Educational Management: New Perspectives

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Preface

Managers in the education industry, be they teachers, heads of schools, school administrators, inspectors and policy makers, are usually held accountable for whatever happens in the educational system. Yet these personnel function in the realms of management. In their different positions and capacities, they coordinate human and non human resources, plan academic and non academic activities, staffing and staff development processes. All these are geared towards achieving the goals of the educational system which include the production of skilled human capital in literacy, numeracy and social skills. This book – Educational Management: New Perspectives - therefore becomes a veritable tool in achieving these aims as it exposes the reader to topical issues in educational management. The book begins by explaining the concepts, principles and functions of Educational Management and their implications in educational institutions, ministries, boards, commissions and agencies.

The article on “Disciplinary Powers of Educational Institutions in Nigeria” highlighted the nature of discipline under the law, sources of disciplinary powers of educational institutions and conducts subject to disciplinary measures. The article on “Record Keeping, Information and Communication Technology (ICT) in School Management” attempted to explain the concept, objectives and importance of record keeping.

The chapter on “Mentoring as a Leadership Function in the School System” focused extensively on the different views on leadership and mentoring. The paper on “Decision Making: Theories and Models” examined ten decision making theories and models.

The article on “Conflict Management in the Nigerian School System” explained the types, sources and stages of conflict and management styles adopted in the school system. The chapter on “School Facilities Maintenance Culture” explained the concept of school facilities, maintenance of school facilities, types of facilities maintenance in school, maintenance culture and challenges in school facilities maintenance culture. The paper on “Quality Management in Education” discussed fundamentals and anomalies of school supervision and inspection.

The article on “Unionism in Institutions of Learning” attempted to explain the concept, meaning, origin and the processes of collective bargaining in unionism. The article on “Management Theories and their Applications to School Administration” identified management theories. It explained education as a system theory. The paper on “Personnel Management identified functions and principles of administration and discussed leadership in schools.

The chapter on “Research Methods and Statistical Analysis in Educational Management” discussed the components of research methods. The paper on “Time Management in Schools” discussed time management techniques, challenges and strategies for effective time management in organizations. “Economics of Education” gave an insight into the importance of economics of education, the association between education and demography, basic concepts in economics of education and education cost types. The article on “Accountability in the Educational System” attempted to discuss the meaning, types, main components of accountability system and implications of accountability for educational management practice.

The paper on “Demography and Education in Nigeria” examined the concept, importance of demography and types of population analysis including the place of dynamic population analysis in Education. “Educational Financing” highlighted the processes of generation distribution and utilization of funds within the educational system.

The article on “Education Management Information System (EMIS)” explained the development, management and functions of EMIS in Nigeria. The paper on “Manpower Planning” explained the concept of manpower planning, its history, its users, reasons for the usage as well as its varied benefits. The article “Politics of Educational Policies in Nigeria” examined the political development of Nigeria from the pre independence era till date and the education policy of each political phase in the country. The article on “Approaches to Educational Planning” discussed the concept of educational planning and the synthetic approach.

The paper on “School Mapping” explained the concept, meaning and origin of the term, its functions, objectives, the seven steps involved in school mapping and factors to be considered in a school mapping exercise. The article on “Performance Management in Schools” examined the concept of performance management (PM), processes, strategies and challenges of PM in schools.

What is peculiar and unique about this book is the sample research topic feature. Getting a research topic can be cumbersome for students in higher institutions of learning. This book has therefore provided sample research topics at the end of every topic. This could act as a guide since it can be adopted or modified to suit the need of the student.

The book - Educational Management: New Perspectives - is a learning material for students in the different levels of educational system: colleges of education, polytechnics, universities, and other allied institutions which prepare personnel for the management of the educational system at all levels (pre-primary, primary, secondary and tertiary). The non-formal sector also requires good management, it will benefit from the array of topics contained in this twenty - five chapter book.

Policy and law makers on educational matters will find this educational book informative and useful. The topics therein will expose them to the multifaceted nature of management issues in the educational system. Inspectors and supervisors from the Ministry of Education will also find this book relevant in guiding their operations.

The writers of the articles in the book are most appreciated for their diligence and commitment in making their materials available. You have been most wonderful.

For our readership, it is our sincere hope that this book will be a reference material and a guide in preparing you for leadership role.

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Chapter 1

Concepts, Principles and Functions of Educational Management

Prof. Adedayo Y. Abdulkareem & Dr Rhoda O. Oduwaye

Introduction

Education is a powerful instrument for individual and national development. It enables an individual to develop his skills and competences. It also enables individuals to live well and contribute meaningfully to societal development. The Federal Government of Nigeria proposed a compulsory, qualitative, comprehensive, functional and relevant education to all citizens of the country. This was in realization of the fact that all aspects of the nation's economic, social and political activities could be transformed when the citizens are adequately prepared through education (Federal Republic of Nigeria, 2013). The Government at federal, state and local levels in the country establishes educational institutions as an effort towards achieving these objectives. It also allows private individuals and organizations to establish schools, colleges, universities and other types of formal and non-formal educational institutions. Moreover, the stakeholders (governments, parents, communities, individuals and private organizations) provide human (teaching and non-teaching staff) and non-human (financial, material and physical) resources for the educational institutions to facilitate achievement of educational objectives. As observed by Abdulkareem (2002), available resources have to be managed by directing them towards the achievement of educational objectives in order to justify and ensure continuous survival of the educational system. In the same vein, Stoner, Freeman and Gilbert (2009) elucidated that organizations (educational institutions inclusive) are likely to collapse without effective management. Educational managers are responsible for proper direction and judicious utilization of the available resources. They are, therefore, accountable to the extent to which the aspirations of the stakeholders are fulfilled in the education system. The managers should, therefore, be familiar with the functions expected of them and the principles guiding the performance of the functions.

This chapter discusses concepts, principles and functions of educational management. It explains the implications of the principles and functions in educational institutions, ministries, boards, commissions and agencies. It concludes with recommendations for theory and practice of education.

Concepts of Management and Educational Management

Management, like many concepts in Social Sciences, has a variety of definitions. As enunciated by Misshauk (1979, p.81), management involves an assessment of a situation, a selection of goals, development of strategies, control of activities and motivation of workforce. These should be conducted rationally and systematically, Misshauk concluded. Furthermore, Appleby (1981) defined management as activities of the higher level members of an organization. The activities can be summed up as the functions performed by managers. In another dimension, Abdulkareem (2002) referred to management as a socio-economic process of coordinated activities through which organizational objectives are actualised. Thus, management could be seen as a multi-dimensional phenomenon. It is concerned with human activities that take place in an environment composed of economic, physical, social, political and technological structures. To Fabunmi (2000), management could be viewed as a process of accomplishing organizational goals, a class of elites that run the affairs of an organization, and a specialized field of study. It is a branch of Social Sciences which adopts a scientific method of enquiry (Fabunmi, 2000). Stoner, Freeman and Gilbert (2009) summarised the definitions given by experts when they stated that management involves performance of functions that would assist organizations in setting and achieving goals.

The foregoing definitions show that management involves bringing resources together and utilizing them for the achievement of predetermined organizational objectives. Management occurs in organizations which produce goods and services. These include business, religious, government, educational and social service organizations. According to Fasasi (2011), educational organizations consist of ministries, boards, commissions and agencies of education at federal, state and local government levels. They also consist of primary, secondary and tertiary educational institutions (formal and non-formal) (Fasasi, 2011). These organizations are the centres for educational management.

Nwankwo (1985) defined educational management as the application of management principles, procedures and practice to issues and problems of education while Oyedeji (1998) defined it as a control of men and materials devoted to education in order to attain effective teaching and learning. Thus, using management principles and procedures, the available human, financial, physical and material resources in the educational organizations are expected to be effectively directed towards the achievement of educational objectives and goals.

Management Principles

Management principles are fundamental and guiding rules that could be applied in any organization. Most of these principles were developed by management theorists such as Fredrick Taylor, Mary Follet, Henri Fayol, Chester Bernard and Max Weber, among others.

Abdulkareem (2002) identified six management principles which are applicable to Educational Management as: principles of scientific management; traditional principles of management; humanitarian principles; bureaucratic principles; fundamental principles, and principles of change.

(1) **Principles of Scientific Management:** By the late 1800, managers' focus began to shift from growth to efficiency. They sought new concepts and techniques that would reduce costs and increase efficiency. It was from this industrial environment that the classical school of management emerged. According to Akanni (1991), Fredrick Taylor, one of the first classical management theorists and writers, contended that managers should identify the best method of doing a job. Taylor formulated the following principles of scientific management to ensure efficiency in an organization:

(a) Time Study Principle: This emphasizes measuring accurate and standard time for a specific work in the organization. According to Taylor, time study principle prevents time wastage and encourages higher productivity. It could also be referred to as time management. In educational institutions, there are academic calendars and time tables specifying activities and their periods. Furthermore, there are time-recording facilities such as time book, movement book and attendance register which are to take accurate data of workers' activities at different times. Modern technology has introduced another dimension to time management with the use of a clocking machine whereby the employee uses a punching card or a thumb print to record attendance in and out of work. This method is being adopted in primary, secondary and tertiary institutions in Nigeria, especially in the privately-owned ones.

(b) Piece-Rate Principle: This principle states that all employees' wages should be proportional to their outputs. Under this principle, a standard output is fixed. With this system, workers are expected to improve their production capacity in order to earn appreciable incomes. In labour matters, this is the principle of 'more work; more pay' and 'no work; no pay'. Using this principle, workers in educational institutions are supposed to be paid on the basis of their outputs. However, we observe that in Nigeria, many employees tend to work less and expect more pay, especially in public institutions; while many employees in some private educational institutions work more and receive less pay.

(c) Separation of Planning from Performance Principle: According to Taylor, managers should plan work for their subordinates. This principle assumes the heads of educational institutions as planners and their subordinates as executors of the plan. It is applicable in a situation where the heads are professional educational administrators while other workers are probably not.

(d) Scientific Methods of Work Principle: This principle sees the manager as one who can scientifically determine workers' best methods of performing their duties. The principle is normally applicable in an educational institution where workers are not professionally trained. It does not take subordinates' expertise and situational variables into consideration.

(e) Management Control Principle: This principle assumes that managers are to control subordinates' duty performance to ensure that there is no deviation from planning and implementation of programmes in the organization. This explains why school administrators are being trained in the art and science of school management.

(f) Functional Management Principles: This principle emphasizes designing industrial organizations to improve the co-ordination of activities among various specialists. In the school system, emphasis is laid on subject specialization.

Generally, scientific management principles aim at:

1) elimination of waste effort;
2) fitting workers to particular tasks;
3) greater care in training workers to the specific requirements of their jobs;
4) greater specialization of activities; and
5) establishment of standards for performance.

Scientific management has been classified as a physiological organization theory for its concentration upon repetitive tasks. It is argued, according to Akanni (1991), that the scientific approach neglects areas of problem-solving and decision-making that are of critical value at higher levels of management.

(2) **Traditional (Classical) Principles of Management:** Henri Fayol formulated traditional principles of management which are useful in carrying out management functions. These are:

(i) Division of Labour: This principle states that each employee should be given a task to perform on the basis of specialisation. In educational institutions, for instance, there are curricular and co-curricular activities to be performed. Efficiency and effectiveness would be achieved when these activities are divided into sections, units and departments, and are assigned to workers on their basis of training and specialisation.

(ii) Authority and Responsibility: According to this principle, an employee is expected to act responsibly in the use of authority attached to a particular position, status or office. For instance, a sports master is given the authority on sports activities.He is therefore responsible for performances in that area.

(iii) Unity of Command: An employee should receive instructions from a superior officer at a time. In a school, a classroom teacher is expected to receive instructions from the Head of Department while the higher authority often passes decisions through the Head of Department to all staff (teaching and non-teaching).

(iv) Scalar Chain Principle: This principle states that there should be a clear and an unbroken chain of authority and communication in a hierarchical order, ranging from the highest to the lowest position in the organization. This principle is strictly adhered to in the school system.

(3) **Humanitarian Principles:** Humanitarian principles were formulated by the human relations theorists such as Elton Mayo, Mary P. Follet and Chester I. Bernard. These are human relation principle, principle of justice and principle of democracy.

(a) Human Relation Principle: This principle emphasises the importance of training and recognising workers as human beings and not as machines. Here, managers are expected to note the feelings and emotions of their staff. It, therefore, behoves the school managers to be kind, open, sincere, just and friendly with their staff and students.

(b) Principle of Justice: This demands equity and fair play in running an organization. The educational manager (teacher, school-head or the Ministry officials) should be guided by this principle in performing their functions to achieve the school goals.

(c) Principle of Democracy: This principle stresses participatory decision-making especially in matters affecting the interest of staff in the organization. This explains why emphasis is put on community-based management and committee system in managing educational institutions.

(4) **Bureaucratic Principle:** This principle which was propounded by Max Weber, a German Sociologist, has the following components:

(i) The use of stipulated rules and regulations in dealing with official duties and matters. Educational managers depend on formal organizational rules and regulations in order to ensure orderliness, stability and good governance in the educational system.

(ii) Division of labour based on workers' functional specialization: Workers are assigned different roles on the basis of their training and specialization. In an educational institution, like any other organization, an employee cannot perform all jobs efficiently and effectively. Each person, therefore, is expected to play a specific role and this has to be based on the area of specialization of the individual concerned.

(iii) Hierarchy of authority among the workers according to their seniority: All employees are organized in a hierarchical order in which officers of a higher rank are expected to give instructions to subordinates. The senior officers give assignments and assess the performance of the junior officers in the educational organizations.

(iv) The function of employing and promoting staff in an organization is based on the staff's technical knowledge. School management uses examinations and or interviews to test prospective applicants for employment and employees for promotion in the school system.

(v) Impersonality in dealing with official matters: Rules and controls are applied uniformly without nepotism or favouritism. Politicization could adversely affect this principle of management in the education sector, and invariably promote inefficiency and ineffectiveness in the educational system.

(vi) Emphasis on documentation: that is, keeping of records. Record keeping is of paramount importance in the school system for evaluation, placement, growth and development.

(5) **Fundamental Principles:** These are often referred to as universal principles. They include principle of responsibility, principle of delegation of authority, and principle of communication.

(i) Principle of Responsibility: Each person must act responsibly in his/her own job bearing in mind the tasks demanded by his/her position.

(ii) Principle of Delegation of Authority: Persons in positions of authority in an organization entrust functions, tasks and duties to their subordinates on the basis of their specialization and skills. The authority so delegated should be clearly defined to avoid confusion. In the school system, principals or school heads often delegate authority to their deputies, assistants or senior staff. But once authority is delegated, the delegator takes responsibility for performance. This principle ensures trust and enhances staff's commitment to corporate performance.

(iii) Principle of Communication: This principle is encouraged to allow a free flow of information vertically, horizontally and diagonally on decisions, policies, programmes, plans, procedures, problems and prospects in the school and the entire educational system.

(6) **Principle of Change:** This principle assumes that change is inevitable in an organization. Components of these are the principle of stability, principle of flexibility, and principle of adaptability.

(i) Principle of Stability: Management must identify and harness change both in the objectives, structures, programmes, plans and procedures without hindrance to growth and or development. This principle is ensured in the educational system.

(ii) Principle of Flexibility: This principle ensures that organizations allow change to occur by blending without breaking. This largely depends on the capacity of the organization's management to accommodate change and innovation. Whatever innovation that is injected into the educational system, for instance must be flexible and comprehensible.

(iii)Principle of Adaptability: Management should ensure gradual change efforts and evolution rather than revolution in the organization. That is, change is introduced to suit the purpose for which an organization is established. For instance, innovation and new ideas are introduced to the educational system while considering the existing socio-economic and political circumstances in the society.

Modern Principles of Management

Developments in manufacturing and service organizations towards the end of the 20^{th} century and the beginning of the new millennium have led to the emergence of new management principles, Some of them, as highlighted by Babalola (2006) are:

(i) **Sticking to Strength**: This principle involves identifying and defending areas of strength in an organization. The manager of a school identifies the aspects in which the school is very good (for instance, sciences or sports) and endeavours to promote to make these aspects/units stronger. He should also strengthen the weak areas that are identified in the school system.

(ii) **Lean and Simple Organizational Structure**: Using this principle, the manager should decentralize authorities as much as possible. He should delegate duties to subordinates.

(iii) **People-centred:** The school manager is expected to treat individuals with respect and dignity, foster enthusiasm and motivate workers with necessary incentives and encouragement.

(iv) **Consumer-focused**: The manager should be aware that consumers' satisfaction is important. He should seek their inputs in policy-making, implementation and control. The consumers in the school system include the staff, students/pupils, parents, communities, employers of labour and old student associations.

(v) **Authority and Autonomy Balancing:** The manager should balance between overall tight strategic/financial control and decentralized authority. He should give freedom for creativity and use of ingenuity, for instance among all teachers, non-teaching staff and students in the school system.

Management Functions

The social and economic process of co-ordinated activities as put together by Abdulkareem (2002) and referred to as management functions are: **planning, organizing, staffing, directing, co-ordinating, controlling** and **motivating**.

(i) **Planning:** This is a process of making decisions on what to do and how to do it successfully. It involves projecting or forecasting future circumstances and requirements for achieving pre-determined goals and objectives. The heads of educational institutions are responsible for ensuring proper planning. The Lesson Plan, Scheme of Work and Syllabus are plans on teaching-learning activities in the educational institutions.

(ii) **Organizing:** This implies arranging activities and resources for effective job performance. It enhances development of an organizational structure and allocation of resources. It is a process of assigning tasks to individuals and groups within the establishment/institution. It is the responsibility of both the school heads and their staff to ensure that activities are organized for goals to be realized in the school system.

(iii) **Staffing:** Management is concerned with employing, deploying, maintaining and sustaining the right type of personnel (in quality and in quantity) to do the job. This is the area of human resource management in an organization. The main purpose of this function in management is to put the right personnel on the right job. It involves matching jobs with individuals within the organization. Heads of educational institutions are expected to ensure that the right persons are placed on the right job for the realization of school objectives.

(iv) **Directing:** Management is concerned with the process of harnessing resources to ensure efficiency and effectiveness in an organization. Leading and supervising are the major activities under directing. Leading is a motivating force in management and supervising is the process of ensuring that the policies and techniques established for achieving objectives of an organization are properly and successfully followed. It is the integrating of people with the organization to get their co-operation for achievement of its goals. School heads are expected to provide effective leadership and supervision for effective performance in their institutions.

(v) **Co-ordinating:** Management involves synchronizing and harmonizing individuals and group efforts by translating the organisation's plan into activities to achieve results. It is the responsibility of every head of an institution to ensure that all departmental efforts are translated into effective results.

(vi) **Controlling:** Management involves the responsibility to adapt the organization to changing events in consonance with an established plan. Budgeting and reporting (communication) are essential activities in control functions. Budgeting is a process of distributing resources by translating plans into action and fostering accountability. This is encouraged in the school system. Periodic reports are given to enable stakeholders to assess the performance of each educational institution.

(v) **Motivating:** Management involves motivating and rewarding people to perform and achieve organizational objectives. Educational managers use both tangible and non-tangible means to motivate/stimulate and encourage improved performance of staff and students.

In another dimension, Abdulkareem (2002, p.24) explained that Reeser (1973) enumerated the functions of a manager as:

i. setting objectives for using available resources;
ii. formulating plans for achieving these objectives;
iii. identifying the activities to be performed;
iv. organizing the activities into groups;
v. defining the tasks to be performed by each group;
vi. grouping the tasks into jobs or programmes;
vii. staffing the jobs with people;
viii. initiating work activities;
ix. supplying incentives to stimulate productivity;
x. setting up controls to measure achievement of objectives; and
xi. taking remedial actions if objectives are not being met.

These eleven functions are expected to be performed by educational managers to achieve educational goals and objectives

Implications for Theory and Practice

The implications of discussing the concepts principles and functions of educational management to the theory and practice of education include:

(i) educational managers at various levels and stages should have a clear perception of the concept of management and be able to apply it appropriately;
(ii) educational managers should ensure the availability of needed resources in appropriate quality and quantity for effective management of educational institutions;
(iii) educational managers should be conversant with management principles and make use of them adequately for an appropriate set of people who are connected with their institutions within and outside the educational system; and

(iv) educational managers should possess adequate knowledge and skills in planning, organizing, staffing, directing, coordinating, communicating, evaluating and reporting. They should also encourage the performance of these functions by the staff in their institutions.

Summary

Management is a process that is practised formally or informally by every individual at home and in establishments, organizations or institutions such as the school. As educational institutions witness unprecedented growth all over the world, especially in developing nations like Nigeria, there is the dire need for educational managers, like their counterparts in other organizational settings, to be knowledgeable about principles and functions of management to achieve educational goals.

Sample Research Topics

1. Principles of impersonality and Human Relations and Teachers' morale in Nigerian Colleges of Education.
2. Time management: A strategy for achievement of educational objectives.
3. Principals' managerial skills and Teachers' job performance in Kwara State secondary schools.
4. Principals' Time Management and Managerial Effectiveness in Secondary schools in Kwara State
5. Committee System and Administrative effectiveness in Nigerian Universities.

Tutorial Questions

1. Define the following concepts: (a) management and (b) educational management.
2. (a) What are the principles of Scientific Management propounded by Frederic Taylor?
   (b) Why would you encourage the use of these principles by educational managers?
3. What are the strengths and weaknesses of bureaucratic principles in the educational system?

4. Describe Henri Fayol's principles of management as applied to the school system.
5. Compare Henri Fayol's functions of management with that of Reeser's.
6. Advance reasons why the use of scientific management principles is more suitable in business organizations than in social-service organizations such as schools.
7. Discuss the extent to which 'Separation of planning from performance principle' can be applied in an educational institution,

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Chapter 2

Disciplinary Powers of Educational Institutions in Nigeria: An Analysis of Judicial Attitudes to Students' Complaints

Dr. Kayode I. Adam

Introduction

Discipline is a key management function in academic institutions where it serves to promote respect for rules, regulations and constituted authorities, fosters peaceful co-existence among members of the academic community; and ensures a peaceful and conducive learning environment. While the nature of discipline has been variously defined by reference to its form, substance and means of maintaining it, sanctions are generally considered an important means of ensuring effective discipline at all levels of education in Nigeria. In higher institutions of learning, the power to impose disciplinary sanctions is almost always specifically contained in the laws under which such an institution is established. However, several disciplinary sanctions imposed by institutions on students have largely suffered judicial annulment generally on grounds of failure to observe established legal and judicial precepts concerning the disciplinary powers of academic institutions. It is, therefore, imperative to examine the powers of academic institutions to impose disciplinary sanctions on students and highlight instances of failed exercise of powers as enunciated in judicial decisions. It is believed that such an exposition could make the legal consequences of actions or omissions of officers of educational institutions in Nigeria predictable.

Accordingly, this chapter undertakes a discussion of the sources, forms and substance of disciplinary powers of educational institutions, legitimate authority for the exercise of such powers, and legal and judicial limits to the legitimate exercise of such powers in Nigeria. The study employs doctrinal research methodology in its investigation which is focused basically on legislative provisions, judicial pronouncements and academic contributions by local and international researchers. Although the disciplinary power of the managements of Nigerian higher educational institutions is the main focus of this chapter, occasional references are made to foreign literature and materials for purposes of comparison and harnessing of learning opportunities available from other jurisdictions. In addition, the exercise of disciplinary powers under university laws is a case study for the judicial approach on the point. As part of preliminary issues, the chapter examines the notion of educational institutions and discipline. Other factors substantively discussed include disciplinary sanctions, sources of power to impose sanctions and authorities empowered to sanction students. It concludes that sanctions could only be legally effective where procedural standards are carefully observed and are within the statutory capacity of an institution and authority to impose. The analysis in the chapter is basically focused on discipline in educational institutions in Nigeria.

Concept of Educational Institutions

The term “educational institutions” is a broad description of various platforms established for people of different ages to gain education and these include pre-school centres such as crèche and nursery schools, childcare, primary and secondary schools, technical colleges, colleges of education, polytechnics and universities. These institutions provide a variety of learning environments and space. It should be noted that education involves the process of developing an individual physically, mentally and morally and therefore cuts across all developmental stages of an individual in the educational structure.

However, the discussion in this paper is primarily focused on management of institutions of higher learning where issues of discipline often lead to litigation and in respect of which judicial pronouncements have made clarifications regarding the legality of certain disciplinary actions.

