974). *Education sector working paper*. Washington, D.C. P.36