Nature of Discipline

Discipline has been described as the willingness of a student to exhibit proper conduct, a great sense of responsibility, passion for order and zeal to discharge duties promptly and efficiently. Discipline could also be understood as a state of orderliness based on compliance with rules and authority, and it also involves self-respect and respect for others, self-discipline and control.

Broadly, discipline underlies orderliness, while its opposite leads to confusion in a manner connected with ethical prescriptions regarding good or bad conducts, right or wrong behaviour. Thus, discipline is a necessary condition for any peaceful and harmonious community whether at the micro or macro level. Accordingly, discipline is key and fundamental in an educational institution for an all round development of students. However, discipline often involves the need to correct failure to observe and act in accordance with rules and orders through chastisement, penalty or punishment in order to restore order and assure effective control.

The need to impose control on behaviour is underscored by the severity and consequences of indiscipline in the Nigerian society, particularly in higher educational institutions. Indiscipline refers to a situation in which people do not control their behaviour or obey rules. Thus, indiscipline occurs where a student acts in violation of established rules and regulations of an educational institution and this could have a far reaching implication on the smooth running of the system. In any event, indiscipline is antithetical to the overall goal of tertiary education to produce a graduate worthy in learning and character.

Common Acts of Indiscipline among Students in Educational Institutions in Nigeria

The list of unethical behaviour which constitutes indiscipline in the higher education system is inexhaustible; suffice it to say that reference is made to common acts of indiscipline or anti-social behaviour in higher institutions. Mention must be made of academic dishonesty in its various ramifications, indecent dressing, cultism and gangsterism, sexual assault, armed robbery and dangerous driving.

These manifest acts of indiscipline have necessitated the vesting of powers in educational institutions to punish culprits. In deserving cases, sanctions are largely imposed on culprits relative to the proportion of the misconduct. However, acts of misconduct may lead to imposition of one or more of the following sanctions identified in the next section.

General List of Disciplinary Sanctions

The following is the list of sanctions that may be imposed on acts of indiscipline.

i. **Admonition:** An oral or written warning to a student that he has disobeyed certain rules of conduct continuation of which may be a cause for more severe punishment as prescribed in the notice or warning.
ii. **Censure**: A formal warning/notice for the infringement of a specific rule which includes the possibility of a greater sanction in the event of a guilty verdict by a court of law for the violation of any of the rules of the university within a specified period contained in the formal warning.
iii. **Community Service**: A community service work may be imposed on a student in the university or wider community for a prescribed period of time as stated in the notice of community service.
iv. **Denial of Registration**: This is a resolution to refuse a student's permission to register or to revoke a student's registration in a programme or course.
v. **Disciplinary Probation**: A student may also be prevented from taking part in certain extracurricular university activities for a stipulated period of time as prescribed in the notice of disciplinary probation.
vi. **Exclusion from Campus Facilities**: A student may also be prevented from accessing campus facilities for a specific time as specified in the notice of exclusion.
vii. **Exclusion from Campus**: This involves outright prevention from accessing the campus for an unlimited period for academic misconduct. The exclusion order shall contain the conditions for vacating the ban, if any.
viii. **Expulsion**: The studentship of students may be terminated indefinitely. A student may be readmitted, if at all, based on the prescribed conditions in the order of expulsion.
ix. **Formal Apology**: An obligation that the student should submit a written or formal apology.
x. **Mark Reduction**: This involves reducing or awarding a zero mark for an assignment based on the merit of the assignment

and putting into consideration the nature of or criteria for the work and also considering the amount of the work which is the outcome of the misconduct. This may affect the overall grade in the course.

xi. **No Credit – Discipline**: In a situation where the academic misconduct substantially smears the student's performance in the course, a No Credit-Disciple (NCD) will be recorded for the student in his transcript.

xii. **Recommendation to Deny Registration**: In some cases of academic misconduct, a recommendation may be made to the Registrar to deny the student's permission to register for a course or programme or have his registration withdrawn.

xiii. **Repeat Work for Assessment**: This sanction requires that a student repeat or re-submit the assignment or re-take the test/examination for full or partial mark.

xiv. **Rescission of Degree**: The degree of the student can also be rescinded.

xv. **Restitution:** A student may be required to refund the cost of a damaged or misappropriated property. Refunds in this case may be in the form of service to repair or compensation for damages.

xvi. **Suspension**: This involves exclusion from classes and other privileges for a specific term as prescribed in the notice of suspension.

xvii. Such other sanctions as may be determined on a case by case basis.

Disciplinary Power of Educational Institutions and its Sources

In order not to make educational institutions toothless bulldogs in the face of recalcitrant or delinquent students, some disciplinary powers have been vested in them. Thus, the number of traditional and innovative sanctions first mentioned above can be legitimately applied by institutions to check indiscipline on campus. The powers are specifically provided for under the respective legislation by which public institutions are established in Nigeria or the charters by which their private counterparts are created. The powers are however, vested in certain organs of the university, namely the Vice-Chancellor and the Senate.

Disciplinary Powers of the Vice-Chancellor

The disciplinary powers of every university and other institutions are contained in the Act (in case of a federal university) or Law (for a state university) by which it was created. For instance, the University of Ilorin Act vests disciplinary powers of the University in the Vice Chancellor. However, Section 18(1) specifically empowered the Vice Chancellor to impose any of the four broad categories of punishment provided thereof. These are exclusion from an activity of the University or using the University's facilities; restriction as to manner or period; rustication for a number of years; and exclusion from the University.

Some quick observations are pertinent in respect of the provisions of the section. First, under subsection (1), the disciplinary power of the Vice-Chancellor is exercisable where in his (or her) opinion any student is guilty of misconduct. The provision employs the word "appears" thereby suggesting that the power of the Vice-Chancellor could be exercised based on the dictates of his (or her) conscience. However, the better view is that the guilt of the student must be investigated to enable the Vice-Chancellor to make up his mind about the guilt or otherwise of the student. Thus in practice, a committee is often constituted to investigate any complaints of misconduct against a student. Besides it has been judicially ruled that the assignment of such a committee should be conducted in consonance with principles of natural justice.

Secondly, despite the broad scope of the powers granted the Vice-Chancellor, some of the common sanctions noted above are outside the reach of his powers. Therefore, such sanctions as reduction in marks, denial of registration and rescission of degree are *ultra vires* (or beyond the power of) the Vice-Chancellor. The implication is that such sanctions can only be legally imposed where any other organ of the university has been vested with the power to do so.

Disciplinary Powers of the Senate

It is significant to note that certain disciplinary powers are directly vested in the University Senate. According to the Act, the Senate is vested with the general functions to control and organize teaching, the admission and discipline of students, and to promote research in the university. With regard to rescission of a degree, the Act empowers the Senate to strip any person of a degree on the grounds that the person has been found guilty of dishonourable or scandalous conduct in gaining admission to the University or obtaining the degree. However, such power is subject to the right of appeal to the Council.

However, no specific or express provision is contained in the Act regarding such sanctions as a reduction in mark or denial of registration but it thus seems that these are conveniently covered by the general powers of the Senate to supervise, regulate and control teaching and discipline of students.

Conducts Subject to Disciplinary Powers of Educational Institutions

It is generally believed that every act of indiscipline committed by a student is liable to punishment by an educational institution. However, relevant legislation of various educational institutions is unequivocal about the sort of indiscipline subject to disciplinary actions of such institutions. The scope of indiscipline in this case is limited to acts of misconduct as exemplified by Section 18 of the University of Ilorin, for example. Ordinarily, an act would amount to misconduct when it is contrary to the statutes, rules and regulations of an institution or is regarded as unlawful, improper, wrongful or inconsistent with the status of a student.

Literally, the term "misconduct" is itself generic and has caused institutions to assume disciplinary responsibility in respect of several acts which the courts have annulled. Misconducts can be classified into two broad areas: (i) the purely academic; and (ii) those which are not purely academic but amount to a breach of the Matriculation Oath. Academic dishonesty, examination malpractices, forgery of results and plagiarism are pure academic misconduct, while acts including rampage, riots, cultism, indecent exposure, violence against the university authorities, and malicious damage to university property are non-pure academic misconduct. Other acts of misconduct which may attract disciplinary measures include drug abuse, smoking, consumption of alcohol, disobedience to lecturers, armed robbery and stealing. As a rule, every misconduct is subject to discipline by educational institutions unless it constitutes an offence against the State. The word “misconduct” has been defined as an unacceptable behaviour, especially by a professional person, and so it is not everything that amounts to misconduct that necessarily amounts to a criminal offence.

Every tertiary institution is a modicum of the larger society and its students a reflection of the members of the society who are obliged to obey the laws of the land. Thus, issues involving substantial allegations of crime against the State such as assault, arson and stealing committed by students of tertiary institutions are, for obvious reasons, subject to trial before a court or tribunal properly formed under the Constitution. This is in consonance with the Constitutional requirement that whoever is facing trial for a criminal allegation has a right to fair hearing before an impartial tribunal or court holding in the public before the lapse of a reasonable time, unless the charge is withdrawn. Hence, any attempt by the university to deal with such matters is tantamount to assuming false jurisdiction. This is one of the fundamental legal principles established in the case of Garba v. University of Maiduguri which held that trial of offences against the State falls outside the scope of the power of the Visitor and the Vice-Chancellor.

Status of Crime Distinguished

An offence is the act or omission which renders the person responsible for the act or omission punishable in accordance with the provisions of an Act of the National Assembly or Law passed by the House of Assembly of a State of the Federation. Therefore, every act of misconduct already defined as a crime or offence under the Criminal Code, Penal Code or any other law in Nigeria has assumed the status of a crime which is greater than mere misconduct. In other words, it is necessary, in determining whether an act of misconduct amounts to a crime, to look at the allegation made against a person whether same has been defined as a crime. It is for this reason that examination malpractice has been said to fall outside the purview of mere misconduct since it has been defined as a criminal offence against the State under the Examination Malpractice Act, 1999. The point is illustrated by the decision in Mohammed v. ABU, Zaria, where the allegation made against the respondent was that of examination malpractice, and the Court held that if found guilty of the allegation by a competent court of law, the respondent would be liable to punishment under the Acts that regulate examination malpractice. In that case, what was alleged against the respondent amounted to a criminal offence.

However, the fact that an act of misconduct amounts to a crime does not completely remove such from the disciplinary powers of the institution. It merely suspends or defers such an action till conclusion of trial by a court. It is only after conviction by a proper court for these offences that appropriate disciplinary measures can be meted out against the culprit by the authorities of the institution. It appears that where a student accepts or admits his involvement in the acts complained of, disciplinary measures can be taken against him/her while the criminal charge or accusation is still pending. The better view is to await the outcome of proceedings at the trial court.

However, the courts have held that it is not all cases where an act has been defined as a crime that it would cause the scope of the disciplinary powers of an institution to be suspended. An example of an act of misconduct so differently treated is fraud which has been defined as false representations made verbally or by conduct either recklessly or with the intention of making material gain or advantage. The criminal element in fraud is limited to cheating which has been defined as a common law offence now restricted to defrauding the public revenue such as the tax authority where there is dishonest failure to make value added tax or other tax return and pay the tax due.

Fraud is an offence only in so far as it involves cheating or defrauding the public revenue. The word fraud may refer to a tort, or a vitiating element in contract, but generally it cannot be unequivocally termed a crime without reference to the context in which it is used.

In that case, the Court held that where it has been established that a student has been involved in any form of fraud, e.g., impersonation, forgery, evasion in the payment of approved school charges, presentation of fake academic credentials, illegal exploitation of other students and embezzlement of Union Funds, such a student could be expelled from the university. The court expressed the following:

In my view, the word ‘fraud’ as used above, in the academic environment of a University, cannot be defined as a crime properly so called. In a Dictionary of Modern Legal Usage (supra), fraud has seven different meanings most of which do not include any element of crime. The dictionary lists the 5th meaning of fraud as unconscionable act short of actionable deceit at common law. Fraud implies more of moral turpitude than crime. It includes, inter alia, deceit or tricks which by itself is not a crime in our penal codes.

The Court then pointed out that fraud in 5.12.4 of the University Hand Book has to be viewed not in the context of the larger society but in the internal affairs of the institution for the sole purpose of banning those acts which the university authorities consider not crimes but morally deprived, unconscionable, irresponsible and out of tune actions with the academic and moral upbringing of youths in the university community. The respondents were neither accused, charged nor tried and/or punished for any criminal offence. A screening panel found they were involved in infraction of the rules governing their admission and which they agreed to observe as a condition for their admission into the Medical School of the respondent. It was a case of breach of contract a major term of which was the authenticity of the academic credentials presented by them. And in determining the authenticity of the scores and credentials presented to the appellant by the respondents, they were heard/or given the opportunity to be heard by the screening panel. The result of the panel was made known to the respondents and it led to the futile appeal to the appellant’s Vice-Chancellor. Respondents were not accused of or charged with any criminal offence so called and they were not tried and/or punished for same.

The core basis for insisting that a crime or offence should be tried by a tribunal or court established for that purpose is the need to guarantee the accused person a fair and reasonable trial in public, and to afford him the presumption of innocence until proved guilty.

There is thus an indication that the courts are reluctant to assume the disciplinary powers of educational institutions or deprive them of their functions. In one instance, it was held that a court would not grant an order that an examination body release the result of an examinee where an examination has not been conducted.

Exercise of Disciplinary Powers of Educational Institutions

As earlier noted, the disciplinary powers of the university can be exercised by both the Vice – Chancellor and Senate. However, the Vice-Chancellor is empowered by Law to delegate his power to or act on the recommendation of some bodies constituted by him.

Procedure for Exercising Disciplinary Powers

Although the power conferred on the Vice-Chancellor is discretionary, it should be exercised reasonably. De Smith summarized the basic judicial approach in this regard that an authority empowered to exercise discretion is bound to do so, but not necessarily in any specific way. In addition, it can only be exercised by the authority so endowed with particular focus on the issue at hand. Similarly, such an authority shall not act under the influence of another body or prevent itself from the exercise of the discretion in each case. De Smith further observed that the exercise of the discretion does not permit the authority to do what is illegal or unauthorized to do. Furthermore, the authority must act honestly having regard to issues concerned and without promoting anything contrary to the sole purpose of the enabling law. Finally, such an authority shall not act arbitrarily.

Secondly, by its structure, the disciplinary organ of an institution is essentially an administrative tribunal. Institutions created by Law are legal bodies with clear and distinct duties and powers such as powers over examination and disciplinary issues. The case of Wood v. Wood showed that the principles of natural justice should apply in proceedings before arbitrators, professional bodies and even voluntary associations when they carry out their disciplinary function. The same also goes for all tribunals or bodies bestowed with powers to decide on issues with civil consequences to individuals.

It is, therefore, submitted that since the exercise of the disciplinary powers was constituted by the Vice – Chancellor, or the body to which his power has been delegated into a quasi–judicial body, such powers cannot be exercised without proper regard to the principles of fairness otherwise referred to as the principles of Natural Justice. A corollary of this principle is that a person must be given reasonable notice of the nature of the case against him. Secondly, impartiality should be guaranteed by eliminating all traces of bias on the part of the person appointed to adjudicate the matter, since a person cannot validly adjudicate in his own matter.

Thus, it is pertinent that the rules of fair hearing must be adhered to when students are subjected to the jurisdiction of the tribunal. In Garba v. University of Maiduguri, OPUTA J.S.C. stated that an accused person must be present when evidence is tendered against him and opportunity given to him to correct or contradict such evidence.

In that case, the appellants were expelled from the University of Maiduguri following a students' demonstration which led to arson, destruction of property, looting and assault on the part of the demonstrators. The Vice – Chancellor set up investigating panels to look into the students' rampage. The Disciplinary Investigation Board was one of such panels. It was headed by the Deputy Vice – Chancellor who was a victim of the rampage. The panel met and conducted investigations during which 104 witnesses including students were interviewed. Their evidence was heard without the appellants being allowed to cross-examine any of the witnesses that appeared before the Board. Although they made a request to call witnesses in their defence it was not granted. At the conclusion of the investigations, the appellants and some other students were expelled. The appellants instituted an action in the High Court on the ground that they were not afforded fair hearing since they did not know the evidence given against them. Based on all the reliefs sought by the students, the Maiduguri High Court declared that the applicants' expulsion from the University of Maiduguri violated their fundamental rights, that the applicants be re-admitted into the University on the grounds that the respondents acted with bias, and that the applicants cannot be deprived of their fundamental rights.

The decision of the High Court was overturned on appeal, and it held that in the light of the terms of reference of the Disciplinary Investigations Board and the consultations undertaken by the Vice – chancellor, and the fact that the applicants were given the opportunity to present their side of the story, the lower Court fell into error when it held that there was no fair hearing and that there was a likelihood of bias.

At the Supreme Court, it was held that since the Deputy Vice–Chancellor of the respondent was both the victim of the rampage and Chairman of the Investigating Panel which heard the appellant, it can be inferred that there was an actual likelihood of bias given that the Deputy Vice- Chancellor was, at the same time, a judge and a witness.

Similarly, in Onwumechili v. Akintemi, the applicants brought proceedings challenging their rustication following the recommendations of an investigation panel set up by the Vice – Chancellor to probe the allegations of examination malpractices. At the conclusion of its investigation, the students were rusticated by the Vice – Chancellor who acted on the findings of the Adegbola Panel which comprised the University staff. During their appearance before the Panel, they only had notice of one of the offences in respect of which they were found guilty. As a result, they brought a motion for *certiorari* to quash the decision of the first appellant, Professor Onwumechili. They also asked, among others, for an injunction to restrain the appellants, their agents and/or servants from carrying out the directives contained in the letter of rustication. The reliefs were premised on the grounds that the appellants failed to observe the rules of natural justice; that the suspension of the applicants violated their constitutional rights; and that the Vice – Chancellor acted in excess of his power under the University of Ife Law, 1970. All the reliefs sought by the students were granted by the trial judge.

On its part, the Court of Appeal decided that the full facts of an offence must be brought to the notice of a person to rebut before he is punished and that for an offence for which he was not formally charged, any decision taken would be a breach of the rule of natural justice. The Court ruled that the trial court correctly set aside the Vice –Chancellor's decision.

However, the Court adopted a different approach in the case of Esiaga v. University of Calabar and Others where the appellant was a final year Political Science student in the University of Calabar. On 29th April, 1991, there was a surprise search of his room by the third respondent and other staff of the University acting for and on behalf of the University. The search revealed several items in the wardrobe of the appellant including a Vikings Confraternity Insignia or Costume, a shotgun cartridge in a carton belonging to the respondent and one pan – African textbook belonging to the Department of History of the University. Two days later, the 2nd respondent, in her capacity as the Acting Registrar of the 1st respondent suspended the appellant on the grounds that he was suspected to be a member of Vikings Secret Confraternity by reason of the items found in his room. The appellant, pursuant to the letter of suspension, filed a motion ex parte by which he sought for leave to apply for enforcement of his fundamental rights as contained in Section 33(1) & (2) of the 1979 Constitution and asked for an order declaring null and void the letter of indefinite suspension as he was never heard by the respondents before they reached their decision. He also applied for an order directing the affected respondents to release his examination results. The leave was granted and the appellants were consequently put on notice. In the affidavit supporting his application, deposed to by the appellant, it was stated that on the day of the search, the 3rd respondent and twelve security men invaded his room. He was surprised to see the incriminating materials which were alleged to have been found in his room. According to him, the security men failed to produce an authority to search the room and further refused to surrender themselves to a search as demanded by him. The appellant further denied ownership of the items or membership of any secret society and stated that at the material time, there were four occupants of the room that was searched and all of them used the one wardrobe in the room where the items were found.

After hearing counsel for the parties on the motion on notice, the learned trial judge granted the application and the consequential reliefs prayed for. Dissatisfied, the respondents approached the Court of Appeal which considered Section 17 of the University of Calabar Act 1990 vis-à-vis the power of the Vice-Chancellor to direct the exclusion of a student who is guilty of misconduct from participating in such university activity for a specified period. It is notable that the Section also confers the right on a student to appeal against such direction to the Council which may confirm or set aside the direction or modify it as it thinks fit. The appeal was unanimously allowed in that Section 17(1) above clearly vests in the Vice – Chancellor the right to suspend a student. The Court was of the view that a student could be suspended before being heard provided that the decision to

suspend is not final. Thus, respondent's suspension was consequent upon his being suspected as a secret society member.
At the Supreme Court, it held that the appellant's suspension was only a temporary measure pending the establishment of an administrative body which would afford the appellant an opportunity to absolve himself of any guilt. It was therefore, the Court's view that the appellant tried to be clever when he jumped the gun by going to court.

Without prejudice, the Supreme Court's decision in the case of Esiaga relating to the suspension of the student, the point to note is that an institution's disciplinary organ is under obligation to uphold the principles of natural justice in the discharge of its duties and to avoid acting in contravention of the provision of Section 36 of the 1999 Constitution.

The need to follow the proper procedure in the exercise of disciplinary power cannot be over emphasized. Its importance is underscored by the observation of the Privy Council in Kanda v. Government of the Federation of Malaya that right to be heard could only be real if the accused is made to know the case, statements and evidence against him including affording him adequate opportunity to contradict same.

Also, in Ceylon University v. Fernando, the Judicial Committee of the Privy Council in dealing with the issue of the discipline of a student in the University held that it was not necessary to confront a student with his accusers since he knew the case and statements against him and had been presented with a reasonable opportunity to rectify or deny them. It seems that the physical presence of an accused person at his place of trial is fundamental to a just decision.

It is pertinent to note that the implication of a wrongful exercise of disciplinary powers of educational institutions is that the culprits whose activities ought to be nipped in the bud often get off the hook and find their ways back into the system thereby rendering the disciplinary measures ineffective. Consequently, institutions are exposed to increased social vices and lawlessness promoted on campus. These are exemplified by the result of such cases as Garba v. University of Maiduguri and Onwumechili v. Akintemi where the students found their way back to the institutions by orders of Court as a result of wrongful exercise of disciplinary powers.

Summary and Conclusion

Disciplinary action awaits any student who commits acts of misconduct contrary to the rules and regulations of his institution. The power to discipline often resides in some organs of an institution in accordance with the Law under which the institution is established. However, the term misconduct has often been interpreted as comprising elements of a crime to preclude original exercise of disciplinary powers by the relevant institution. By Law, only a competent court of law or tribunal established for the purpose can try a crime. Thus, institutions should learn to recognize the signpost and refrain from having the “first bite” for trial whenever an allegation of crime is made against a student.

Furthermore, disciplinary organs of an institution should recognize that they perform quasi-judicial role when exercising disciplinary powers and therefore, should ensure that culprits are granted fair hearing as a prescribed natural sense of justice which is enshrined in the Nigerian Constitution.

Finally, every organ of an institution should recognize the limit of its disciplinary powers for no one organ is entitled to exercise the power of another or impose sanctions reserved for another. These and other salient points mentioned in the chapter in respect of disciplinary powers deserve to be accorded a prime of place in an educational institution for effective and efficient management.

Review Questions

1. Explain the nature of discipline and its significance to effective management of educational institutions in Nigeria.
2. (a) List five common acts of indiscipline and describe possible sanctions to control them.
   (b) Identify the sources of disciplinary powers of the management of educational institutions.
3. Using the example of a university, describe the organs vested with disciplinary powers in educational institutions in Nigeria

4. Examine the relationship between misconduct and crime and the limit of disciplinary powers of educational institutions in this respect.
5. Examine the procedural requirement for observance of principles of natural justice for effective discipline in institutions.

Sample Research Topics

1. Management of disciplinary problems among secondary school students in Lagos state.
2. Relevance of Courts' Intervention in the Management of Educational Institutions in Nigeria.
3. Exhausting Internal Disciplinary Procedure of Institutions Prior to Litigation.

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Chapter 3

Record Keeping, Information and Communication Technology (ICT) in School Management

Dr. Felicia K. Oluwalola

Introduction

Ordinarily, one can say that a record is a written document kept for future references. An individual can create numerous records about us which will constitute an important part of our lives. Records are also critical to our work, and we create and receive business records every day. The volume of paper work handled in a modern office today is enormous, for example, in offices, educational institutions, hospitals, courts, media houses, to mention but a few. Without adequate records it is impossible to get any past event. Infact, no organization can survive without adequate record keeping and information for daily activities. What exactly do we refer to as records and how do they differ from other types of information? The Association for Information Management Professionals (AIMP) stated that records are pieces of information stored or received by an individual or organization which serve as a means of processing documents from the time they were received to the period when they would be needed. Records can be referred to as information, whether processed or unprocessed, collected and preserved for future use. (Onifade 2004).

The importance of record keeping, information, and communication technology in school management cannot be overemphasized. In Nigeria, the records of most schools are kept manually, either publicly or privately, in paper form. In most cases, important document get lost. It is sometimes difficult to go through paper work and this often results in wrong performance analysis, inaccurate planning, and inefficient management of school records.

Oluyemi (2007) established that, Information and Communication Technology (ICT) is a global network related to technology used to process, store and transmit data or information. That is, ICT is not limited to computer only application, internet, and networking but also to technology which is being used for collecting, storing, editing, deleting, formatting, saving, transmitting and passing information from one place to another. It is now seen worldwide that ICT in educational institutions is a necessity and an opportunity to achieve stated goals and objectives. However, the gap records fill in this age of technology is very crucial.

Concepts of Record Management

Records can be referred to as the collection of valuable information in an organized form, whether in a file or electronically. They can be seen as a permanent account of a document which provide facts or events. A record is anything that provides information about the past either in the form of personal documents, letters, accounts or general orders.

Records can also be referred to as processed data or information, collected, and maintained by an organization or an individual. Methods of keeping records differ. Record keeping in organizations is not the same, it depends on the volume of the documents, size of the office workers, nature of operation and the work being carried out in the office. Management of records is misconstrued to equate filing whereas filing is an aspect of record management system. Filing involves classifying, arranging and storing records, documents or file folders according to a systematic plan for ease of reference. For any organization to survive, up-to-date information is necessary, document must be properly arranged, stored at the right place and handled by right personnel for management decisions.

Record management may be referred to as one of the essential parts of information as well as the management of the manpower, hardware and software in an organization. Record management is a method of controlling all records throughout their life circles, from creation to retention. Therefore, an effective management record serves as the survival of any organization. However, record management is all about the following:

- Proper keeping of records from the time of creation to the time they will be needed;

- Keeping of records to ensure they are genuine and reliable;
- Providing adequate services to meet the needs of the organization; and
- Providing accurate, reliable and useable documentation for easy accountability;

Research has shown that not all documents can be referred to as records. Record management procedures are based on classification of records of any institution which indicates its data or information that will become records.

Objectives of Record Management

The structure and nature of any organization demands functional record management and this should be goal oriented and service minded. Therefore, the general objectives of record management are stated below:

- To provide accurate information as economically as possible for the smooth running of an organization;
- For systematic procedures in creating, storing, and protecting records, retrieving them when needed and for disposing unusable documents in the organization;
- To set and maintain efficient and effective standards for equipment, personnel and procedures relating to record management;
- To educate staff on the best way to improve clerical performance in all activities related to the creation, and maintenance of report manuals and most especially, of processing records;
- To sensitize school administrators/managers on the importance of records to the organization.

Importance of Good Record Keeping

In any organization, the importance of record keeping include:

- The office is made tidy and relieved of less important documents.
- Record keeping provides security for documents, files and file folders against dust, mishandling, and information pilferage.
- It makes for efficient and accurate work process.

- It facilitates confidentiality of records.
- It makes for easy and quick retrieval of records.
- It allows for easy accessibility of records for decision-making purposes.

Reasons for Keeping Records in an Organization

Records serve as the storage devices of any business. In a school setting, students assist the institution to process and manage any information that concerns students for effective operation and for its survival. Every organization keeps records purposely for future references. This is because records that are used and monitored by the organization have administrative or historical values. Students' guide manuals are used for administrative purposes. Deeds of contracts, minutes of meetings and students result are documents that add legal value to an organization. From a personal perspective, why does an individual keep records such as a birth certificate, the ownership of car, and the promissory note that provided the money from friends or relations? The answer is simple: In this 21st century, people cannot live without keeping adequate records. Also, students' information is kept right from child birth to the grave, most especially from pre-primary to the tertiary level. This is done to help the school authorities know more about each pupil/candidate in the school system. Therefore, the primary aim of keeping records is for future references and its availability when needed by an individual or organizations at large.

Record Classification

Record classification can be referred to as grouping of documents or files according to the filing suitability. Schools can adopt any system that is most suitable depending on the type of record such as students' result, admission letters, student bio data forms, staff data, etc. Among such filing systems are:

(i) Alphabetical Filing System
(ii) Numerical Filing System
(iii) Chronological Filing System
(iv) Alpha-Numeric Filing System

(v) Geographical Filing System
(vi) Subject Filing System

Alphabetical Filing System

This is the simplest method of record classification. Here, folders containing letters from correspondents or papers relating to subjects are arranged according to the first alphabet to tally with the name or surname of the folders which are arranged in a strict alphabetical order. Surnames of staff/students/customers which begin with letter “A” placed in one group and those beginning with letter B, C.D-Z are placed in another group.

Numerical Classification

This is a filing system that involves the arrangement of files, folders or documents, etc, in a serial order. In this system, folders carrying numerical tag are arranged in the cabinets in a numerical order, e.g., 1, 2,3,4,5, etc.

Chronological Filing System

In this filing system, files, folders or documents are arranged in order of date in which the file is received or created that is, files are arranged in a systematic order of date, day, time, etc.

Alpha Numeric Filing System

This is a type of filing where folders or files are arranged with the use of the combination of the alphabet and numbers, e.g., A1, B1, C1, D1, E1, etc.

Geographical Filing System

This is a filing system where files, folders or documents are arranged according to their geographical areas or regions of operation. Documents are sorted and arranged according to the area they come from, e.g. town, city, state and country, etc.

Therefore, a school’s choice of a particular system of filing depends on a number of variables such as:

(i) Consideration for future expansion.
(ii) Cost of choosing the system.

(iii) Security of the records.
(iv) The nature and volume of records
(v) Duration of keeping the records.

Essential Features of a Good Record Keeping

School authorities/organizations must know that good ideal filing system for an office must aim at achieving the following attributes:

- *Simplicity*: It must be simple to operate. Any method adopted must be straightforward and easy for the operator in an organization.
- *Economical*: This means it must be cheap to operate, cost-effective and reasonable.
- *Adaptability*: Adaptability demands the system used need to be flexible, malleable and adjustable, that is, give room for future expansion.
- *Suitability*: In respective of any system adopted it must be appropriate, apt, fitting and correct.
- *Safety*: A good filing system must ensure the safety of all documents.
- *Accessibility*: The system adopted should be convenient, have ease of access, ease of understanding, be user-friendly, open and convenient.
- It must not be liable to confusion and complication

Record Management in Schools (RMS)

Record management in the school system refers to methods of keeping, processing, storing and retrieving records. These include students' information/data such as students' profile, examination, admission, teachers, classes, attendance, school plant in terms of infrastructural facilities and budget of the school. The specific objective of a School Record Management Information System is to record, store, retrieve and update the records when necessary for effective and efficient running of school activities.

The information received will assist the school administrator to manage up-to-date and accurate information on education, students, and career development. It also assists the school administrator to receive, store and analyse information about the school affairs. Educational policy makers observed that quantitative and qualitative information is needed in making decision for accurate records and effective accountability.

Record Management Processes

The Record management process involves eight steps;

1. **Creation** – In a school setting records are created and designed from new forms and other documents when the need arises by the administrator. For example, a file is created (open) for new students at the point of entering into the school system.
2. **Storage** – Records are stored for easy accessibility and future reference.
3. **Update** – Up-to-date information which is added to the existing record is kept from day to day for effective performance in the office.
4. **Retrieval** – This involves searching and locating the desired records for information whenever it is needed. This should be handled by the right clerical officer.
5. **Use** – The information received assists the school administrator/management in decision making.
6. **Appraisal and retention**– This involves keeping of documents for as long as would be required by the organization. Some of them may be retained because of their necessity, archived, or disposed of as soon as possible.
7. **Archiving** – This is the method of storing records that are not needed at a particular time but later called for at the appropriate time (inactive records).
8. **Disposal** – This involves the method of discarding, deleting or destroying records that are no longer needed in the school system or organization.

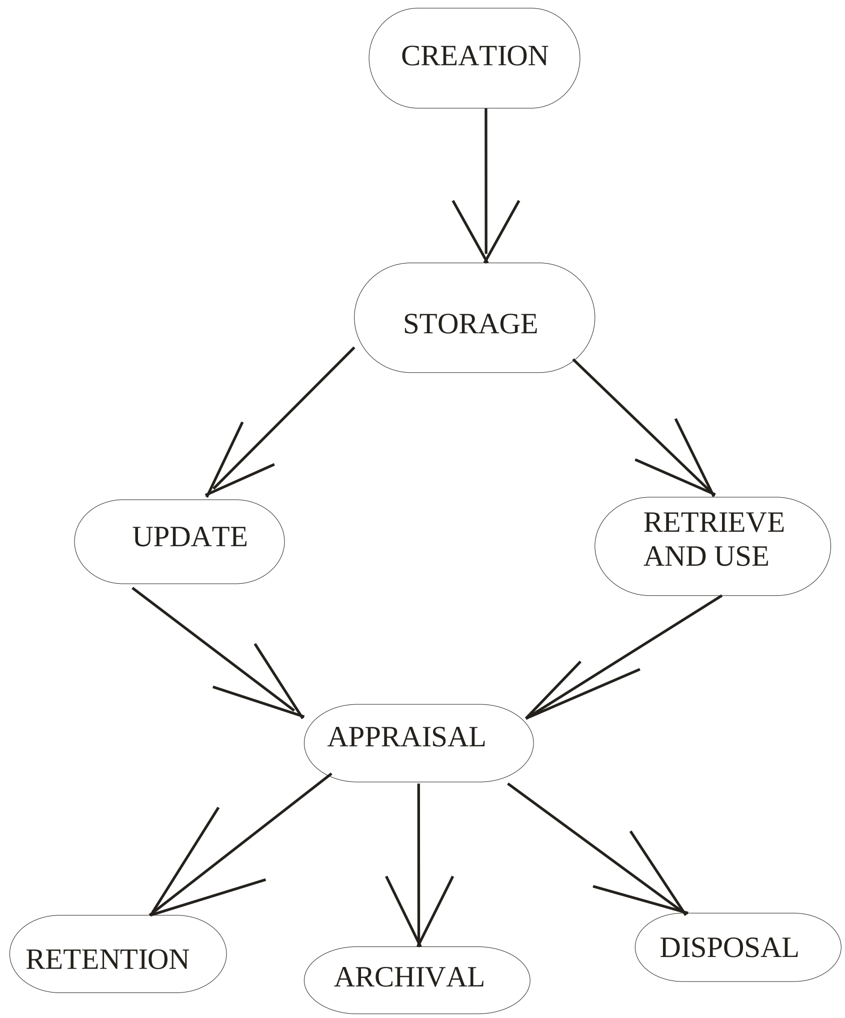
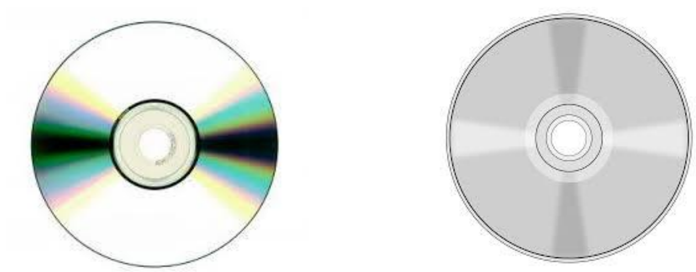


Figure 1: Record Management Process

In any organization, most especially in an institution, RMP must be handled by the staff who is in charge of managing records and seeing to the update for efficiency. Also, it must be carried out step by step in order to conform with school regulations and requirements for easy storage. Every calendar year, accumulated and appraised records should be retained or disposed of. Similarly, records can be grouped or arranged in a ways that suit the organization.

The Role of Technology in School Record Management

Technology has played a prominent role in record keeping in schools. It has made the work of the school administrator easier. Information recorded on papers such as students' profile, payment of school fees, invoice, students' results, and other relevant documents can be computerized, scanned and stored through electronic means. For example, information can be stored for a long time in compact discs or flash drives and retrieved when needed.



Compact Disc

Flash Drive

Functions of School Records Management System

A School as an important organization needs to take the issue of record keeping seriously. School records must be given adequate priority for any organization or institution to achieve its stated goals and objectives. The following are examples of records that must be kept from time to time:

1. **Students** – In a school setting, students' records, for example, educational background of students, attendance, academic

performance and behavior must be carefully handled. **Lecturers/instructors** –Teachers' profile such as personal characteristics, educational qualification, on-the-job-training, years of experience, employment status, length of service, area of specialization, class/subject taught, workload, additional qualification if any, competency skills and any professional qualification or award must be kept.

2. **Budget** – It is the duty of the school bursar to keep accurate record of daily expenses which include school budget, income and expenditure and this may be by type, finance balance such as cash at hand, balance brought forward, etc.
3. **Physical facilities** – School facilities in terms of total number, good, worth and fitness of structures such as classrooms, equipment and others should be documented. This also must include the rate of utilization in terms of time, space and global use of the school plant.
4. **Instructional materials** – Relevant instructional materials needed in schools are recorded in terms of quantity and conditions.
5. **Learning achievement and outcomes** – For proper feedback, students' results, continuous assessments, assignments and students' attitude, etc, are recorded accordingly.
6. **Extra-curricular and co-curricular activities** – These are extra school activities, schedules, and total number of staff.
7. **School and community interactions** – This is another vital record that .school authorities need for easy administration.

Management of Electronic Records

Today in some organizations, management of electronic records, most especially in government parastatals, is nothing to write home about. Management of adequate records has gone to zero level, and this has affected many organizations to the extent that they find it difficult to achieve organizational stated goals and objectives. Therefore, it is good that technology must be used for record keeping in order to facilitate quick retrieval of documents in any organization. However, for efficient and effective record management to take place in any school administration, the following records are crucial:

1. Students' record Card
2. Attendance Register.
3. Textbook card.

4. Report Sheet
5. Teachers' records.
6. Teachers' evaluation reports.
7. Inventory of physical facilities.
8. Inventory of furniture/equipment.
9. Inventory of teaching/learning resource materials.
10. Summary of school budgets.

The above listed records, when properly kept, updated and used by the school administrators/managements of any institution assist in achieving their stated objectives.

Students' Record Cards

Students' record cards enable the teacher to record and monitor the day-to-day activities of students, and store information about their personality trait and family background. They give detailed information about each student such as the date of birth, age, telephone numbers of both the student and the parent or guardian of each student and this must be kept by the school administrator.

Name:______________________________ Admission Number:___________
Home Address____
Sex:__________ Date of Birth/Age:______________ State of Origin:__________
Name of Parent/Guardian/Tel No:____
Occupation of Parent/Guardian:____

Subject	Class I	Class II	Class III	Class IV	Class V
Eng. Lang					
Eng. Lit					
Yoruba					
Maths					
Chemistry					
Biology					
R.K					
Agric Sci.					
Geography					
History					
H/Econs					
Fine Art					
Music					

Figure 2: Students Record Card

Attendance Register

This is the most important aspect of record keeping. Teachers make use of attendance sheets to record daily punctuality of students. This serves as an evidence if peradventure any student performs woefully or otherwise. It also assists the class teacher to determine the rate of punctuality in terms of gender, date of birth for effective monitoring and accountability.

Attendance Register

S/No	Surname	Other Names	Sex	Handicap	Age	Admission Number	Week Ending					Week Ending					
							M	T	W	T	F	M	T	W	T	F	

Number of Sessions:____

Average Attendance: ____

Total Attendance: ____

Figure 3: Attendance Register

Textbook Record Sheet

The textbook record sheet contains all the textbooks acquired by each student. The teacher takes note of all the books and how the student maintains them. The ones not yet bought by their parents are also included for future reference. This enables both the teacher and the parents to have the accurate number of books that belong to each student for record purposes.

Report Sheet

A summary of students' performance card gives details about each candidate's behaviour throughout his stay in school. It also serves as a means of checking students' behaviour and if there is any misconduct among the students, this book can easily be referred to and then sent to parents to inform them of their ward's misbehaviour.

Report Sheet

NAME OF STUDENT____________________ CLASS:_________________________AGE:_______
YEAR____________ TERM____________ HOUSE_____________________SEX:________

ANNUAL ACADEMIC PERFORMANCE		1st Summary		2nd Summary		1st Summary		2nd Summary		3rd Term Exam		3rd Term Summary		Annual Summary		Annual Average	Remarks	Teacher's sign
SUBJECTS		MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED	MARS OBTAINED			
ENGLISH LANGUAGE																		
	MATHE-MATICS																	
BASIC SC./TECH	BASIC SCIENCE																	
	BASIC TECH.																	
	PHE																	
	COMPUTER SCIENCE																	
PRE VOC.	AGRICULTU-RAL																	
	H/ECONS																	
RELIGION & NATIONAL VALUE	IRK/CRK																	
	SOCIAL STUDIES																	
	CIVIC EDU.																	
	SECURITY EDU.																	
	BUSINESS STUDIES																	
QURITRAL CREATIVITY ART	FINE ART																	
	MUSIC																	
	FRENCH																	
	YORUBA																	
	HAUSA																	
	ARABIC																	

3. PSYCHOMOTOR SKIL

	5	4	3	2	1
Handwriting					
Verbal Fluency					
Games					
Sports					
Handling Tools					
Drawing & Painting					
Music Skill					

SCALE:
5 – Excellent degree of observable trait
4 – Good level of observable trait
3 – Fair in observable trait
2 – Poor in observable trait
1 – No observable trait

4. AFFECTIVE AREAS

	5	4	3	2	1
Punctuality					
Neatness					
Politeness					
Honest					
Cooperation with Others					
Leadership					
Helping Others					
Emotional Stability					
Health					
Attitude To School Work					
Attentiveness					
Perseverance					
Speaking/Handwriting					

TOTAL MARKS:____ OUT OF:__________________ AVERAGE:_______________
NO. IN CLASS:____ CLASS POSITION_______________________________
CLASS TEACHER'S COMMENT:____
____ SIGNATURE:______________________ DATE: ________________
HOUSE TEACHER'S COMMENT:____
____ SIGNATURE:______________________ DATE: ________________
PRINCIPL'S COMMENT____
____ SIGNATURE:______________________ DATE: ________________

Figure 4: Report Sheet

Lecturer/Teacher's Record Card

It is very important for a school setting to create and keep adequate and up to-date record of teachers in charge of the subject and most especially what has been or is to be taught. This keeps adequate profile of teachers' personal data, academic background, years of experience, employment status and teachers' role and responsibilities including academic and administrative activities in the school.

Teacher's Evaluation Report

In order to achieve the objective of education as it is stated in the Policy of Education teacher performance must be evaluated. This can be done periodically and it enables the teacher to perform better knowing full well that his/her evaluation will be based on his performance. This increases teachers' productivity at work. (See figure 4)

Teacher's Evaluation Report

PART I

Personal records of officer: (*To be completed by the Officer being reported upon*)

1. Full Name of Officer (Block Letters) – Surname First:_____
   ____
2. Department/Division
3. Personal Particulars:
4. Leave Records:

PART II

5. (A) Target Setting for Promotion
   (B) Target Setting for the Appraise by the HOD/Division
   (C) Achievement of Targets
6. Job Description:
7. Training Courses/Seminars Attended since Appointment:
8. Job Performance:

PART III

9. Assessment of Performance:
10. Aspects of Performance:

S/N	**Assessment of Actual Performance Standard/General Ability**	**A**	**B**	**C**	**D**	**E**	**F**
1.	Job Assessment/General Ability						
2.	Character Traits						
3.	Work Habits						
4.	Leadership Attainment						

A – Outstanding
B – Very Good
C – Good
D – Satisfactory
E – Fair
F – Poor

11. Overall Assessment

From the above assessments, indicate the overall performance of staff by ticking the appropriate box below:

A	Outstanding		An exceptionally valuable member of the staff; performance is well above the required standard for the job.
B	Very Good		Display good all-round level of effectiveness; performance meets requirements in all important tasks.
C	Good		A competent Member of the staff; generally achieves the standards required
D	Satisfaction		Completes all assignment satisfactorily within agreed date.
E	Fair		Performance does not always reach the required standard; room for improvement.
F	Poor		Performance does not meet the required standard.

12. Training Needs:
13. General Remarks:
14. Do you suggest the officer for Promotion? Comment indicate you opinion ____

Figure 5: Teacher's Evaluation Report

Inventory of School Facilities

The specific objectives of an inventory of school facilities are:

- Update the total number of tangible assets such as building of classrooms, infrastructural facilities, equipment and laboratories;
- Monitor the condition of school facilities on ground as this enables the authorities know how much to allocate for preservation and rehabilitation when necessary.
- Determine the carrying capacity of the classrooms in relation to the total number of the students they can accommodate in order to know whether they are fully utilized or underutilized.

Inventory of Teaching/Learning Materials

Availability of instructional resources is a necessity for effective learning to take place in an institution or organization. The state and use of teaching materials will determine the quality and outcome of education. This must be properly kept by the school authorities.

Financial Summary

Schools need financial resources to function. It is a necessity for any administration to survive. School finances should be carefully managed and recorded accordingly in relation to the school rules and regulations. And this must be done for proper auditing and monitoring.

School Record Management Schedule

School management schedules give details of a period of 12 months for three terms including school holiday in July to September to end the school calendar for the year, particularly in Nigerian academic calendar. In a school setting, there is the need for proper school record management schedules in order to maintain complete, consistent and uninterrupted information for effective work performance in an organization. (See figure 6)

School Records Management Schedule

MONTH:	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
RECORD TYPE:											HOLI	HOLI
LEARNER STUDENT:												
LEARNER'S CARD												
ATTENDANCE SHEET												
STUDENT'S PERFORMANCE (EXAMINATION)												
TEACHERS:												
LECTURERS' RECORD												
TEACHERS' PERFORMANCE												
EVALUATION REPORT												
RESOURCES:												
INVENTORY OF FACILITIES												
INVENTORY OF EQUIPMENT												
INVENTORY OF LEARNING MATERIALS												
FINANCE:												
BUDGET SUMMARY												

Figure 6: School Records Management Schedule

Life Cycles of Records and Information

In a school setting, the administrator/manager needs to understand managerial functions and relationship in discharging his duties. Also, stages of record life cycles must be properly understood for better ways of handling the documents for necessary action to be taken for a successful administration.

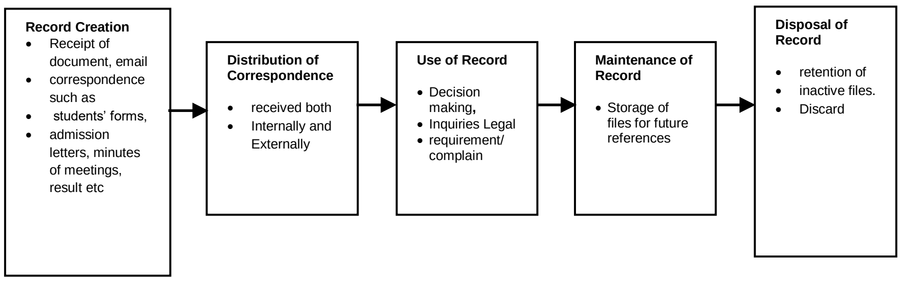


Figure 7: Life Cycle of Record and Information

Life Cycle of Record and Information

A record and information life cycle is a crucial concept that managers/school administrators must thoroughly understand for the smooth running of an organization. This shows the stages that an office record must pass through in its life cycle. This is the movement of records through the various stages of creation (receipt of record), distribution of files, both, internally and externally, maintenance (store/file/retrieve), use (decisions) to disposal (transfer, retain or destroy). Simply put, a life cycle of record information system is the movement of records through the various phases from creation, maintenance use to its disposal. This means that records have flow patterns right from the time of creation to the final stage of disposal.

Creation of records: Records are created for a purpose, as an evidence of official business. It is during this stage that the physical format of a record (paper, electronics, magnetic and photographic) and information content are established. Whenever a record is initiated, it starts by using a specifically designed form to collect information. Control over record creation rests upon the principle of record. This indicates that a record that is not created cannot be controlled.

Distribution of records: This explains how a record is forwarded to the person in charge of it. It is the exchange or dissemination of information to would be end users. Documents are distributed to different categories of people within or outside the business organization.

Use of record: This is where records and information are actively used and shared for decision making. Here, information is used either for decision making, documentation, reference purposes or in satisfying legal requirements.

Maintenance/ Storage of files: This stage determines the survival of any record in an organization. This has to do with knowing which and what records are held. Decisions are decided on how to keep them in an appropriate place, that is, in a storage facility and retrieved when needed.

Disposition/Transfer/Retain/ Destroy: This is the last stage of a record information life cycle and it involves two types of records: inactive records that may not be destroyed and are transferred to lower cost storage and records that must be destroyed. When a stipulated period of time has lapsed, such records can either be transferred to less expensive facilities by the officer in charge or to an external record equipment for permanent storage or destruction. Therefore, many records can be legally destroyed at the end of their active life cycles.

Summary

Information and Communication Technology which serves as a global networking system for human endeavour has been in existence for thousands of years. It was discovered as a means of acquiring, storing, transmitting, retrieving and processing information. From the few points mentioned above, it can be seen that technology changes ways of doing things without much stress, most especially the methods of handling records in the 21st century. Technology has electronically assisted many organizations/institutions in handling of mails.

Record management enhances the performance of school administrators, an individual and a manager in an organization. A proper utilization of records makes the roles of school administrators/managers easier. They become aware of their responsibilities and work conscientiously towards the achievement of educational objectives. However, some institutions/organizations face a lot of challenge in handling their responsibilities.

For us in this part of the globe, we need to find out the number of computer literate and internet compliant people? How many are prepared to accept the innovations that come with ICT? What about the problems posed by inadequate power supply, inadequate funding and the absence of political will in holding the bull by the horn? It seems we have not started the journey to relevance in proper record keeping? Until we imbibe the right attitude in doing things, we may never be on the mark to start the race but will remain spectators in 21^{1st} century.

Review Questions

1. What do you understand by record management?
2. What are the classifications for records? Name them.
3. What are the steps to take in the process of school record management?
4. Explain the functions of the various essential documents required in school record.
5. Critically analyse the role of ICT in school management.

Sample Research Topics

1. Effective Record Keeping: A Strategy in Curbing Ineffective Management of Schools.
2. Information and Communication Technology and School Record Management System in Tertiary Institutions in Nigeria.
3. Influence of ICT Application on School Management and Record Keeping in Tertiary Institutions.

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Chapter 4

Mentoring as a Leadership Function in the School System

Dr. Funmilola Adeyanju

Introduction

Mentoring is the art of sharing the experience, knowledge and/or skills of a specific content area with someone who needs them. In most instances, the experience and the application of the knowledge are very crucial to successful mentoring. Normally, emphasis is on the relationship between the mentor and the mentee (protégé). The mentor serves as a guide, counsellor, confidant, adviser and role model to the mentee. It is usually expected that the relationship will enable the mentee to develop holistically. In a mentoring relationship, people learn by doing because under the guidance and direction of the mentor, the mentee is given direct access to important insights and past experiences. In situations like these, people are expected to be able to put into practice what they have learnt.

Allen & Poteet (2011) defined a mentor as someone who teaches or gives help and advice to a less experienced and often younger person. Examples of a mentor include a trusted counsellor, guide, college professors, school heads, senior teachers, experienced politicians, surgeons, coaches, guide pilots and church leaders.

Leadership is a complex concept in spite of its obviously visible nature. This might be so because it means different things to many people. Maxwell (2009) viewed leadership simply as influence. It is a process involving two or more people in which one attempts to influence the other's behaviour towards the accomplishment of some goals.

In their opinion, Morphet, Johns and Reiler (1982) stated that leadership entails the influencing of the actions, behaviours beliefs and goals of one actor in a social system by another actor. This happens with the willing cooperation of the actor being influenced. Leadership is a process whereby an individual influences a group so as to achieve a goal. It entails the ability to carry along all members of the group to achieve effectiveness. In ideal situations a leader needs to exhibit supervisory skills to ensure that colleagues and subordinates develop competences and skills that will help organizational development and goal achievement.

In modern times however, more supervisory skills may not necessarily help leaders to achieve effectiveness because leadership roles are very dynamic and complex. Therefore, leaders that aspire to high level success must learn skills to become more effective and efficient. Dynamic organizations keep expanding physically, structurally and scientifically.Naturally, employees retire or get new jobs and new workers are always being recruited. This means that leaders are constantly developing new modes to train and retrain staff. As a result, leadership is closely related to mentoring because one of the major keys to leadership effectiveness in a dynamic age like ours is coaching and mentoring. Coaching may emanate from outside influence while mentoring stems from within the organization.Both of them are however, regarded as crucial leadership functions in any organization that desires growth. Opinion leaders are of the view that, to a great extent, the old rules of management and supervision may no more be effective to successfully run modern day complex organizations. This probably accounts for current successful leadership which now depends greatly on the power of coaching and mentoring to achieve success.Leadership demands that leaders acquire expert coaching techniques to enable all team members to become aware of their positions, completely devote their talents to the task at hand, give adequate support to their team mates and put in their best for organizational goal achievement.

Effective leaders need to put in place structures for effective coaching where all members feel valued and appreciated. This will in turn help members build solid foundations for loyalty and trust. Yulk (1989) observed that when bosses are dynamic, individuals who are growing on the job may not likely leave. Also, under-performers are encouraged to work harder and great performers are motivated and rewarded to become better and stronger.

Effective mentoring is a key factor to leadership success. Through mentoring, leaders assist employees to identify and utilize their full potential. Employees are also encouraged to take their full potential to the next level.

This chapter focuses on the following sub topics;

1. Views on leadership/mentoring.
2. Basic characteristics of mentors /mentoring practices.
3. Benefits of mentoring.
4. Mentoring as an essential leadership skill.
5. How does mentoring help leaders and subordinates to grow?
6. Structure of a mentoring programme.
7. Summary

1. **Views on Leadership/Mentoring**

The concept of leadership can be viewed from different perspectives. Odor (1995) opined that leadership may be grouped into three broad classes

- Leadership as a process of influence,
- Leadership as an agent of change, and leadership as a behaviour arising out of situation and authority.

Maxwell (2009) said that the concept of leadership can be defined in the idea of an individual exerting influence on others. George and Jones (1999) said that leadership entails monitoring and evaluating individual, group and organizational performance to ensure that organizational goals are achieved.

Leaders are managers because they are expected to be incharge of the five main functions of management as identified by Aibieyi (2009). These are planning, organizing, coordinating, commanding and controlling (POCCC). A leader engages in activities that are directed towards forecasting the future of an organization. In planning, leadership is focused on the art of identifying and prioritizing the organizational goals to be undertaken. It also entails determining appropriate strategies to be used in engaging all human and non-human resources to achieve these goals. An organizational structure of authority and responsibility should be adequately put in place by an effective leader. In essence, tasks should be professionalized and arranged in relevant units or departments.

Furthermore, a good leader ensures that individual/group tasks and efforts are properly coordinated. All efforts must be directed towards achieving organizational goals. Leaders are in control when all organizational activities are performed in line with established policies, rules and regulations.

Peretomode (2012) concluded that leadership may be defined as a process by which a member of a group or organization persuades, inspires and influences the attitudes, behaviour and actions of others. The leader is meant to direct other people's activities so that they will become committed to task performance that will help to accomplish set goals and thus positively move the organization forward.

Mentoring is a method of training and development that can be used to increase an individual's potential to carry out particular duties and responsibilities and get acquainted with new techniques (Hanford & Ehrich 2006).It involves the art of imparting skills and knowledge by an older or more experienced person to a younger person or a novice in a particular field. Mentoring is a deliberate attempt by an individual to train or tutor a less experienced person. The main aim of mentoring is to ensure that freshers in a particular field become better equipped for their professional lives.

Davidson & Foster-Johnson (2001) said that it is a relationship that involves the mentor's personal involvement in helping mentees grow and turn out to be self-fulfilled. Mentoring enhances the ability of leaders to acquire tools, techniques and strategies that may help them solve varieties of problems like developing the art of taking initiatives, motivation for greater achievement, ability to separate personal problems from organizational problems and building dynamic team members. According to Dubrin (2005), mentoring is a process whereby people are helped to grow and develop. A mentor may therefore, be described as an individual who has vast experience and knowledge and who is committed to giving support,care and advise to a less experienced person. The less experienced person is regarded as a mentee or a protégé.

In the past, employees took their time to learn skills through training, education and experience. However, modern day organizations require people who will learn fast and apply the learning to benefit the organization. Busch (1985) observed that educational training is an expensive venture and many organizations have difficulty preparing individuals who are destined to lead organizations now and in the future. Mentoring seems to be the answer in the transition from education to experience. Mentors are people who teach or give help and advice to other people, therefore, mentoring is very essential because it assists the modern team-based organization to succeed.

In a leadership/mentoring relationship, people learn by doing. Under the guidance and direction of the mentor, the mentee is given direct access to important insights and past experiences. In such cases, people are able to put into practice what they learn from more experienced individuals.

2. **Basic Characteristics of Mentors/Mentoring Practices**

It is very essential that leaders acquire skills to help others learn, grow and be more effective in their jobs. Leaders can become effective mentors by putting in place opportunities for a mentoring partnership and personal or professional network in mentoring within their organizations. All leaders may not become effective mentors. It is therefore important to develop some basic characteristics that may help a leader to become an efficient and effective mentor. However, Dubrin (2005) rightly noted that it is not absolutely necessary to possess all the skills and characteristics of an effective mentor but it is important that those skills be gradually developed.

Hansford, Tennet&Ehrich (2003) identified the following basic characteristics that good mentors must possess:

- Mentors must be individuals who are always willing to share their knowledge and experience with others.
- They are persons who have pleasure in encouraging and motivating others.
- They are individuals who desire to ask and provide avenues to answer challenging questions.
- They should be people who are always eager to contribute to other people's growth and success.
- These are persons who are ready to invest quality time in the process of mentoring.
- They must ensure that mentoring procedures contribute a great deal to their own career goals and to community development.
- They must be individuals who are willing to identify the type of people they want to mentor and the specific areas of the person's

life they want to work on. David (2001) stated the following basic characteristics that may help mentors to be effective: They must be nurturing positive persons who promote the growth of others; be able to build trust, show empathy, listen actively, influence tactics, help others set goals, monitor other people's performance, give feedback, encourage positive actions, discourage negative actions, help others solve problems and help difficult people.

In mentoring practices, a competent mentor must possess the ability to increase mentees' competence level. It is only when the level of competence increases that individuals in an organization can achieve greater/better performance. A good mentor normally provides opportunities for challenging assignments that are directed towards positive organizational development. In the process of mentoring, it is essential that the mentor make available all needed materials, information and information sources. Mentoring practices are also focused on an expanse of activities that involve extensive teaching and coaching on varieties of related subjects and topics.

It has been established that people learn more through examples laid down by leaders. Mentors are role models,so they should set good examples for their mentees to follow.

Furthermore, practices in mentoring include the leader's ability and willingness to develop self confidence in their mentees. This may be achieved if subordinates face challenging tasks and are given a free hand to proffer necessary solutions. A lot of encouragement and praise when and where necessary should also be done. Furthermore, mentees need to be corrected in love so that a true sense of confidence can be built.Okoh (2009) opined that two major styles may be identified to ensure good mentoring practices. They include: The equipping and the empowerment styles.Effective mentors should provide opportunities to holistically equip their mentees and also give them necessary backups.

Mentors should empathise with their mentees' thoughts, feelings and observations about a particular situation or challenge. A good mentor also possesses traits to appreciate and praise others especially when they have shown signs of commitment and success.

How does Mentoring help Leaders and Subordinates to Grow?

Leadership skills are constantly needed in all growing organizations. Owen (2011) rightly observed that in any organization, growing leadership expertise within a short period of time is a herculean task. Organizational development has become highly dynamic as new projects and innovations are frequently embarked upon. This also translates to the fact that vacancies come up for leadership and managerial positions. However, the challenge here rests on the possibility of these new sets of people acquiring relevant knowledge. And even if they are sent on short courses, how can they apply what they learnt to enhance organizational development within a short time?

In conventional settings, would-be-leaders are sent on training to learn skills but they acquire knowledge, education and experience on the job. However, because of the fast pace of technological development, organizations may not be able to wait for such a long period as was the situation in the past. Apart from this, opinion leaders are of the view that education and training cannot always be administered, especially taking into consideration the huge cost of training. In the light of this, modern day organizations have to derive suitable means to bridge the gap between education and experience. This is where mentoring comes in.

Mentoring helps leaders and subordinates to develop appropriate behavioural patterns that may enhance an improved level of competence. When a competence level is developed, leaders (mentors) and subordinates (mentees) have improved knowledge, skills and attitudes necessary for organizational development.

In the school system, principals, vice principals, heads of departments and year heads are the leaders and invariably, the mentors. They are expected to continue to develop their leadership skills by exposing new and inexperienced teachers and support staff members to the right professional knowledge and etiquettes. They also learn from these relationships because some of the younger teachers might be current in some important issues especially those that have to do with new technologies.A mentoring relationship is very unlike leadership/subordinate relationships because mentoring's main objective is to identify and encourage both effective and non-effective mentees whereas the latter relationship may not be interested in ineffective workers. It sanctions ineffectiveness instead of providing opportunities for improvement.

Invariably, mentoring helps both sides to ask questions, find out and address areas of weaknesses. Furthermore, people are given the opportunity to learn from other people's mistakes and experiences. When this is done, the school system experiencesa desired holistic growth. (Aloko 1999).

Benefits of Mentoring

Mentoring is of great benefit to the mentor, mentee and the organization. Mentoring adds value to the professional and private lives of both the mentor and the mentee. In order to excel in their different professional areas, potential leaders need people who can guide them, people they can refer to as role models. Therefore, for an all-round success in any field of endeavour, would be leaders need role models and adequate guidance. Mentoring brings about opportunities to become role models and assists in the personal as well as professional growth of the mentee. These practices therefore, help both the mentor and the mentee because the mentor gains a wide range of experiences in the course of mentoring. He becomes more confident and this aids his professional growth. Mentoring also gives opportunities to strengthen mentors' leadership skills.

The mentor while developing mentoring relationships, becomes widely acquainted with people from different backgrounds and with diverse characteristics traits. He develops the capability to manage people of different age groups, religious affiliations, tribes and cultures. As a role model to such people, the mentor himself becomes more responsible in handling situations and circumstances. His performance at work greatly improves as he becomes highly conscious of being a success and not an embarrassment to his mentees. Mentoring can also give a new perspective to one's performance. This is because the mentor ideally wants to constantly do a self-appraisal.

In mentoring, individual self-esteem may be greatly enhanced. The mentor becomes positively proud of up-coming professionals that are being mentored. At the same time, the young professional also becomes proud of his role model who inspires his professional growth. New staff members get acquainted with the rules and regulations guiding the operations of the organization through early orientation mentoring programmes. The Organization's life too becomes more practical through mentoring programmes. This is because mentors expose mentees to written and unwritten issues in the organization. This helps the mentees to develop new horizons in the organization and their career development. Thus, mentees have a wider view of organizational operations, naturally develop a sense of belonging and total commitment. They are thus encouraged to put in their best and even guide others who come behind them.

In the opinion of Robbins (2001), mentoring aids the development of competence in the organization. As a result, organizational investment experiences desired growth. Furthermore, it creates a conducive atmosphere for a very organized skill transfer scheme. Actually, in mentoring, the well experienced staff members are given the opportunity to transfer necessary on-the-job skills and knowledge to the mentees. Lapses in behaviour that may hinder mentees' professional development may be detected and corrected early by mentors. Mentoring also builds a solid work force because all workers are adequately motivated through a comprehensive mentoring programme. Organizational development, most often, is related to the styles and procedures of leadership and mentoring. Leadership is closely linked with mentoring and the handling of both concepts may have positive or negative effects on the achievement of organizational goals. It has been asserted that leadership portrays one's ability to ensure that organizational activities are well coordinated with the cooperation of all stakeholders.

Leadership is an administrative behaviour and before a leader can perform optimally, he has to be able to get the cooperation of colleagues and subordinates through appropriate acts of coaching and mentoring. By the authority vested on the leader, he is able to expose others to the intrigues of the profession (Zachary, 2000).

A successful leader should be an effective mentor. All organizations need to identify relevant procedures and technology that may help in implementing processes of mentoring because the issue is of massive benefits to the leader (mentor), the subordinate (mentee) and the organization at large.

This chapter has been able to establish the fact that mentoring aids positive growth in leadership skills. It is imperative for school leaders to make use of mentoring techniques to enhance competence in the system.

Structure of a Mentoring Programme

A mentoring programme may be structured in various ways. Thomas (2001) identified one major way as the ability of mentors to establish effective activities and conversations to encourage and build self confidence in the mentoring programme. Some of these activities may include:

i Identifying and highlighting mentees' areas of strength.
ii Discovering mentees' areas of weaknesses and making positive efforts to work on them.
iii Going out to lunch.
iv Introducing mentees to mentors' immediate family members and getting to know theirs also.
v. Encouraging mentees to always try something new on the job.
vi. Encouraging mentees to teach the mentors something that seems difficult for them.
vii. Giving mentees sincere one-on-one praise for excellence.
viii Correcting mentees on one on-one basis when their actions and activities fall below the expected standard.
ix Being constantly open and available for discussion. The mentor should do some mentoring on the phone especially when face to face meetings are not feasible.
x. Discussing other things apart from job issues. This may be done if the mentor is knowledgeable in various areas of endeavours. In this instance, social, religious or professional magazines and articles should be read and discussed by mentors and mentees.

Furthermore, mentors must be very observant. They should put in place strategies to observe how mentees relate with them. So also, mentors need to find time to attend mentees' special events, for example, marriage ceremonies, birthday parties, child naming ceremonies, etc. Mentees should also be assessed from time to time on the quality of the mentoring relationships.To this end, mentors need to give room for mentees to express positive, accurate and correct feedback on all issues. Finally, mentors should encourage mentees to meet other mentor – mentee groups on the job.

It has been asserted that if all these activities are well structured, mentoring programmes will become more rewarding for organizations, mentors as well as mentees (info@ementoringgroup.com).

Summary

This chapter dealt with prevalent issues on leadership and mentoring Leadership entails the ability of leaders to acquire modern skills to train and retrain their staff in order to achieve set organizational goals. It also focused on some basic characteristics of mentors as well as standard mentoring practices. Important benefits of mentoring to the organization and individuals were further noted. Potential leaders should ideally relate with people who have the ability and capability to guide and direct them on the ethics of the profession. The world is very dynamic therefore, education and experience have to be considered in organizational development. Furthermore, the chapter emphasized the fact that mentoring programmes should be well structured and they should be a part of personnel functions in all organizations. Mentoring is indeed a very important skill in leadership.

Review Questions

1. Discuss elaborately some basic benefits of mentoring.
2. How does leadership relate with mentoring? Back your write up with practical examples.
3. What is mentoring? Explain ways leaders can become effective mentors.
4. Identify and discuss in detail seven characteristics of a mentor.
5. State the significance of mentorship as a means of developing and achieving organizational goals.

Sample Research Topics

1. Faculty mentoring schemes and lecturers' Job Satisfaction.
2. The Role of Mentors in the Professional Development of Secondary School Teachers in Nigeria.
3. Mentoring Programmes in Secondary Schools in Nigeria: Strategies for Improvement.

4. Impact of Mentoring skills on Principals' Professional Growth in Nigeria: A Comparative Analysis.

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Chapter 5

DECISION-MAKING THEORIES AND MODELS

Prof. Norah Omoregie

Introduction

Decision-making is at the centre of every organisation, although individuals are also involved in personal decision-making. It is the method of selecting a course of action among other possible alternatives. It involves establishing and selecting possibilities based on the degree of importance and specified parameters of the choice makers. Senior managers in companies, industries, ministries, schools, churches and even in families are daily confronted with making decisions.

Decision-making is necessary to avoid wastage, and to be able to cope with any uncertainty that may arise. There are different theories and physical representations (Models) of choice-making. This is because of the background of the choice makers, their values, available information and available facilities. It is the objective of this chapter to discuss decision-making theories and models. Theories are defined as sets of ideas put together to give meaning or interpretation to a phenomenon. According to Kerlinger (1986), a theory is a group of thoughts, opinions and beliefs built together to present a common picture of a situation showing how variables are related to one another, with the hope of interpreting that situation and what may happen. In the study of educational administration, Emile Durkheim (1991) defined a theory as a group of ideas, beliefs and opinions considered to be true and related to each other, and which consistently defines and explains occurrences in behaviour in educational organizations.

Models are representations, copies or figures of what the objects look like or how the objects work. This chapter discusses the various types of decision-making theories and models:

i. The Rational Model.
ii. Bounded Rationality Model.
iii. The Gradual Increase Model.

iv. The Organizational Procedures Model.
v. The Political Model.
vi. The Trash-can Model.
vii. The Individual Differences Perspective Model.
viii. Normal Choice-Making Model.
ix. The Multiple Perspective Approach.

- Consumer Decision-Making Models.

i. Usefulness Theory.
ii. Satisfying Theory.
iii. Prospect Theory.

- Factors That Affect Decision-Making.
- Decision-making processes.
- A Typical Decision-Making Model (Turpin, S. and Marais, M. 2004).

i. **The Rational Model**

The decision maker is faced with making a choice between a set of alternatives. A number of steps are involved in rational decision-making as outlined in Simon's work (1977).

- Capacity of the Mind: Identifying opportunities for choice making.
- Composition: Creating, manipulating and breaking down options of lines of actions.
- Selection: Choosing one specific way of acting differently from other ways that are there.
- Review: Looking at previous selections.

The rational decision-maker has the ability to raise many alternative solutions to the problem on ground and put numbers on them according to their usefulness to each alternative. The alternative with the highest utility is therefore, chosen. It is believed here that the decision maker knows all the alternatives that could be applied and the repercussion of applying any of the alternatives. He has a pre-determined choice of solutions for out-comes of the selected alternative and the ability to compare the outcomes of the chosen alternative.

All utilities and probabilities are subjectively assigned numerical values by the decision maker and the alternative with maximum utility is chosen. This has been a dominating principle for decades.

Although this model is based on reasoning rather than emotions, since reasoning is affected by one's background, available information and facilities, some discrepancies may be expected. The decision maker may not know all the alternatives that could be applied or the repercussions for any alternative applied. He may have the ability to compare the outcome of choices made or statistical values or usefulness attached to any alternative during the time of selection. The importance or usefulness attached to every stage of making decision is highly subjective, so it may not be a perfect decision making model.

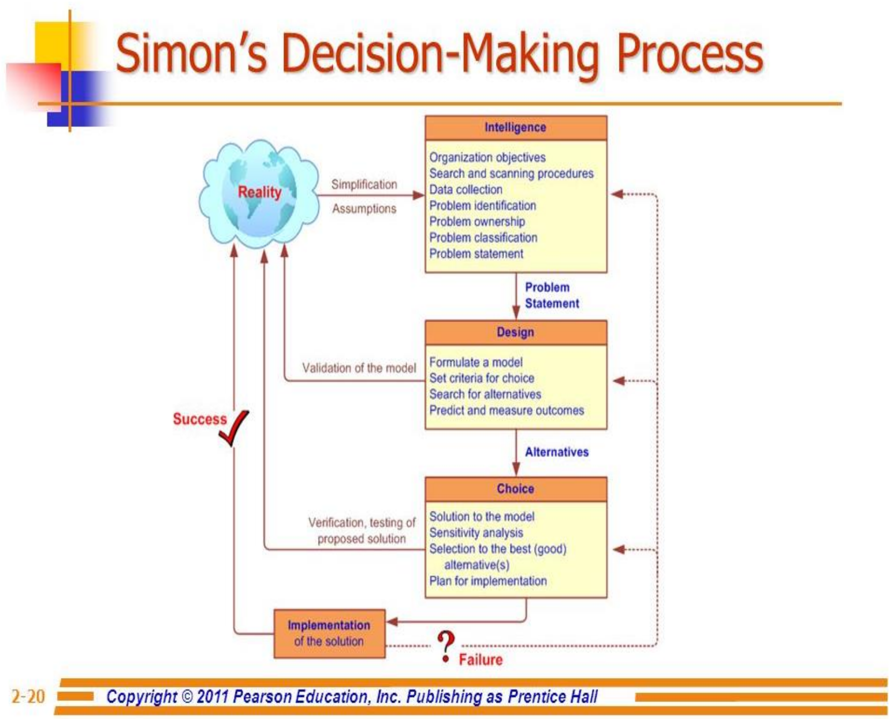

Figure 1: Simon's Decision-Making Process
Source: 2011 Pearson Education, Inc. Publishing as Prentice Hall

The Bounded Rationality Model

This also is greatly attributed to the work of Simon (1979). It is a "satisfying" oriented process with six steps:

1. State the problem.
2. Point out standards for making decisions.
3. Weigh the standards.
4. Raise alternatives.
5. Match every alternative with each standard.
6. Decide the most useful choice.

The one deciding does not have all the information needed to make all the choices, so optimal choices are not compulsorily required but the choice still has to be made. As was said by Simon and quoted by Chase, V., Hertwig R. and Gigerenzer G (1998), "Human choice of reasoning is diagrammatically represented by a weapon or a cutting tool whose cutting edges are the organized job environment and the abilities of the key player to write or manipulate solutions."

These scissors cut the problem to smaller chunks that could easily be searched. In this model, the decision maker is occupied with the action of searching for a satisfying alternative. Every identified alternative is evaluated and one of them is believed to **"satisfice"** and the search is ended. It is assumed that the decision maker has the knowledge of all the regularities in the task environment.

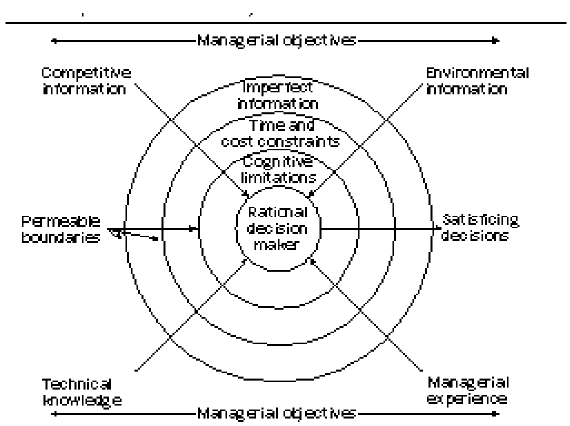

Figure 2:The concept of bounded rationality (i)
Source:Important People Who Have Contributed to This Branch,cogpsychdecisionmaking, https://cogpsychdecisionmaking.wikispaces.com/Important+People+Who+Have+Contributed+to+This+Branch

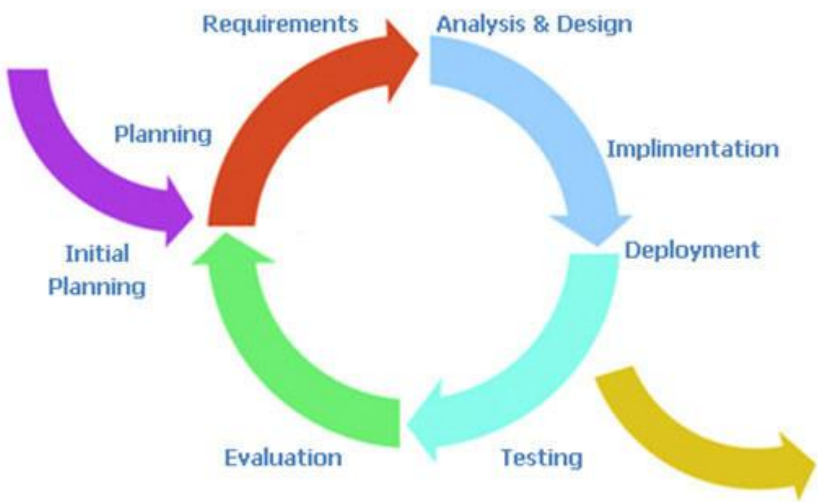

Figure 3: The concept of bounded rationality (ii)
Source: Incremental Model, November 8, 2008 by Amir Ghahrai
https://www.testingexcellence.com/incremental-model/

The Gradual Increase Model

The Gradual Increase Model was an attempt to correct the deficiencies of the rational model. It believes that the selection of goals and objectives is tightly chained to the scientific analysis of the problem. The managers here select possibilities for solving a problem slightly from existing policies instead of making new ones to solve the existing problems. The consequences tied to alternatives are defined and redefined and adjustments are made, seeking for a better policy that could be managed. In this model, a good decision is agreed upon. A single decision that has a solution to the problem on ground is hardly available. Incremental decision-making is remedial rather than being holistic. It can hardly solve future problems. Step by step processes of incremental actions are taken while keeping the strategy open to adjustment. The aim of this model is to provide solutions to existing problems rather than work towards existing goals. The good thing about the model is that it gives room for logical incremental adjustment during decision making processes.

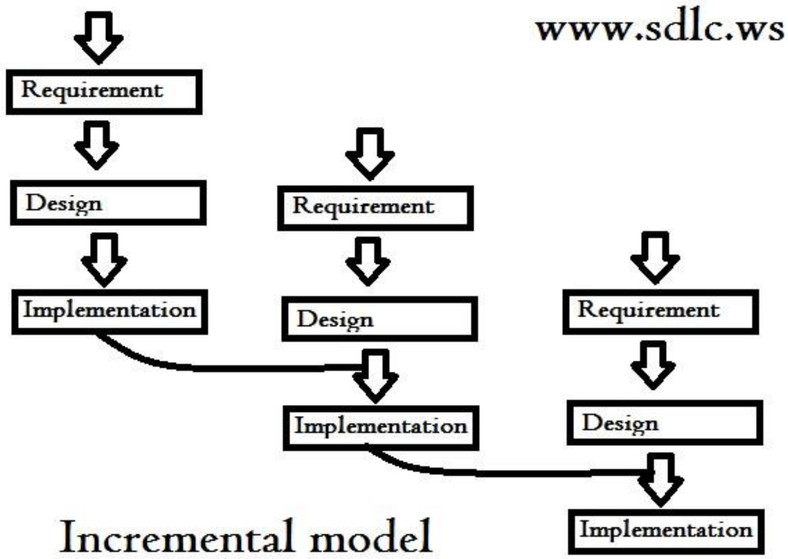

Figure 4: Gradual Increase Model
Source: Incremental Model in SDLC, Wednesday, October 6, 2010. http://prd4testing.blogspot.com.ng/2010/10/incremental-model-in-sdlc.html

The Organizational Procedures Model

The above named Model wants to study the choices made as the products of standard working methods generated by restructuring all the parts of the organization (Turpin S, and Marias M, 2004).

Many theorists contributed to this model, giving it a name from their own point of view. The decision makers here are interested in promoting organizational interests. Decisions are a sum total of standard operating procedures given by organizational subunits. Huber (1981) saw it as aprogram model, showing that decision are earlier series of events planned with procedures already in existence as well as the routinized deliberations of those making such decisions. Krabuanrat and Phelps (1998) saw this model as the use of codified organizational experience. Das and Teng (1999) called it the avoidance model indicating that choice making in an organization is a fixed plan aimed at retaining the existing order while solving problems at the expense of innovation.

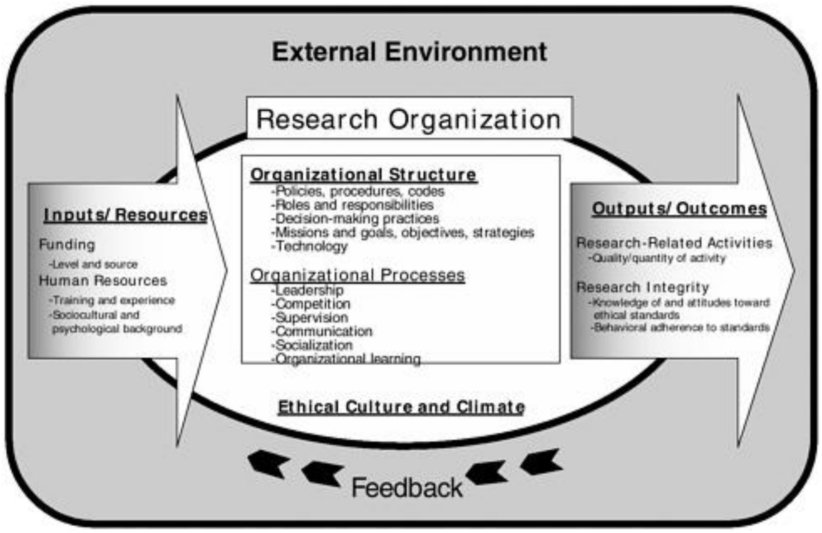

Figure 5: The Organizational Procedures Model in a Research Organization
Source: Integrity in Scientific Research: Creating an Environment That Promotes Responsible Conduct (2002), Chapter: 3 The Research Environment and Its Impact on Integrity in Research.

The Political View Model

This Model sees choice making in an organization as an individual bargaining process motivated by the agenda of those involved rather than reasonable judgement. Those in the organization differ in their belief about the organization’s goals and values and relevant information. When people have opportunities to be involved in decision-making, personalized views are projected so that the choice-making does not come to an end, rather, it remains a war between different organizations. Choice-making is doctored by influence, power and self-interest. When another party comes to power, policies are changed due to personal interests and not by generality. Pfeiffer (1981) saw politics and power as major determinants of decision making in this model.

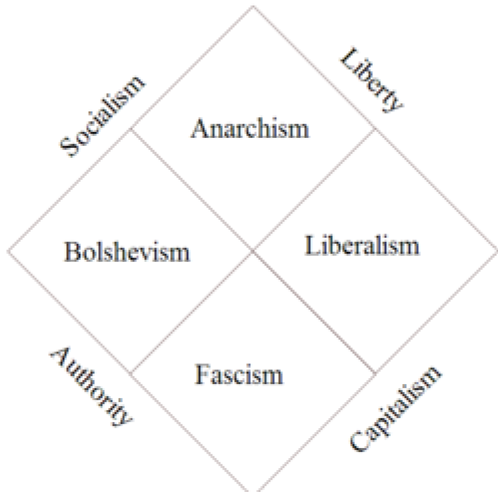

Figure 6: The Political View Model
Source: Political Spectrum, Wikipedia, https://en.wikipedia.org/wiki/Political_spectrum

The Trash Can Model

The Trash Can Model focuses on decision-making in a troubled organization. The research of Cohen, March and Olsen (1972) presented decision-making in a seemingly pluralistic organization with several actors having divergent purposes and opinions. Unlike in political circles where decisions are deliberately manipulated by participants, a decision is an outcome of several relatively independent streams in the organization. In this model, there are several unsatisfactory situations searching for ways to cry out and there are streams of solutions waiting to be applied to solve problems and participants with divergent ideas who are also permanent.

All these streams are gathered in a supposedly “Trash Can” which is a choice opportunity where a decision is made. When a choice is made, the trash can may be thrown away. This might happen without a solid solution to the problems in the trash can. The decisions made here are dependent on the quality of the participants currently in the can.

The Trash Can Decision Process

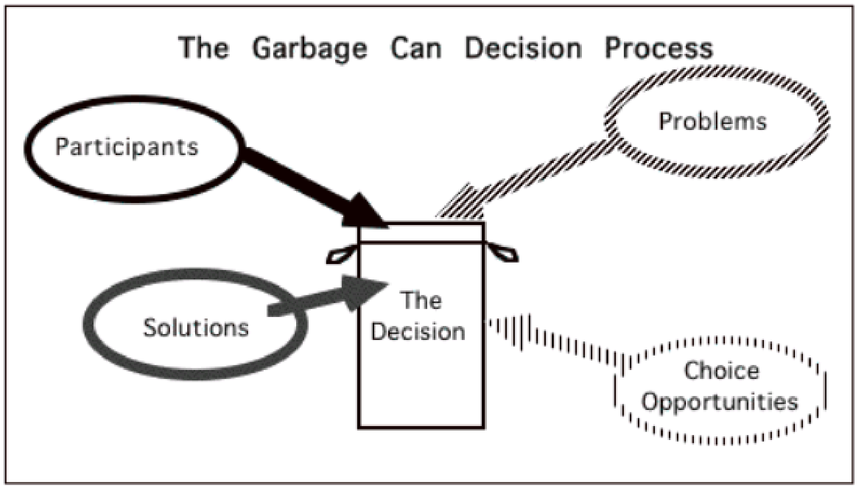

Figure 7: The Trash Can Decision Process
Source: Urban Complexity and Planning: Theories and Computer Simulations, by By Shih-Kung Lai, Haoying Han, Page 26.

The Individual Differences Perspective Model

This type of model believes that problem solving and manner of solving problems by a particular manager are affected by the manager's upbringing, personality and method of decision-making. If this is the case, managers will certainly come to final decisions of different backgrounds and different decision-making styles. Keen and Scott Morton (1978) contributed to this model.

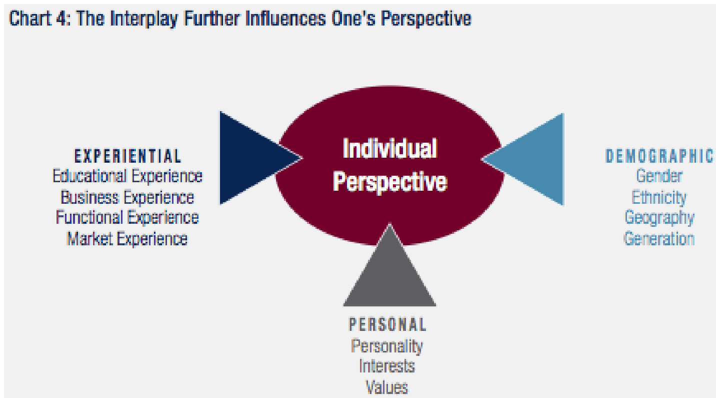

Figure 8 (i): The Individual Differences Perspective Model
Source: ©2017 Russell Reynolds Associates, Board Directors and Chief Executive Officers. Different Is Better: Why Diversity Matters in the Boardroom, http://www.russellreynolds.com/insights/thought-leadership/different-is-better-why-diversity-matters-in-the-boardroom

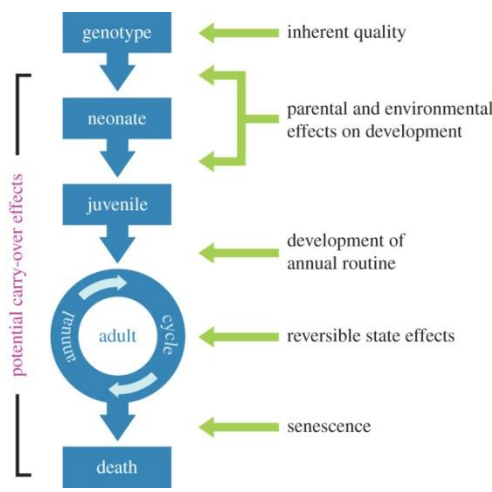

Figure 8 (ii): The Individual Differences Perspective Model
Source: The Royal Society, An ontogenetic perspective on individual differences, fig. 2, Nathan R. Senner, Jesse R. Conklin, Theunis Piersma. Published 2 September 2015.DOI: 10.1098/rspb.2015.1050

Normal Choice - Making Model

Normal Choice Making Model has to do with enquiring and knowing choice making in its normal setting. It is strictly practical and different from other models that are descriptive. Klein (1998) contributed to this model when he studied and investigated over 600 choices made by people who looked after those that were ill in a hospital or persons in the army. Klein's input on the field of Normal Choice Making Model in the present circumstance is very much like that of the past occurrence. The choice-makers, in addition, are able to identify plans to be taken that could be successful. Klein noted that one of the major influences on right decisions is a previous personal involvement. The RPD Model buttresses the suggestion that a previous personal involvement increases one's ability to recognize a new similar occurrence.

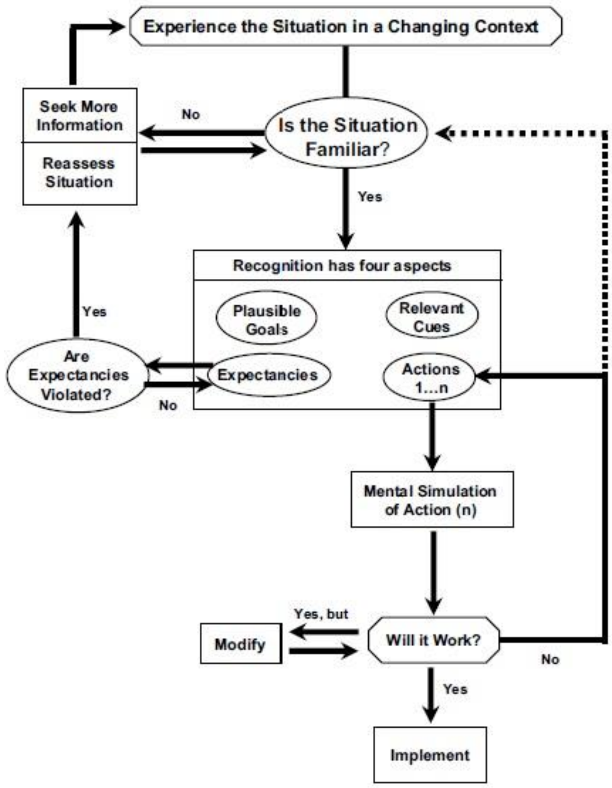

Figure 9: Model of Recognition-primed Decision Making
Source: Model of recognition-primed decision making. (Decision making in action: Models and methods. G. Klein,J. Orasanu, R. Calderwood, C. Zsambok, Editors.

The Multiple Perspectives Approach Type

The proponents of this type of choice-making model were Mitroff and Linstone(1993). The reason for coming up with this numerous perspective methods was to capture all the available ways of thinking about a problem. Earlier, Churchman (1971) had come up with the idea of unlimited systems of thinking that assumed every problem originated from another problem. It was on this assumption that Mitroff and Linstone built their multiple perspectives approach. These several ways of viewing problems grouped all ways of thinking into mechanical (having to do with machines), and human or personal modes.

Every attempt to inform so as to analyse the problem in the system is under technical perspective, so also all modelling projects, hence, the possibility of obtaining several technical views in a system. Organizational and individual perspectives covered as data are collected about the views of role players and stakeholders. The “sweeping approach” is included when data is collected from other sources outside the role players and stakeholders. In addition to technical, organizational and individual views, Mitroff and Linstone included ethnical and aesthetical perspectives to this model.

According to them, even when a decision looks sensible from technical perspectives or is well endorsed by an individual or a group of persons in the organization, the question of ethnical or aesthetical perspectives must be answered. It is not complete until these two later perspectives are considered.

Consumer Decision-Making Model, Strategies and Theories

It is interesting to know that sellers control all general rules of selling, so buyers choose which products and services to purchase and also the model or type. Three decision-making models arose from this and without doubt, the school managers, and other public and private managers have things to gain from consumers’ decision-making models.

Figure 10: Consumer Decision-Making Model, Strategies and Theories
Source: Marketing & Buyer Behaviour - the Decision-Making Process. http://research-methodology.net/consumer-decision-making-process-a-detailed-analysis/

The three theories are discussed as follows:

- **Usefulness Theory**

The proponents of this theory believe that customers make choices based on the usefulness of the goods. These customers are capable of reasoning and are able to see the likely results of wrong choices and so choose things that will be of utmost usefulness.

School administrators and managers should make decisions based on alternatives that will maximize the well-being of the school, staff and students. Utility becomes a reference point in making decisions.

- **Satisfying Theory**

This was proposed as an alternative to Usefulness Theory in the mid-1950s by Herbert Simon. This theory believes that consumers stop their decision-making immediately they get to their destination, for instance, when people are looking for a new area to settle in.

In the case of usefulness theory, customers will first assess all available options in the market, judge the level of usefulness, and then choose the option that will offer utmost usefulness. Under the satisfying theory, consumers may only rate or score the newly discovered apartment because of nearness to a desired location and accept it as **good enough**. This theory was considered more robust than Usefulness Theory. However, it had its short coming in the area of prediction. Funds and facilities are never enough for the school system. This is due to an increase in students' population and consistent use of facilities that lead to dilapidation. Satisfying theory may be important to school managers who may apply the principles of **"good enough"** instead of not having at all.

- **Prospect Theory**

This theory emerged as extra determinations were made to have more understanding of consumers' choice-making than statistical maximization of usefulness theory including not providing a choice that maximizes satisfaction theory. The Prospective theory was mooted by Daniel Kahneman and Amos Tversky (1970). Two elements that were added were the concepts of value to replace utility and the concept of gift that makes something more admirable if it belongs to a person than to someone else. The concept of desirability makes available a measurement one can compare when assessing profits and losses emanating from the point of reference. There is often a slight increasing or decreasing difference between reference point and profits or losses. The two elements added should be of great interest to school administrators and managers. Ultimate value should be of paramount concern when deciding on school policies or acquisition of school property. Also, the concept of endowment should be beneath the choice of having necessary equipment in the school rather than continuous borrowing of such items from neighbouring schools from year to year.

Factors that Guide Decision-Making

- **Governmental Values**

Governmental policies concerning issues guide decision makers. The question is "What did policy say concerning this issue?" What is the blue-print concerning this issue on ground? An example could be the admission of students into a university with at least five credits, including Mathematics and English. Any university that disregards such government policies certainly face the wrath of the government.

Beliefs of the Organization

Those who make decisions in an organization, particularly the officials who are part of bureaucracy, are controlled by the beliefs of the organization. Administrators have a subtle way of using rewards and sanctions to induce workers to act in accordance with the values of the organization. Decision-makers in every organization must take cognizance of values that will promote and enhance its interest.

- **Professional Values**

Norms exist in every profession. These norms are the guiding principles or ethics of the profession and are sometimes cultural to the profession. Lawyers, doctors, engineers, teachers, all have their professional values or norms that shape decision-making behaviour.

- **Ideological Values**

This is the belief system of a nation. Patriotism was the highest philosophy in describing the behaviour of large number of leaders and Operation Desert Storm. Traditional views and political movements built on personal freedom are American political ideologies while democracy is the ideological value guiding decision-making in the Nigerian political system.

- **Personal Values**

For individual decision-making, personal values are certainly major factors that guide it. Values such as personal ambitions, reputation, self-interest, level of education, social-economic status and religious beliefs dove-tail individual decision-making.

Processes of Reaching a Decision

✓ Manktelow& Carison (2010)

1. Make up a helpful environment.
2. Raise good possibilities.
3. Examine all the possibilities.
4. Select the most appropriate possibility.

5. Examine your choice.
6. Inform others about your decision and begin to take action.

✓ Brown(2010)
1. List out your goals and expectations.
2. Collect data.
3. Generate possibilities.
4. State advantages and disadvantages.
5. Make your choice.
6. Take steps to actualize your choice
7. Scrutinize the outcomes of your choice.

✓ Stockphoto/Maica Approach (2010)
1. Develop a positive choice making environment
2. Raise positive solutions.
3. Scrutinize each of the solutions.
4. Make selections.
5. Examine your selection.
6. Inform and take steps to actualize the choices made.

A Typical Decision-Making Model

Finally, there is a decision-making model that gives an insight into the process of decision-making. The model has parts that are not in agreement with the patterns in Simon's (1977) model of logical sound choice-making where alternative lines of actions are planned. The stage agrees with the several component views of Mitroff and Linstone (1993).

The model also shows a convergent phase where individuality and self-visions play an important role. If the choice-maker is in doubt and the situation is not stable, the focus could be delayed so as to maintain choices until the last moment. For a decision maker whose personality is that of someone who is quick to act, the gap in the phase may be shortened.

The action of balancing could result in racing cycles between the disagreement and agreement stages. The whole process in the model is also affected by other factors such as entanglement of the problem, time pressure and the surroundings.

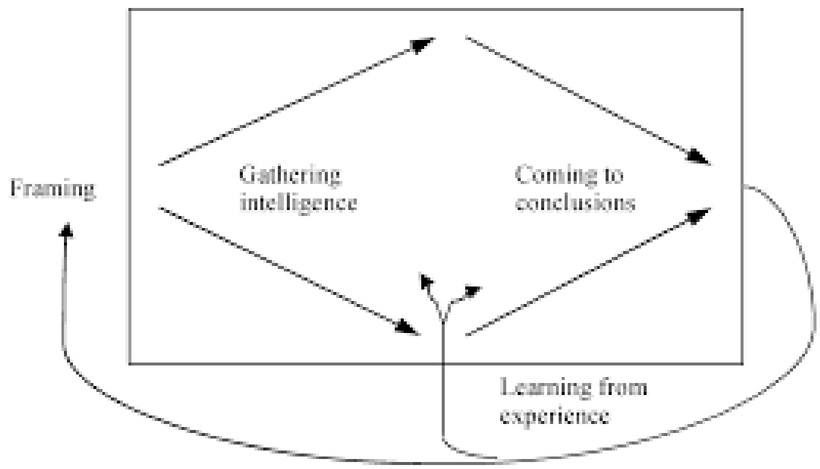

Figure 11: Stages of a Decision-Making Process
Source: Russo and Shoe-Maker (2002)

Summary

The chapter examined various decision-making models found among decision-makers in industries, factories and governments including public and private offices. It also included decision models and theories found among consumers and marketers. In all, ten decision-making models and theories were identified. It scrutinized factors that affected decision-making processes since the factors were the reasons for different models.

Three different decision-making processes were outlined and a diagrammatic model of what goes on internally during decision-making was also included. Without doubt, students who want to know about decision-making will find this chapter very useful and easy to understand.

Revision Questions

1. Discuss any five decision-making models that could be useful to school managers.

2. Identify the usefulness of the following models to a school head:
   i. The Rational Model.
   ii. The Organizational Procedures Models.

iii. The Trash Can Model.

3. What lesson will each of the following models and theories add to the knowledge of school decision-makers?
   i. Usefulness Theory.
   ii. Satisfying Theory.
   iii. Prospect Theory.

4. Why is the knowledge of factors that affect decision-making important to decision-makers in Educational Administration?
5. (a) Outline and discuss any step in a decision-making process.
   (b) Draw a decision-making model and discuss events expected to go on in the model.

Sample Research Topics
1. Decision Making Process and Administrative Effectiveness in Formal Organisation.
2. Impacts of Participative Decision Making on School Effectiveness.
3. Relationship between Decision Making Process and Organisational Behaviour in Secondary Schools
4. Decision Making Process and School Management Effectiveness

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Chapter 6

Ethical Issues in School Management and Classroom Communication

Dr. Olukemi Oyetubo

Introduction

Ethics can be defined as the science that deals with the acts of right and wrong, moral principles, judgment and acceptable conduct. It also defines decisions and explains behaviours. The knowledge of ethics also helps us to take informed decisions, (Kizza 2007). Issues that are ethical are part of everyday life in every school. These often involves taking informed decisions when there are challenges in the system, (Campbell 2004).

According to Eric Digest (2015), ethics is an idea or a moral belief that influences the behaviour and attitude of people. Ethics are also seen as the code of the behaviours considered correct, especially that of a particular group, profession or an individual. Ethics give expression to the norms and values that are prescriptive for an acceptable behaviour, action and functions in a specific school. Ethics could also be described as a guide to action or rules guiding an individual or determining professional behavior. This is because what is acceptable in an organization may not be acceptable in another and for entirely legitimate and logical reasons. Ethics enable us to understand humanity and further instructs on how to make logical progress.

For instance, many factors affect the decision of teachers regarding learners in their care. This is because the teacher is involved in all aspects of learners' development, be it physical, social and emotional. This topic will therefore be discussed under the following subheadings:

a. Ethical Issues in Education.
b. Ethical Issues for Classroom Management.
c. Ethical Responsibilities of a School Administrator.
d. Possible Ethical Dilemmas.
e. Notions of Management.

f. The Concept of Classroom Management.
g. Importance of Classroom Management.
h. Communication in the Classroom.
i. The Importance of Communication in the School.
j. Suggestions for Effective Communication in the Classroom
k. Summary
l. Sample research topics
m. Review questions
n. References

(a) Ethical issues in Education

Ethical issues in any educational sector include rules and regulations that form educational policies. Ethical standards enable students, administrators and educators to ensure quality education. These issues are geared towards creating the right climate for effective teaching and learning.

Schools are supposed to make learners know the difference between unacceptable and acceptable behaviour. Any ethical policy must, therefore, evolve the schools' missions and values. Such policies must also be consistent with and work alongside existing ethics related documents.

Ethical practices and principles are major undertakings which require leadership, commitment, resources and time. It is also vital that school administrators set examples by demonstrating such ethical behavior and living by the school's ethical principles themselves.

(b) Ethical Issues for classroom management.

Classroom management is the action preliminary to a teacher – student class interaction, class grouping, curricular designing, time – tabling and formulating school rules and regulations: The administrator must, therefore take cognizance of the following: (Anumnu and Oyetubo, 2009):

i. Appropriate Leadership Model

The learner must see his or her teacher's behaviour as appropriate or positive every time. Hence, the teacher must exhibit behaviours worthy of emulation. To do this, the teacher must develop a relationship of genuine respect, care and trust with his or her learner. The learner then models his behavior after the teacher's behaviour.

ii. **Self-discipline Model**

Self – discipline is one of the major goals of any management practice. Teachers/educators should put strategies in place to enhance this in the classroom. This may be achieved by creating an atmosphere of trust and respect for the learners.

iii. **Matching Experiences with Learners' Model**

Schools should encourage constructive experiences of learners. When this happens, learners are most likely enabled to influence their behaviour. Invariably, this will bring about high regard for other people.

iv. **Display of Empathy Model**

Empathy is the ability to understand and share the feelings of others. Thus teachers need to objectively consider the challenges faced by learners. These should be dealt with adequately.

v. **High Expectations**

It is the duty of the teacher to communicate with and also believe in the ability of each learner while ensuring maximum achievement from them.

vi. **Freedom and Independence to Function**

Learners should be given the chance to be independent. However, a good teacher sets appropriate limit of freedom so as to avoid unnecessary injury. Before the virtue of self reliance can be developed in learners, they have to be taught how to take responsibility for their various actions and inactions.

vii. **Normalization Model**

Learners should be provided with natural and safe environment.

viii. **Fairness Model**

Teachers should exhibit fairness in all aspects of school life. Positive reward should be given when necessary. It is also imperative to punish *offenders without showing favoritism. This will enhance pupils' holistic* development.

ix. **Respect for Dignity and Worth of the Individual**

Teachers should make opportunities available for learners to acquire or improve their skills. All learners should be accorded due respect irrespective of their background.

x. **A Continuum of Behaviour Management Interventions**

The teacher should use invention strategies that will help the child to be free and at the same time proactive in the classroom.

xi. **Behavioral Change must be Rational and Well-planned**

All classroom activities should be geared towards learners' improved classroom performance. Ethical issues should be considered even when behavioural changes are required.

xii. **Consent**

Teachers need to avoid activities that bring about clash of interest and unnecessary rivalry. Therefore, appropriate authorities should be given their due respect.

(c) Ethical Responsibilities of a School Administrator.

The concept of governance incorporates four fundamental issues which are:

- Managing the organization to make the best use of available resources.
- Reflection of values and goals in the system and established structure.
- The nature of interaction established by leaders that gives rise to the commitment of workers.
- How application of leadership is formerly put into practical use.

Schools should, therefore, use certain codes as guides when developing ethics for administrators. The implementation of these ethics involves the administrator having to conduct himself in the following ways:

(1) Be Professional

The administrator should be accountable for his own professional growth by making sure that he keeps up to date with curricular and co-curricular issues. He should be trustworthy and reliable at all times.

The administrator must see his school as an institution for learning. Furthermore, there should be promotion of systematic learning and teaching in the school. This may be achieved when the needed inputs are supported.

(2) Accept Responsibility

A good administrator should be a children disciplinarian. That is children's discipline should be uppermost in his heart. Learners should be encouraged to be above board in their behaviour. Negative behaviour should be identified and corrected immediately. The administrator must ensure that he makes available individual support for each pupil. He should be very sensitive to the learners. Challenges should be handled in ways that everyone involved is happy.

(3) Be Diligent and Co-operative.

An administrator has to be punctual and also conform to the school rules and regulations. Pupils can easily identify a teacher who is unprepared. The exhibition of unpreparedness may lead to indiscipline in the classroom.

(4) Classroom Management

A teacher must always be time conscious. Time management is also crucial. Therefore, the teacher must leave the classroom immediately after the lesson, and should get to the class on time. In addition, any punishment that sends the learners out of the class should be avoided.

(5) General Control in the School Environment

When students move from one lesson or classroom to another, their behaviour must be monitored by their teachers. Learners must not be sent on errands outside the school premises.

(d) Possible Ethical Dilemmas

Decision making is a major function of the administrator. This task is sometimes problematic because of the different choices involved. These are ethical dilemmas:

This is often the case when one cannot pinpoint the actual course of action in a particular situation. Such complex situations are chaotic and therefore, the administrator may be at a crossroad in taking a decision. This may come up when individuals' values are at variance with those of organizations. In dealing with dilemmas, some of the following issues must be considered.

- What ethical issues have evolved?
- Suggest ways out of the complex situations.
- The positive and negative sides of each approach.
- Codes and documents in existence.
- Organization's vision and mission statement.
- Does the administration want to guide the staff in decision making or does it want to allow them to be independent and proactive enough to take a decision?

Some Possible ethical dilemmas are:

- Opportunities abroad.
- Advances in Public health.
- Problems in and with the community.
- Caring for students.
- Freedom of speech.
- Difficult decisions

(e) Notions of Management

There are different perspectives of the word "Management". Management is the act of getting things done through people (Koontz, O'Donnel & Weihrich, 1980). This definition suggests that management is a sequence of coordinated activities. Other researchers such as Aghenta (1998) opined that management is a set of interwoven activities all of which are aimed at maximizing the utilization of available resources to achieve the goals of the institution. When related to education and the classroom in particular, management is the process of getting things done especially planning, organizing, directing, controlling and evaluating human and material resources (Adesina, 1981).

The school administrator must competently perform his or her managerial functions, setting out what to do and how to do it (planning); mobilize and organize the resources needed to perform the task; and coach, motivate and empower those who carry out the task. He or she monitors what is being done and how well, with a view to ensuring compliance with the plan. For managerial effectiveness, it is not enough that the manager plans well, he must also successfully implement his plans, decisions and policies so that the educational goals are achieved. The extent to which these goals are achieved depends very much on the activities of the teacher in the classroom.

The school administrator's and the teacher's roles can therefore, be described as mainly facilitative and supportive. Their jobs in the school as far as implementation of the goals and objectives of the school is concerned can be categorized into three: interpersonal, informational and decisional. The interpersonal role or responsibility, especially on the part of the school administrator, is aimed at ensuring effective interpersonal relations among students, student – teacher, teacher – management and management-students relationships. It also involves motivation towards teaching and learning. The teacher as a manager in the class performs the roles of obtaining and disseminating information both within and outside the school that would aid and enhance teaching – learning activities. The school manager and the teacher develop new ideas into projects as well as being the school decision makers and conflict or crisis handlers. How these functions are realized, however, depends on the school environment. The teacher and the school manager, through the classroom, get information about each child's cognitive, affective and psychomotor abilities, and other characteristics (Adesina, 1981).

(f) Concept of Classroom Management

Classroom management is seen as the ability of a teacher to create favourable conditions that facilitate instructions. One major responsibility of the teacher in the classroom is to translate educational objectives into knowledge and skills to the students through effective management of his or her class. He or she disciplines, controls, monitors and evaluates learners' attitudes, and infers from their behaviours and responses in the classroom environment (Weinstten & Mignano, 1993).

In summary, classroom management is the action preliminary to teacher- student class interaction, class grouping, designing curricular, time tabling and formulating school rules and regulations. How teachers perform these activities is of great importance.

(g) Importance of Classroom Management

The classroom is of paramount importance to the teacher because he is principally in charge and must be in control of all the teaching and learning activities.

- A classroom that is well managed will encourage cordial interaction as well as the ability to tolerate and learn from one another.
- It provides opportunities for learner – teacher and learner – learner interactions. The interaction habits can be shown when the learner is able to listen to directives, enjoys working with others, asks other students for help, and is the boss. It helps him get along with others and express his own ideas. All these cannot be achieved except the classroom is well managed.
- A well – managed classroom facilitates the independence of learners by encouraging the choice of activities and creativity. In a situation whereby the classroom is spacious, well ventilated and well equipped, learners are encouraged to be creative and innovative.

(h) Communication in the classroom

The Advanced Learner's Dictionary (2010) defines communication as correspondence, a passage or channel, and a means of communication, and giving and receiving information. In generic terms, communication may be seen as the means by which we get other people to understand us. For Simon (1999), communication is any process whereby decision premises are transmitted from one member of an organization to another. As an organizational activity, communication is the means by which the people in the organization exchange information concerning the environment, operational requirements of supervisors, programme status and ideas of improving organization efficiency (World Bank, 2001).

Every communication process in the school involves at least three elements, the sender, the receiver and the message that is transmitted. In the classroom, communication involves the teacher and the learners and the lesson to be transmitted. It is in recognition of this that Tassel (2002) defined communication as a two way art. There must always be the transmitter (source) and the receiver of an information. Four concepts in the above definition are of remarkable importance. These are meaning, understanding, information source, and information received. In any classroom environment, good communication between teacher and learners is very important and this means that the teacher talks, learners listen pattern must be observed.

In teaching, the teacher engages in communication when he gives a lecture, a class discussion, explains the content of a lesson, or when he merely gives some signals. A teacher must learn to listen and allow learners to talk and give their view or solutions to classroom problems. The teacher must continuously strive to improve the ability to communicate to his or her learners and also be receptive. Until school managers and teachers communicate effectively, they will not achieve the desired results for which the classroom is meant.

There is no doubt that communication is important in the school. It is another manifestation of the need for coherence. A child will only gain a coherent education if the school functions as a unit, and this means that different parts of the system must receive and transmit information to each other. Communication is thus a coordinating mechanism for various organs or units of the school organization. The executive or the administrator not only has to coordinate the activities of these interdependent parts but also has to obtain feedback from the environment (Moore, 1992). A channel of communication must be established, and this may take time and patience. Although there is the need for structure, excessive structures may create an over formalized system in which personal responsibility is submerged and initiative stifled.

(i) The Importance of Communication in the School

The school, like any other formal organization, is a boundless collection of interdependent parts devoted to the accomplishment of some goals.

- Communication is a coordinating mechanism for various organs or units of the school. The administrator not only has to coordinate the activities of these interdependent parts but also has to obtain feedback from the environment.
- The school organization is peopled. Individuals in it (teachers, pupils and other staff) have varying frames of reference. Teachers are employed in schools because of the knowledge and expertise gained before entering or in the course of the job. Through communication, such knowledge and expertise become available and are shared among different members of the school organization. Thus, communication becomes very essential to organizational growth and development.
- Every school is only a unit within a larger system of education. Education is a wider system comprising many subsystems of varying relative strength and controlling power, all interlaced and interlocked with each other.
- Communication is a valid link of individuals within the systems. For example, it is common knowledge that many secondary school students choose very wrong combination of subjects such that they find it almost impossible to gain admission into universities. But with effective communication, this problem could be reduced to the barest minimum.
- Communication enhances good and prompt sensing or detecting of internal strains within the institution as well as provides data relating to problems of institution.
- Absence of or inadequate communication among the school personnel creates an environment of rumour, counter-rumour and innuendo, all of which are injurious to the school.
- Open channels of communication encourage the release of tension which otherwise would remain hidden until it probably blows up and wrecks the establishment. Through an open communication system, the school executive avoids the wrath of accumulated tension from his or her teachers and or learners.

The main aim of communication in educational management can be summarized as follows:

- ➢ To bring social cohesion to the school organization.
- ➢ To facilitate decision-making within the school, whether on the treatment of the individual pupil or on other major matters.
- ➢ To enhance public reputation of the organization, where good repute is deserved, and to encourage reasoned criticism where it is valid.

(j) Suggestions for effective communication in the classroom

- *Developing mutual trust*

  The effect of a teacher's communication with a learner and vice versa depends considerably on the type of relationship that exists between them and the usefulness of the information as perceived by the receiver. The classroom teacher must therefore, build up a healthy climate of mutual trust and respect with and among his or her staff and learners. This is necessary because communication flows along friendship channels.

- *Learn how to communicate effectively*

  To ensure effective communication in the classroom, teachers should learn to tell enough, listen enough, tell soon enough and discuss with everyone concerned only what he or she says. It is always advisable to communicate with a background of good policies and practices, establish an atmosphere of reliable trust, give what is needed and follow up with action.

- *Develop proper listening habits*

The following are a guide for effective listening to school management, teachers and learners.

- ✓ Stop talking. You cannot be listening if you are talking at the same time.
- ✓ Give everyone your ear but few your voice. Put the speaker at ease. Let him feel free to talk.
- ✓ Let the speaker realize that you really are interested in listening to him.
- ✓ Remove all necessary distractions around. For example, control

the noise in the environment.

- ✓ Empathize with the speaker.
- ✓ Be patient and do not interrupt the speaker unless to seek further clarification of a point.
- ✓ Control your temper.
- ✓ Go easy on argument and criticism.
- ✓ Ask questions when necessary to properly clarify issues.

- *Make use of feedback*
  Among the numerous methods available to improve communication, feedback is by far the most important one (especially in the classroom). The advantage of this perspective is that the information sender will, right from the start, do all in his power to overcome those barriers so as to improve his chances of being understood by the person at the receiving end.

- *Be aware of people's body language*
  Non-verbal gestures such as a handshake, a smile, a shrug of the shoulder or even silence have meanings. They are often unnoticed or, if noticed, not properly interpreted. Therefore, in face-to-face communication, the information sender (teacher) carefully watches out for such non-verbal clues and tries to understand what they are intended to convey.

(k) Summary

Effective management focuses mainly on developing and managing a positive relationship between adults and children. For this to take place, it is essential that all stakeholders in the school system ensure a progressive development of a positive school climate where there is absolute trust, respect and cooperation. This will bring about desirable interrelationship virtues like faith and love in and for one another, healthy competitions and readiness to assume responsibility for one's actions and inactions. For obvious reasons, each institution is expected to have its laid down rules and regulations because what is acceptable in an organization may not work in another.

Communication is therefore, the means through which people in any organization exchange ideas. Chaos sets in when communication breaks down. The need for coherence and exchange of information between society and the school makes communication inevitable. It aims, among others, to bring social cohesion in the school, enhance public reputation and ensure that decision making is effective. Communication acts as a co-ordination mechanism for various organs or units. Its importance in the scheme of things should be highlighted. While it senses early internal strains within the school, its absence usually creates an environment of rumours. An open channel of communication is therefore, encouraged.

(l) Sample Research Topics

1. Teachers' Classroom Management Practices and Secondary School Students' Academic Performance in Ilorin Metropolis.
2. Classroom Communication skills and Teaching effectiveness in Ibadan North Secondary schools.
3. Effective Classroom Management and Students behavior in Edo State.
4. Ethical issues in Research: An Explorative study of University of Benin Undergraduate Project Reports

(m) Review Questions

1. Discuss the relevance of ethics to management of schools
2. Who should be responsible for ethical issues in the school system?
3. Discuss the relevance of effective communication to teaching and learning.
4. Management is the process of getting things done through people. Discuss.

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Chapter 7

Conflict Management in Nigerian School System

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Introduction

Conflict which is no longer a new phenomenon occurs every day in human life. There are conflict situations throughout parts of the world, including the school system. As long as many lives and human beings interact, conflicts will arise. Conflict, in the perception of parties involved, endangers their purposes and anticipations (Coser, 1956, Boulding, 1977 and Faleti, 2006). Most times, its effects and outcomes can be positive or negative. Comparatively, it is seen as a negative and an avoidable phenomenon. Conflict is however, positive when it creates opportunities for eclectic solutions to a problem which may promote creativity (International Alert, 1996 and Faleti, 2006). However, it is conceptually part of human social living (Izard, 1992, Weeks, 1992, Faleti, 2006 and Mutiullah, 2013). From a realist perspective, conflict involves a situation of competition for scarce resources or interests (Deutsch, 1973 and Faleti, 2006).

Conflict has a devastating effect on the school system. This includes: destruction of life and school property, sometimes murder or death, withdrawal of or dismissal from appointment and studentship, forceful transfer, obstruction of academic activities including teaching and learning, school closure, unlawful arrests and detention, among others. All these have likewise become a global concern for education stakeholders and practitioners such as governments and education policy makers, ministries of education, school administrators, teachers, students and parents. Most importantly, the achievement of academic excellence and quality education depends largely on how stable and safe schools are. There has also been a consensus among scholars that there is a clear link between failure in governance even in school's leadership, underdevelopment, insecurity and conflict (Mutiullah, 2013). It is therefore pertinent to note that some conflicts existing in the Nigerian school system arise out of individual differences and disagreements, interpersonal relationships in school, lack and inadequacy of school facilities, bad leadership and teacher contributing factor (Mutiullah, 2013). Such conflicts have great consequences on academic activities and progression and therefore, require specific approaches.

Efforts towards conflict prevention and management in the Nigerian school system cannot be sustained without inputs of education stakeholders. Conflict has been shown to increase group outcomes, when properly managed. It is in view of this fact that organizations make deliberate efforts to ensure that conflicts are managed and resolved in the work environment for the sustenance of peace and stimulation of sustainable development. It is therefore, in this context that the present chapter on conflict management fills an essential gap in the existing literature. The chapter will further be concluded by up summarising the topic, identifying its implications for educational management, pointing out some review questions and outlining some research topics related to the topic.

Concept of Conflict from various Perspectives

The concept of conflict is multidimensional and many scholars have tried to describe what conflict is from various perspectives. Conflict simply means a disagreement or an argument between two or more parties. It is a struggle over something (could be power tussle), an issue or existing object. Whenever there is a conflict, each of the parties involved either tries to win or lose, and sometimes might want to come to a compromise or an agreement. Conflict breeds competition resulting in parties' awareness of mutually incompatibility wants for which party desire to and in which each party desires to eliminate the realization of the wishes of the other. It is also a desperate bid to attain limited essential means with the ultimate purpose of attaining supremacy over the rival party.

Furthermore, Mutiullah (2013) explained conflict as an attempt of actors who utilise a brute force to eliminate opponents and obtain scarce values. The foregoing showed that a conflict arises as a result of cross-purposes of essential ideals and resources. Ughamadu (2006) conceptualized conflict as a disagreement over an issue; sometimes such disagreements may be positive or negative. In whichever way whether in the family, communal, industrial, national or international settings it is a normal occurrence in human relations because society or mankind needs to disagree in order to agree. To Ughamadu, conflict is functional when it brings the real peace or truth out of any situation. On the other hand, it is dysfunctional when it brings about hostile competition in inter-group relationships. Such hostility manifests in insults, name-calling, defamation of character or blackmailing, stepping into another's shoes, sarcasm, false accusations, withdrawal of services, incentives, strikes, , termination of appointment, demotion, magnetization, deprivation, boycott of classes, violence or killing. It can hinder progress and bring about a definite frustrating or desperate attitude (Faleti, 2006; Ughamadu, 2012).

Amason (2007) described conflict as a form of socialization because organizations have goals that workers have to adopt at the expense of their interests (Etzeoni, 1965). Conflicts therefore exist whenever it is impossible for the interest of workers to tally with the goals of the organization, or when a group of people feels that their needs are likely to be denied (Bens, 2006). Moore (1964) and Etzioni (1965) noted that the social structure of the enterprise determines the conflict relations between labour and management.

Obi (2004) defined conflict as an action by persons or a group of persons which in some way makes it less likely that the desired action of another person or a group of persons is attained. In this sense, whenever two or more people or a group of people engage in a struggle towards achieving their goals, conflict is likely to arise. In inter-organizational relations, Onwachekwa (2002) defined conflict as stemming from the fact that parties must share scarce resources or work activities that create different status, goals or values. Consequently, three different approaches to organizational conflict were first, the traditional view: that it is avoidable because of its potential to instigate disfunctionality within the organization; the human relations position: that conflict is part and parcel of the processes of organizational performance; and lastly, the contemporary view proposed by interactions: that it is a pre-requisite for an organization to perform effectively because it supports the goals of the organization. These conflicts are functional and constructive. However, conflicts that prevent the achievement of goals are dysfunctional and destructive (Aja, 2007).

Theoretical Perspectives

Conflict perspectives emphasize the essential material inequality of social groups. They draw attention to differences in power, manifest in class and contrast ideologies. Two conflict perspectives are discussed below:

Marxism Social Theory

Karl Marx (1818–1883) brought up the view that the history of class struggles exists in all known societies. Schaefer (2004) noted that prominent sociologists contributed to the growth of the theory. The crux of the theory revolves around how society's institutions including education promote the differential privileges of some groups at the expense of others (Schaefer, 2004).

Conflict theory from this school of thought argues that the social class within society has different routes to material and non-material resources and that the more powerful groups exploit the weaker ones. This results into clashes (conflict). The nature of the description of the conflict by Marx which accounted for class struggle is called a dialectic materialism. Karl Marx, the key proponent, posited that capitalism would definitely produce inherent tension that would usher radical change leading to revolution and freedom of the masses from the ruling classes. In general, Marx wanted the proletarians (people who sell their labour for wages) to rise up against the capitalists (owners of means of production) and overthrow the capitalist system. In a bid to seek for freedom from the ruling class (capitalists), conflict and opposition step in between the two parties, thus leading to destruction.

This conflict theory therefore, draws attention to causes of conflict which emanate from social stratification by class, gender and race in all known periods. It is therefore, a macro analysis of the society as an arena of inequality that generates conflict and change. Other theories which evolved later from Marxism social conflict theory as discussed in the chapter are Interactionism and Exchange theory.

Interactionism Theory

The interactionism theory is also known as the symbolic interaction. The main proponents were Max Weber, George Herbert

Mead, Erving Goffman, George Homans and Peter Blau. It is a sociological theory that places emphasis on conflicts occurring from human social interactions. This approach created a framework for seeing the product of everyday interactions of individuals as the basis for conflict. Society is therefore, an outcome of shared reality that people develop as they interact in countless settings using symbolic communications. The phenomenon called society is therefore complex and dynamic.

This perspective explains conflict in a diametrically opposite way from the earlier orientations. It noted that conflict can either play negative or positive roles. Conflict is a part of people and organizations, existence, but not all conflicts are good. A conflict at a very low level will not jeopardize daily organizational activities but create a better understanding of existing issues (Robbins, 2000; Smooha, 2000; Aja, 2007) Conflicts which inspire creativity when handling and resolving issues are positive and needed in organizations. However, conflicts should be managed and controlled to reduce their harmful and dysfunctional effects (Aka, 2007; Omisore & Abiodun 2014).

Interactionists proposed that conflicts could be:

a. – task-related (content and goals of the work);
b. - focused on interpersonal relationships; and
c. – process-related to work execution (Robbins, 2005).

Types of Conflict

Realistically, a conflict is multi-faceted because it involves vastly different parties, individual persons or large macro units (Deutsch, 1973). In the school system, there exist various types of conflicts and such includes student-school authority/management conflict, school authority/management-teacher conflict, student-student conflict, student-teacher conflict, teacher-teacher conflict, teaching staff-non-teaching staff conflict non-teaching versus non-teaching staff conflict, and so on. Ejiogu cited in Ndum and Okey (2013) mentioned some types of conflicts:

1. Hierarchical conflict due to power relations:

a. the type witnessed between the leader and the led (such as lecturers-students);

b. super-ordination or proprietorship (Ownership-control);
c. lateral non-alignment (e.g between Vice Chancellors)
2. Reality- normative ideological conflicts.
3. Cultural values and institutional expectation conflict

Adimora as cited in Ughamadu (2012) identified other types of conflicts which include:

1. **Intra-personal conflict (Internal/ within)**

This is the internal conflict of an individual. Intrapersonal conflict occurs within the individual as a result of role conflict and job stress. Role conflict is the different simultaneous roles played by persons in a given community or an organization, for example, the role of a parent as an employee who may come into conflict when the employee's child becomes sick, and he/she is stressed at work. This often leads to intrapersonal conflict because such a worker may not be able to put in his best into the ever-mounting pressure of work on a job schedule. Intrapersonal conflict often leads to self-destruction, alcohol and drug abuse. It also has an effect on job performance, turn over and causes absenteeism. However, these can be solved by sending staff to seminars, workshops, Counselling centres (set up in the office). Types of this conflict include; positive goal conflict, positive-negative goal conflict, and negative-negative goal conflict.

2. **Interpersonal Conflict (External/outside):**

This type of conflict is external to the individual and more destructive than the intra-personal one, it occurs between two or more persons in the same organization. This can occur between the principal and vice principal, principal and teachers, teachers and students, management and students. Interpersonal conflict which occurs between two or more persons in an organization could be caused by many factors which include opposing personality, prejudice, jealousy and envy, or as a result of:

a. Differences in values: For example, one person might place a great emphasis on task accomplishment to the exclusion of all else, while another might stress the need to maintain good employers relations even if performance of the immediate task is slightly affected;

b. Differences in problem–solving styles: One person may prefer to work differently from the other while the other person may prefer group work; and
c. Differences in managerial philosophies: One person may favour decentralization of decision making while another favours centralization. Interpersonal conflict also occurs due to competition between individuals for power, promotion or rewards.

3. **Inter-group conflict**

This is the conflict that happens between work units or departments. It is caused by issues pertaining to authority, jurisdiction, control of work flow, and access to scarce resources. Jimoh-Kadiri (2012) classified inter-group conflict into two, namely, bargaining and system conflicts.

Bargaining Conflict: This takes place when groups struggle for power, influence or even scarce resources within the organization, for example, when there is a budget deficits and government attempts to reduce it by cutting down expenditure.

System Conflict: The system conflict occurs when different departments in an organization work towards different objectives which are completely different from the overall organizational goals. The system conflict can be resolved through the use of task forces and rotating members of department among work units.

4. **Structural conflict**

Structural conflict is concerned with an industry as an organization, with interplay between technological and social factors negatively affecting labour interests and productivity (Etzeoni, 1965). The size of an organization has been found to correlate with the amount of conflict in that particular organization. This may manifest in the personalities involved, with supervision as an example, where administration wants the number of supervisors visiting schools to be increased but the Financial Department attempts to limit the number. Various types of structural conflict include ambiguities between two departments, competition between two or more employees, differing goal conflict, communication barrier/gap, role dissatisfaction mutual dependence of department, among others (Weber, 1948; Pascal, 1978)

5. **Strategic Conflict**

This type of conflict deals with contrasting group interests in society or organisation. The group that starts the conflict in the society or organisation deliberately intends to get an advantage over the other party.

6. **Constructive Conflict**

Constructive conflict is positive because it sources for an alternative in a problematic stimulates innovation by articulating and selectively present conflict as a means of exposing subjective arguments into the open while reducing objective tension.

Positive/constructive conflict has the following attributes of:

a. Initiating growth and developing clarification of issues;

b. Improving problem solving qualities;

c. Strengthening relationships and giving room for creative resolution to disputes;

d. enhancing of productivity; and

e. bringing about spontaneous communication.

7. **Destructive Conflict**

This type of conflict is negative, destructive and therefore, unacceptable. Here, conflict is seen as a harmful contact or battle, a subjective struggle, being in opposition or fighting. It has the following features:

a. It is destructive, leads to division and emphasises differences among groups;

b. It encourages win-by-all-means-necessary attitudes and hinders progress in the society or national development; and

c. It encourages individuals to resort to an unfriendly environment and creates distrust.

Sources of Conflict

Conflicts exist in varying contexts and could develop from same sources. Obi as cited in Oboegbulem and Onwurah (2011) grouped sources of conflict into two

a. **Structural based conflict:**

This is the disagreement which stems from the way an organization is designed in terms of size, characteristics and nature of environment. Such sources include task interdependence, differences in status, inadequate facilities and equipment, inadequate evaluation mechanism, differences in performance criteria and reward system, role dissatisfaction, and disagreement over needs.

b. **Non-structural based conflict**:
This is attributed to personal behaviour of individuals as they relate with one another themselves. It includes differences in personality traits, background, values, perceptions, style of management, incompetence, poor attitude to work, issues of generation gap, anti-authority and prejudice. Furthermore, classroom management, disruption and punishment have also been identified as some of the common sources of conflicts in schools in particular.

Stages of Conflict Management

Conflict management according to Aghedo (2011), has in three stages, namely:

a. **Pre–conflict Stage:** At this stage, efforts are made by a third party (peacemaker) to resolve the dispute before the situation degenerates into physical combat. This, Aghedo said is a pro–active conflict management stage because conflict is anticipated and efforts are made to redress causal grievances to avoid escalation. Pre–conflict management is significant because the cost associated with violent conflict can be avoided.
b. **Conflict Stage:** At this stage, efforts are made by a third party to bring about peace and end hostility between actors engaged in on – going conflicts. The management of conflict at this stage is an indication that efforts were either not made to settle the dispute at the pre – conflict stage or such efforts were unsuccessful.
c. **Post–conflict Stage**: According to Aghedo (2011), efforts at this stage are made by a third party to ensure sustainable peace after initial conflict has ended in order to avoid any reoccurence. This normally takes the form of economic development and peace. To ensure lasting peace, the grievances that triggered initial conflict

are thoroughly interrogated, victims of such conflict are compensated and perpetrators brought to book.

Conflict-Promoting Factors in Schools

There are several causes of and conflict promoting factors in schools. Ndum and Okey (2013) identified that within the school system, they manifest as:

i. **Continuous competition for scarce resources:** The resources at the disposal of schools are keenly contested for by staff salaries, student amenities, and other service needs. The perceived relative or absolute educational needs thus lead to a conflict. According to Sanda in Ndum and Okey (2013), there is correlation between scarcity of resources and conflicts resulting from unmet needs. This type is often with the school administration to do the desirable. Poor management also has the potential for generating conflicts.

ii. **Differential perception of goals:** Conflict is likely to be high where parties (teacher-students, parents-teachers) see the same phenomenon differently. In the school, attention needs to be focused on the primary goals of teaching and learning. In the process of learning, students may not learn well unless they are actively involved and so accept responsibility for their learning activities. So, if students do not really learn any skill, they might engage themselves in other unauthorized activities (such as cultism).

iii. **Autonomy or academic freedom:** Autonomy relates to a situation where a party seeks to avoid the control of its activity from another party or when an attempt is made by a party to insulate himself from such control (Idowu in Ndum & Okey, 2013). Academic freedom is synonymous with autonomy in form of school organization, design and course delivery, association execution freely holding ideas, among others.

iv. **Administrative leadership:** When an administrator adopts an autocratic or authoritarian style, it tends to be a source of conflict. For example, when appointments and promotion are carried out without appropriate consultation and cooperation of the affected unit, a conflict may result. Managers would also generate conflicts if they are authoritarian and dogmatic. In a school (e.g. university) system, the goals of quality education include adequate funding, uninterrupted academic programme, student and staff welfare, reward system and physical facilities. Failure to sustain any of these standards might lead to conflict. However, when there are role ambiguities or when such roles are vague or uncertain, conflicts may result.

v. **Differential in values and lifestyles:** The tertiary institutions have a high concentration of young adolescents who are exposed to unfettered freedom and independence for the first time. Consequently, such institutions become the arena of cultism, aggressive actions, sexuality and risky behaviours. The working class, particularly the academics, are pattern maintainers who enforce or impose rules and regulation. Both the youth and the pattern maintainers are always on a collision path especially, when the former demand for and claim their rights. This results in the disruption of teaching and learning.

vi. **Communication barrier:** Conflict arises as a result of barriers in the communication process. Ohanmu (2002) saw communication as sending messages through a channel from sender to the decoder. Ambiguity in communication creates serious problems and misunderstanding and this situation can result to conflict. A school administrator can generate conflict through withholding of information, sending improper messages, inhibition of feedback and permission of environmental noise (or distractions).

vii. **Political agitations:** The state of the nation showing a deviation in governance that is beyond the school internal environment, such as political control of education, often generates conflicts between the school system and other external stakeholders. For instance, the state or Ministry supervising education can also control the curriculum, budget and calendar of the school. Furthermore, national issues often instigate unrest within the school system. External interventions in university autonomy and management may also generate controversies. These conflicts often disrupt teaching and learning. Also, incidents of conflict within the university include role interdependence, differences in performance criteria and reward systems. However, personal behavioural background, traits, values, communication, perception attitudes and emotions may also generate conflicting interests.

Okotoni and Okotoni (2003) also identified the following sources of conflicts within the school system especially at the secondary and primary levels:

1. Violation of staff conditions of service;
2. Failure to implement national wage for teachers;
3. Failure to adhere to due process in retirement/or retrenchment of teachers;
4. Administrative failure by unit heads or leaders;
5. Inappropriate use of funds in school;
6. Indiscipline exhibited by staff or students;
7. Professional incompetence and failure to measure up to required standards;
8. Personality clashes among stakeholders in the school;
9. Inferiority/or superiority complex: leading to personality clashes;
10. Favouritism and related sharp practices;
11. Role conflicts experienced by teachers and students;
12. Misunderstanding of motives of parents, teachers or proprietors; and
13. Youthful exuberance.

Effects of Conflict

The management of conflicts in an organisation may produce a positive or negative outcome. According to Zikmann (2000) Okotoni and Okotoni (2003), proper conflict handling styles may show problems that have been swept under the carpet and improve cooperation among parties. Conflicts are therefore, a warning signal for a quick intervention. Since conflicts are part of human existence, no organization is spared. Conflicts should be handled realistically without pretence. Effective management of conflict is highly essential for peace and progress. Conflict is found in all organizations, but its management would determine its positive or negative end for organizational performance.

Positive Effects

Conflict exhibits challenges that can promote the understanding of others' positions and ideas and facilitate innovation and progress. It makes people to criticise their thinking and assumptions (Searborough, 1998). Conflicts can therefore, be functional and constructive. Omisore and Abiodun (2014) pointed out that the following positive effects of conflict are functional to an organization because they:

a. stimulate individuals to work harder because talents and capabilities are exhibited.
b. fulfil certain psycho-social needs (dominance, aggression, esteem and ego) for constructive use.
c. provide creative and innovative ideas which enhance employee's benefits.
d. add varieties to organizational life which might be monotonous.
e. facilitate an understanding of problems, coordination among individuals and departments;
f. inspire creativity especially when organisations utilise conflict as an opportunity to generate creative problem solving mechanisms;
g. promote sharing of opinions that could promote workers synergy in accomplishing organisational goals; and
h. improve communication by bringing group members to understand the most effective communication styles.

Negative Effects

Conflict can produce negative emotions when it reduces opportunities for disputants. It may push leaders to resort to authoritarian decisions. Conflict can also produce schism because different group members tend to emphasise dissimilarities between themselves and others (Scarborough, 1998). Mgbekem (2004) opined that conflict can cause stakeholders to withhold information or resources from others. It may force skilled employees out of the organisation, thus resulting in brain-drain which reduces performance (Etzeoni, 1965). Conflict can also lead to forceful dismissal or sack of an employee, transfer and destruction of life and property. When a conflict manifests as shown in the foregoing, it is destructive. Omisore and Abiodun (2014) likewise identified the following negative effects of conflict:

a. Reduction in organisational performance as it consumes managerial time and resources that have alternative positive use.
b. Promotion of self-interests at the expense of those of the organisation.
c. Development of morbidity in workers who lapse into emotional and physical actions that could produce psychosomatic disorders.
d. Unproductivity in time management.
e. Possibility of work sabotage and losses in the market scope.
f. Incident of poor services and consequent low productivity.

According to Omisore and Abiodun (2014), there are three possible individual responses to negative effects of conflict, viz:

1. **Psychological Responses:** manifesting in lack of motivation.
2. **Behavioural Responses** in form of smoking, alcoholism, social eating problems, aggression or work sabotage and decreased communication.
3. **Physiological Responses:** - These are often ignored or unnoticed, but they generate diverse health challenges.

Responses to and Outcomes of Conflict

Outcomes of and responses to conflicts have been categorized by Crawford and Bodine (1996) as soft (mild), hard (strong) and principled (Rational). In both soft and hard responses, disputants take positions relative to the problem. They negotiate these positions by trying either to avoid or to win. Soft and hard negotiations either bring about one-sided losses or demand one-sided gains. In principled responses, disputants use conflict resolution strategies to produce lasting "agreements" that address and resolve conflicting interests fairly and take into account how others will be affected by the agreement (Ojiji, 2006).

The outcomes of conflict as highlighted by Crawford and Bodine (1996) include the following:

Dimension of Responses

Mild	**Strong**	**Rational**
Evading	Challenging	Fair-hearing
Avoiding	Tackling	Articulating
Objecting	Assaulting	Tolerating
Caving-in	Shouting	Brainstorming

Outcomes/End-State of Conflict

Mild	Strong	Rational
Joint losses	Lose	Joint victory
Win	Win	

Soft (mild) responses are typically manifested in feelings of loss in focus and uncertainty about the future. A very strong approach to conflicts may occur when parties are unduly competitive and desirous of victory. They utilise aggression that can result into lose-lose or win-lose outcomes (Ojiji, 2006). Principled (rational) responses occur between parties with a persuasion to solving the problem and with the goal of managing conflicts efficiently and amicably. The rational responses always listen, respect each other and work towards resolving their conflict whose possible outcome is win-win to the best interest of each party (Shakar Rao, 2015).

Conflict Management Strategies

Conflicts are unavoidable consequences of human interaction in the school system. Proper handling of such conflicts would promote peace and progress in the education system. These conflicts handling styles refer to the internal mechanisms adopted by various school authorities. An effective management of conflicts in educational system is necessary for its development.

When a conflict arises, the manager or leadership should manage it with discretion and transform it to a positive instead of a negative force. Failure to properly manage a conflict may manifest in delay of work disinterest and in extreme cases, a complete breakdown of the system. In resolving conflicts, an effective communication process and an acceptable conflict negotiators are important (Robbins, 2000).

The school cannot do without one conflict or the other but it should manage such to enhance the attainment of its goal. However, conflicting parties should be able to communicate their grievances systematically and be in readiness to negotiate for peace. The negotiator mediating the process should not be a novice (Aja, 2000). Therefore, conflict management in schools demands an appropriate style that is more of transformationary leadership. Best (2006) and Magaula (2007) presented the following three strategies of crisis resolution among warring parties: mediation, arbitration and reconciliation.

He noted that each of the three approaches could be used in a conflict. Ibukun (1997) also noted that conflicts can be resolved through authority, command, problem solving, restructuring of the organization and re-orientating parties in a conflict through dialogue. Mutiullah (2013) identified five conflict management strategies as: accommodation, avoidance, collaboration, competition and compromise.

Accommodation:

Accommodation involves dealing with the problem through self-sacrifice whereby a party abandons his own concerns to maintain peace. Thus, the party sacrifices its wants for others. A party who possesses this style is non assertive. There is a deliberate neglect of its own needs while focusing on satisfying those of the other party. It is a reflection of the desire to ensure personal and social harmony (Ojiji, 2006). It is obliging, according to Chand (2013), accommodation is not assertive but cooperative in nature. This is diametrically opposed to competition.

Avoidance:

This strategy is adopted when one of the parties in a conflict ignores the confronting stake or challenge. Avoidance involves an abandonment of the conflict as an option. The issue in conflict is handled in a non-combative way. When the perceived negative end outweighs the positive outcome, this approach may be adopted. A party ends up ignoring the problem, thinking that the conflict will be resolved without intervention. Avoidance means that the party has neglected the stakes. The opposing party, on the other hand, may address the conflict. This approach is however, non-assertive and non-cooperative. There is no motivation to pursue the need of the parties in conflict (Ojiji, 2006)

Collaborating:

Collaborating aims at resolving conflicts through joint actions with other parties involved. Therefore, communication is an important part of this strategy. Here, steps are taken to search through issues to situate the desires of the parties without eliminating their respective interests. Parties in collaboration aim to come up with a successful resolution of conflict without compromising their key issues. Supporting the above, Wheeler and Tuener (2007) opined that this is an assertive and cooperative style which promotes parties working together to jointly win. Adopting this method motivates parties to find acceptable solutions to stakeholders' interests and good relationships. In this approach, the winning and losing options are not the priority, but the goal is to find mutually acceptable solutions to parties' positions (Ojiji, 2006).

Competition:

Competition involves authoritative and assertive behaviours. Here, there is interest in the well being of the other party (Ojiji, 2006). To a competitor, losing indicates weakness, while winning indicates strength. Through competition, the aggressive party put pressure on the other party to achieve his goals by whatever means. The quest in competition is the effort to win while the other party loses (Ojiji, 2006). Cross (2013) equally highlighted that this style involves the use of confrontation which places a party's desires above those of all others involved in the conflict. Hard struggle (Assertiveness) is the hallmark of this approach in which the negotiation aims to address the conflict head-on. This style which is based on power relationships presents a situation where one party perceives itself as having ability power over issues than the other party. The outcome of this strategy is that at the end, it could leave both parties at (lose-lose), that is, losing out rightly from the struggle (Ojiji, 2006)

Compromising:

Compromising involves finding an expedient mutually acceptable solutions to the needs of the parties involved. Parties in a conflict make concessions in order to resolve it. In a situation of this sort, a party is both partially assertive and cooperative (Ojiji, 2006). Compromising is therefore a mutual give-and-take scenario where the parties submit the same amount of investment for solving the problem. Compromising becomes necessary in situations where the positions of the parties are so incompatible that they cannot be reconciled without each of the parties losing something in the process thereby resulting in a "win some" "lose some" situation (Ojiji, 2006).

Other strategies include negotiation, mediation, use of third party, ad-hoc committee, use of dialogue, domination or forcing, and consensus participatory decision making (Olaleye & Arogundade, 2013). Corvette (2007) also recognised domination, prayer or oath taking as possible styles which are not discussed in this chapter.

Negotiation:

This involves dialogue and discussion between parties in a conflict situation who have to come to the realisation that by talking to each other, they can find a solution to the problem. The benefits of a compromised solution outweigh the losses arising from avoidance. Negotiation promotes joint decision between parties (Jeong, 2000, Best, 2006 ed)

Mediation:

Mediation is a form of negotiation in which a neutral person helps the parties in conflict achieve an acceptable settlement (Godongs, 2006). It is a process undertaken informally by a neutral party who manages the settlement of differences between invested parties. Mediators generally operate in neutrality because they have no vested interests. They cannot coerce or impose judgements, but can transform the dynamics of the conflict situations and suggest possible directions towards settlement (Miller, 2003).

Mediation is unsuitable:

a. if a serious incident occurs and no useful conversation is possible from the parties.
b. If the sincerity of one or more of the parties is in doubt.

c. where one of the parties does not want to listen or participate in any useful discussion.
d. where the issue cannot be negotiated.
e. if fair agreement is not possible due to inequality.
f. when the issue in conflict deserves public knowledge. (Godongs, 2006)

Use of Third Party:

This is equally like mediation where a third party or a mediator who is not an interested party to any of the group (s) engaged in the dispute is consulted to resolve a conflict.

Ad-hoc Committee:

In this process, a separate committee is set up to conduct an investigation by looking into the causes of conflict existing between the conflicting parties. Thereafter, they map out plans or ways of resolving the dispute.

Use of Dialogue:

This is a problem-solving method where both conflicting parties come together to have a close dialogue and find ways of resolving their conflicts. An agreement and consensus are drawn after the dialogue and each of the parties must be ready to adjust and shift grounds in order to get to a conclusion. Dialogue brings conflicting parties to a face-to-face meeting for the purpose of problem identification and resolution through discussion. Literer (2010) maintained that conflicts can be resolved by helping the conflicting parties understand each other better and appreciate how each affects the other. This strategy is a constructive way of conflict management that enables the parties to come to terms and reach an agreement by resolving their conflict.

Domination or Forcing:

Chand (2013) maintained that domination or use of force strategy is without the option of cooperation. Through this method, one party priotises its own interests. It is also known as a competing style. A party stands up for his right and uses all available power to secure the winning bid in the conflict. Relationship between parties is not considered. School administrators who adopt this style want to have their way at all cost. This style can be used only when one's leadership is established. A lion can be a symbol of this style. The exact outcome of this conflict management strategy according to Chand (2013), is that of win/lose with one party winning while the other entirely loses out and leaves the scene with so much regret, aggression and agitation.

Consensus/Participatory Decision-Making:

In this strategy, parties consult together with the intention to understand the main issue in the conflict and to deal with it. This articulates the interests and concerns of parties in a conflict. Through this process, the parties in the conflict work together to resolve the dispute by a plan of action they support. Through collective participation, a win-win solution results. This approach is people oriented, where parties are good listeners who are constantly working selflessly for progress with little concern for self. The approach in normal circumstances produces a lasting resolution of the conflict (Ojiji, 2006)

From the foregoing, it is certain that the nature of the conflict situation would determine the most appropriate resolution strategy. In some instances, a combination of strategies may be required to get to the root cause of a conflict situation. Adopting an eclectic or a combination of strategies will offer opportunities to disputants to benefit from the strengths of the combined strategies.

Below is a summary or specifics of the different models of conflict management strategies discussed in this chapter.

Conflict Management Style	Contextual Situations Where Applicable
Accommodating	• it is a natural result of conflict. • It may be a conscious or an unconscious activity. • It is universal because it is found in all societies and fields of social life • It is continuous and not limited to any fixed social situation. • Its effect vary with circumstances and it may reduce or postpone a conflict.

Conflict Management Style	Contextual Situations Where Applicable
Avoiding	• It involves ignoring or denying the importance of conflicting issues. • It is a way to tactically postpone the conflict • It shows parties as being unassertive and uncooperative • Both interests or needs of conflicting parties are nor pursued.
Collaboration	• It provides opportunities for parties to satisfy their interests through a collective effort • It provides parties better chances to achieve security and social prestige • It makes provision for social equality, • It develops the spirit of mutual assistance and helpfulness among the parties
Competing	• It is a process of seeking to monopolise the goal • It is continuous and also universal • Attention of each party is concentrated on the goal • It gives positive as well as negative results • When competition becomes rigorous, it results in conflicts.
Compromising	• It involves finding mutual solutions by all the parties; • It is a scenario where both parties lose something; • It reduces the negative impacts of conflict; • It can be beneficial especially in the short term; • It shows parties as both partly assertive and cooperative

Implication for Educational Management

Conflict is found and inevitable in every organization including the school system. Failure to effectively manage conflict has great consequences on students' academic achievements, schools' development and learning outcomes. When conflicts are allowed to escalate within the school, they lead to destruction, therefore, the need to control them in the school system. This has great implication for educational management whereby the administrative leadership of various educational institutions must be familiar and given appropriate training on how to manage conflicts in the school by adopting various conflict management styles and strategies. This generally will lead to educational growth and sustainable development in the country.

Summary

This chapter has discussed conflict management. Furthermore, it explained the concept of 'conflict' its causes or promoting factors. The effects and possible management strategies were discussed. The word ‘conflict’ has many meanings in everyday life. In a broad sense, the term ‘conflict’ entails disagreements, debates, disputes and active efforts by one party to prevent another from obtaining his needs. It could be a struggle between two parties. Likewise, in the school system conflict occurs but it is the responsibility of the administrative head to resolve it in the school but when neglected, it will cause further havoc in the system. The stability and development of the Nigerian education system also lies on the ability to maintain peace and harmony in the system. This has however, being the main thrust of this chapter.

Review Questions

1. Critically define conflict.
2. Explain three types of conflicts existing in any organization.
3. Discuss the four conflict promoting factors in the Nigerian school system.
4. What is conflict management?
5. Is conflict inevitable in organizations? Explain the five basic conflict management strategies in the school.

Sample Research Topics

1. Assessment of Principals’ conflict management strategies and school discipline in secondary schools in Anambra State, Nigeria
2. Evaluation of conflict management strategies of administrative heads in resolving teaching and learning problem conflicts in Anambra State, Nigeria. .
3. Assessment of influence of school related conflicts on students’ academic attainment in secondary schools in Imo State, Nigeria.

4. Conflicts in Nigerian Universities: Causes, Consequencies and Management.
5. Role conflict and Lecturers job performance in Universities in South-West Nigeria.

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Chapter 8

School Climate and Educational Management

Prof. Cordelia C. Nwagwu

Introduction

Organizations are established by society for the attainment of certain purposes and objectives. There are many types of organizations from which institutions and systems emerge. Education is one of the basic institutions established by society for its survival and development. Schools and education systems are social organizations charged with the responsibility of developing human resources and capacities with the knowledge, skills and values needed by society. A major function of education is the socialization of children, youths and adults. Schools, as social institutions, are expected to provide the enabling environment for the desired education to thrive. This is why schools have to be properly planned, organized, and administered.

Educational Management, as a discipline of professional studies, concerns itself with the training, production, and deployment of managers who can effectively provide leadership and supervise the educational environment for successful teaching and learning activities. The school, as a social organization, possesses certain characteristics which are common to all social .organizations. The first is that it is formal. Three other important characteristics are structure, size and complexity. The education system and the schools it operates are structured, and there is a hierarchy of levels, authority and responsibility. The education system is administered as a bureaucracy, and people working in a school are aware of their roles and limits of their powers and duties. Structurally, participants in the school setting, including the principal, teaching and non-teaching staff, and students recognize that they are in different categories with associated responsibilities. They also appreciate the need to work harmoniously together in order to achieve the aims of education and the specific objectives of the school. There is a lot of interaction and inter-dependence, hence the need for co-operation.

The element of size as a feature of social organizations such as the schools is important. This is because the larger the size of a social organization, the more difficult it is to co-ordinate and manage the activities of the individuals and groups within the organization or institution. Hall (1982) said that there was much evidence to show that the variable of size of a social organization has many implications. First, there was a relationship between increase in size and increase in differentiation of both structure and roles. Secondly, changes in the size of an organization or institution invariably resulted in increases in organizational activities and managerial responsibilities. Thirdly, there was a relationship between changes in institutional size and members' individual participation on the one hand, and their performance on the other hand. Fourthly, staff relationships and morale in the work place are related to changes and increases of size and structure in an organization or institution. The above are important research findings and conclusions relevant to any discussion of working conditions.

The third characteristic of the school as a social organization is that it is a complex institution. In the opinion of Robbins (1989), complexity in an organization refers to the degree of differentiation. Such variabilities in complexities could be horizontal, vertical or spatial. In a typical school situation, we have departments and fields of specialization. There are also individuals and groups with their interests and motivations, needs and dispositions. It is the responsibility of management to co-ordinate all the diverse differences among individuals and groups in the school. This creates a complex task of providing a conducive work environment that accommodates all institutional members with their personalities, needs and dispositions. The differentiation can be vertical according to a member's status in the hierarchy of authority and responsibility. Complex school situations demand managerial expertise to prevent or at least minimize conflicts and misunderstandings which create unhealthy school climate.

Teachers and students, according to Coombs (1968), constitute the largest inputs in the education system. They are also the most critical in terms of all activities and programmes aimed at the achievement of the goals and objectives of the system. Using the systems analysis approach, we discovered that the determination of institutional goals, the mobilization, processing and utilization of all inputs, the implementation of policies and programmes to productivity of outcomes, all depend on the successful co-ordination and harmonization of the contributions of the people in the internal and external environment of the school. The school climate is a critical determinant and indicator of our efforts and achievements. This explains the importance of the school climate in educational management.

We can summarise this introductory section thus:

1. An educational institution is a social organization
2. Social organizations are characterized and influenced by objectives, structure, size and complexity
3. People are the most important inputs and products of an education system
4. People co-ordinate and manage all the inputs, programmes and processes of an educational institution.
5. A conducive environment is critical to the achievement of institutional goals and objectives.

Concept of School Climate

School climate is a technical term used to describe the status of human relationships within the operational environment of an educational institution. In the introduction section of this chapter, we emphasized the central role and importance of people in the process of achieving school aims and objectives.

School climate is primarily concerned with the interactions of members of the school within the context of the institutional objectives, structure, size and complexity of human relationships. It is the product of leadership directed towards providing the conducive environment for effective governance, teaching and learning. School climate varies from one educational institution to another according to location, circumstances and time. Continuously improving the school climate quality is one of the major functions of educational leadership.

School climate is a complex term because it depends on many variables which are inter-dependent and changeable. For a clearer understanding of its concept and manifestations, other variables which more or less connote the concept of school climate in educational management are examined below:

1. School Environment which is a broader concept than school climate because it includes many other aspects of the school.
2. School Tone which is perhaps the closest terminology for school climate. This is because its focus is on the quality of relationships between and among individuals and groups in the school: leaders, teachers and students inclusive.
3. School Ethos refers to the traditional values, culture, beliefs and cherished practices which every member of the school is expected to respect. Commonwealth Secretariat (1993) said school ethos refers to habitual traditions on such things as efficiency, effectiveness, discipline, excellent student performance in public examinations and extra-curricular activities. Many old government colleges and mission schools in Nigeria gained and still maintain their popularity through their school motto and ethos.
4. Esprit de Corps is a French Language expression which describes the degree of honour, respect, loyalty and devotion that members of an organization or institution give to the whole body. Members, by their individual and collective action and behaviour demonstrate their sense of belonging and best wishes to their institution. They work together to uphold the image and reputation of their school, whether they are current staff and students of the school, or alumni members. In Nigeria, many alumni groups vigorously sustain esprit de corps in their schools, and thus encourage a warm open school climate.

Origin of the term "School Climate"

We have thus far tried to define and illustrate the concept of "School Climate" in educational management. It is also necessary to briefly examine the etymology or origin of the term itself, and how it came into the lexicon of educational management. We know the meaning of the word "school". "Climate" is a geographical word which describes what happens in the atmosphere. The study of climatic conditions is called climatology. From the investigation and measurement of what happens in the atmosphere, the experts (climatologists) inform people what the situation is, and what to expect. They conclude that the atmosphere is hot or cold, full of moisture (humid) or dry, the direction and strength or power of the winds, whether the sky is hazy or clear, and whether the cloud is low and heavy with rain or just thin and dry. From the calculations, we are asked to expect warm or cold weather, sunshine or cloudy day, rainfall, snow fall or dry winds like we have during the harmattan season in Nigeria. Weather forecast has become a regular feature on daily newscast by radio and television stations to alert the public on what to expect during the day in different parts of the country or the world.

From the above description, when we talk of school climate, we are actually attempting to establish the best possible atmosphere or environment that can lead to the achievement of school goals and objectives. As with the atmospheric climate, school climate is the result of a combination of forces and factors. The variables are many, unstable and changeable. But unlike the geographic climate which experts can only monitor but cannot change in any meaningful way, the leaders of the education system and individual schools have the capacity to plan, manage and alter the school climate in order to establish a favourable one. We can control and manipulate the school variables to create a conducive school environment for teaching and learning activities and outcomes. This is why every practitioner of educational management should have a clear understanding of the concept and origin of school climate.

Types of School Climate

In the last section, we traced the origin of the term "school climate" to the geographical study of the climatic conditions of the atmosphere. There are different ways of describing and classifying a school climate to reflect the real situation within the school. We recall that school climate is mainly a description of the relationships between and among individuals and groups in the work environment, as they co-ordinate their different roles to manage the other school resources and inputs towards the achievement of common goals. The identification and classification of types of school climate which appear below are in pairs. The pairing seeks to show the positive or desirable attributes alongside the negative and undesirable features.

We shall not go into an elaborate definition or a discussion of the types of school climates because the words themselves are self explanatory. They include:

1. Warm or Cold School Climate: The warm one exudes energy, activity, free interactions and mutual help or assistance to one another. The cold school climate presents the opposite features to the warm one. There is apathy, lack of interest and co-operation.
2. Friendly or Hostile (Threatening) School Climate: The friendly climate is favourable, amiable and inviting. It makes a member feel at home and wanted by the other members of the school. On the other hand, a hostile school climate makes you feel unwanted and unrecognized. It is threatening to some members who consider some people intimidating and hostile to their interests and welfare. Castetter (1971) said that one of the most important personnel functions in educational management was the creation of a friendly environment for members to perform their duties well. Nwagwu (2004) added that it was imperative for principals and teachers to create and maintain a student - friendly school environment for effective learning to take place. A hostile or an intimidating school climate is counter - productive.
3. Open or Closed School Climate. An open school climate is one where members of the institution interact freely and are encouraged to be creative and innovative. They communicate with one another, sharing ideas on best practices for effective performance of their respective functions. Tubbs and Moss (1977) emphasized the importance of communicating when they said that interpersonal communication was one of the fundamental attributes of human society. An open school climate accommodates divergent views for analysis and discussion, and does not permit discrimination for whatever reason. A closed school climate tends to isolate people because it frustrates free association and communication among members. People are boxed into informal groups which gossip and discriminate against one another, thus generating conflicts or misunderstandings.
4. Democratic/Participatory School Climate or Authoritarian/ Dictatorial School Climate. A school environment is deemed to be operating along democratic principles when it encourages

members to participate fully in the organization and administration of school policies, programmes and activities. The participation is characterized by their involvement in decision making processes, especially on matters that affect their lives and working conditions and interests. In the view of some scholars Nwadiani (1998), Nwagwu (2004) and Peretomode (2012), when members of an organization or institution are empowered to participate in the formulation of policies and making of decisions that they understand and which may affect them directly or indirectly, it becomes easier for them to comply with and follow the implementation process. On the contrary, autocratic governance breeds a climate of resistance, opposition or silent rebellion. It creates avoidable crises and frustrates members' aspirations.

School Environment

The term, school environment, is often interchangeably used to mean school climate. But in this chapter, we will try to establish some slight technical differences between the two concepts. Whereas we have described school climate in the context of the quality and status of the relationships among organizational members in the work place, the school environment is a broader concept and it has two major components. The first is the social or human relations element which we have termed the school climate. The second component is the physical environment comprising the infrastructures, facilities, equipment and other materials needed for the administration, teaching and learning programmes and activities. In essence, the social and the physical elements constitute the school environment.

However, the two components of the school environment do not exist as isolated, independent entities. Rather, they impact on each other in many diverse ways. For example, in many Nigerian schools, there is acute shortage of classrooms, laboratories, staff offices, toilets and other conveniences. We do not have sources of clean drinking water, let alone electricity or alternative power supply sources. Inadequate provision or non-availability of these physical provisions that make life comfortable or enhance the efficient performance of our school duties can cause a lot of irritation, frustration, insecurity and inconvenience to principals, teachers and students. They may react to the unpleasant physical environment in ways that negatively influence the social environment or the school climate. Nwagwu (1994) called these generators of crises in many Nigerian schools.

Human Relations Theories Related to School Climate

We reiterate here that school climate refers basically to the quality of relationships and the interactive behaviours of the institutional members in the work environment. The importance of the human and social component in organizations had for a long time been stressed by scholars. Research findings have continued to confirm this importance. In this section of the chapter, we select and examine some of the theories applicable to discussions of studies on the work environment, and specifically on the school climate

1. **Mary Parker Foollet and Elton Mayo Theory:** They were leaders of the human relations movement early in the twentieth century. The research led by Elton Mayo at the Hawthorne Plant of Western Electric Company in America gave some astonishing results. Peretomode (2012) summarized fundamental findings and conclusions from the human relations movement studies.

a. Human beings expect not only financial rewards from their work environment. They also gently value recognition and appreciation of their contributions.
b. Workers want to be treated with respect as human beings by their super-ordinates and supervisors, not like machines which have no feelings. Respect for human dignity is essential to morale boosting.
c. More changes in the physical environment may not result in increased productivity in an organization, but improvements in the social environment regularly produce increases in outcomes. The propositions and principles of the human relations movement have continued to influence leadership concerns in education, including the status of a school climate.

2. **Doughlas McGregor's Theory X and Y:** From his research findings, he classified workers into two distinct groups, Group X and Group Y, and gave his views on each group. He described

Theory X workers as people who did not like work and who waited to be told how and when to work. They expected strict supervision by their super ordinates, and grumbled frequently over working conditions and tools. Theory Y group enjoyed their work, liked to have freedom to develop and use initiative; did not need intensive supervision, and adjusted well to the work environment by creating a warm, open climate. One wonders which group many Nigerian teachers would belong to considering their attitude to work, with so many perceived inadequacies and complains about the school work environment.

3. **William Ouchi's Theory Z:** Following some criticisms of McGregor's theory X and Y, Ouchi in the 1980's developed Theory Z as a hybrid or mixture of Theory X and Y. He argued that in real life, hardly did any person operate exclusively on Theory X or Theory Y principles. Very often, changes in the physical and social environment tended to alter people's emotions, behaviours and work ethics. He used Theory Z to designate this group of workers who worked along Theory X and Theory Y interchangeably as situations changed in the work place.

4. **Abraham** Maslow's Theory of Hierarchy of Needs: Maslow identified five basic human needs: physical, safety, social, esteem, and self-actualization. The theory explained that the needs were arranged in a hierarchy of lower up to the higher needs of esteem and self actualization. The pre-potency sub-theory explained that unless the lower needs were satisfied to a reasonable extent, it was difficult to attain or access the higher order needs. The theory helps to explain the human element in a school environment, especially the school climate. People work to meet and satisfy certain personal and group needs. School climate becomes an important instrument for satisfying many needs.

5. **Victor Vroom's Expectancy Theory:** Like the assumptions in Maslow's Hierarchy of Needs Theory, Vroom found from his studies that human beings participate in organizational and institutional activities with their agenda of what they expect to gain from their participation. They have needs to satisfy, and they

are motivated to create an enabling environment that would assure the achievement of their personal and group needs and objectives (Ogunu, 2000).

6. **Jacob Getzels & Elgon Cuba's Social Systems Theory:** This is a popular theory when people study human behaviour in organizations, especially the school as a social system. It has two major dimensions; the institutional or nomothetic dimension and the individual or idiographic dimension. The former has the elements of roles and expectations, while the latter has the elements of personalities and needs - dispositions. Some scholars refer to them as the sociological and the psychological dimensions. The relevance of this theory to the analysis of a school climate is that we are enabled to have a holistic view of the work environment. School has given us certain roles to play with societal expectations of the results principals, teachers and students should accomplish. At the same time, it is recognized that the stakeholders have their individual personalities and specializations, as well as their personal needs, interests and dispositions. A synergy between the two dimensions creates a school climate that guarantees success in achieving personal and institutional goals.

7. **Frederick Herzberg's** Two Factor Motivation Theory: This is another theoretical framework often used by researchers in assessing the level of job satisfaction among employees. Herzberg, in his studies, identified factors which he termed "motivators or satisfiers", and those factors he labelled "hygiene or dissatisfies or maintenance" factors. Briefly summarized, if the maintenance factors are present in the work environment, the workers may not necessarily become satisfied or motivated. But if the motivators or satisfier factors are not present, the employees will be dissatisfied. School administrators need a clear understanding of the two factor motivation theory to be able to create and sustain a favourable school climate in the workplace.

   There are many other theories on motivation and job satisfaction which are related to leadership and maintenance of a favourable school climate. Many Nigerian scholars have written books and chapters in books on this important theme. They include Peretomode (2012), Nwagwu et al (2004), Ogunu (2000), Nwadiani (1998), Uyanga (1995) and Aghanta & Omoregie (2005) in addition to numerous foreign authors.

Factors Influencing School Climate in Nigeria

A critical survey of research findings and practical observations on the school environment and the school climate in major Nigerian schools, ranging from primary to tertiary level, would easily identify the under listed as factors that invariably determine the situation:

1. **Leadership Style of Chief Executives:** Some principals, head teachers, vice chancellors, provosts, rectors, deans, directors and heads of department do not possess the necessary skills and competencies to run a peaceful, united and friendly institution. Some are too authoritarian while others care very little about the welfare of their staff and students. Achieving a cordial, open school climate therefore becomes very difficult.

2. **Pressure from the External Environment.** The school external environment includes the community, the Ministry of Education and other government officials, external examination bodies and parents. Very often, they bring too much pressure to bear on school administrators, teachers and students. They either raise too high expectations or overtly criticise the school management for perceived short-comings and these can generate conflicts, ill-feelings and misunderstandings which are inimical to the operation of a healthy school climate.

3. **Physical Environment of the School:** Earlier in this chapter, we discussed the interactive relationship between the social and the physical environment. In many Nigerian educational institutions, there is a shortage of everything except students. Classroom space, office space, laboratories, libraries, toilet facilities municipal services like transport, clean pipe-borne water and electricity are in short supply, if at all available. These inadequacies cause much inconvenience to school members who

may become irritable, unfriendly, cold and uncooperative. These are negative indicators of school climate.

4. **Teachers' Morale and Job-Satisfaction.** A committed and satisfied group of teachers happily works to maintain a healthy school climate. On the contrary, when there is low morale and much dissatisfaction with the state of affairs, staff motivation goes down, and so does the school climate. In many places, teachers' unions such as the Nigerian Union of Teachers (NUT) and, Academic Staff Union of Universities (ASUU) may become militant and uncompromising. Strikes, acrimonies and soured relationships destroy happiness, togetherness and co-operation in school climate.

5. **Students' Discipline and Motivation:** Whenever students are motivated to learn and their welfare is high on the school administrators' agenda, there is peace and harmony in the school. However, if poor management leads to much indiscipline and students unionism and unrest, there is little chance of sustaining a suitable school climate that enhances effective teaching and learning. Students' participation and cooperation are important factors in the establishment and maintenance of a healthy favourable school climate.

6. **Conflict Management Mechanisms:** The current thinking by scholars (Peretomode, 2012 and Nwagwu and Ivowi, 2014) is that a conflict is a natural phenomenon in every human or social institution, for many obvious reasons. The reasons include different personalities, different needs and dispositions, diverse roles and interests, many informal and formal groups, etc. For a healthy school climate to be sustained in an institution, the administrators, teachers, students and parents should have systems, rules and procedures on how to deal with conflicts and misunderstandings before they degenerate into crises. Conflict prevention and management require human relations skills necessary for school effectiveness and school climate.

7. **Professionalism of Administrators and Staff:** There is a code of conduct for staff enacted by the Ministry of Education and teachers' unions. They incorporate the "dos and don'ts" of the practitioners. They represent rules and regulations which serve as guidelines and minimum standards of professionalism. If principals and teachers adhere strictly to the code of conduct, there are positive predictions of a warm, open, democratic and friendly school climate within the institution.
8. **Outside Interference and Imposition:** Culprits include government officials, parents and community leaders. They at times play roles that cause confusion or divisions among staff and students and which destabilize the school climate.

9. **Political and Religious Differences:** Wherever partisan politics and religious bigotry are allowed to grow in the school environment, invariably, there will be open confrontations and divisions. Such conflicts adversely affect the school climate.

10. **Respect for Fundamental Human Rights:** These are guaranteed in the 1999 Constitution of the Federal Republic of Nigeria. They include respect for human dignity, freedom of association, freedom of conscience and religion, and freedom from discrimination. Their observance enhances harmony and co-operation which are elements of a healthy school climate.

The above identified factors broadly accommodate other minor influences. When we adopt best practices in dealing with each of the factors, we are assured of positive results. If, on the contrary, we behave in ways which negatively impact on the school environment, the likelihood is that we will end up with a hot, unfriendly and ungovernable environment where much time is wasted mending fences instead of enhancing a healthy school climate which promotes efficiency, productivity and achievement of educational objectives.

Recommendations

Arising from our discussion of various aspects and implications of school climate in this chapter, some recommendations are desirable and important.

This is particularly appropriate in consideration of the factors which were identified as influences on the creation and maintenance of a healthy favourable operating climate in Nigerian educational institutions. The recommendations are briefly listed below.

1. Seminars and workshops should, from time to time, be organized for education officials, school heads, teachers and student union leaders on the nature and importance of a cordial, healthy school climate.
2. School authorities should raise awareness of the culture, rules and regulations of the school, and the consequences of acts of misconduct or indiscipline among staff and students. Observance of peoples' fundamental human rights should not be compromised or ignored. Orientation programmes should be organized for new staff and students.
3. Governing councils and boards of educational institutions should constitute committees for the speedy resolution of conflicts within the schools. Early constructive and objective actions or interventions help to prevent break down of personal and group relationships.
4. Improve the physical environment for administration, teaching and learning.
   Some acute shortages of facilities such as classroom seats, laboratory spaces, hostel places, offices and so on can create stress and struggles which degenerate into crises. In the view of Nwagwu (1994), a crisis ridden environment cannot permit the development and sustenance of a conducive school climate that fosters effective teaching and learning achievement.
5. Proper supervision and planned inspection and accreditation exercises are essential in order to monitor and ensure that standards and quality are maintained in the institutions. Any observed lapses should be urgently addressed to effect the desired improvement.

In conclusion, school climate is about working relationships among people in an educational institution. The quality of the school environment greatly determines school effectiveness and the degree of learning achievement. Therefore, priority attention should be given to the creation and sustenance of a cordial, friendly, open and participatory school climate in every educational institution, and this is one of the primary functions of a school management.

Summary

The article explained in detail the concept and types of school climate as well as major factors that may positively or negatively influence it. The term school climate refers to the relationships that exist between and among individuals and groups in the school environment. The main purpose of these interactions is to ensure appropriate coordination of people's different roles in the management of all other school resources to enhance organization goals achievement. The different types of climate identified include warm or cold, friendly or hostile, open or closed, democratic/participatory school climate.

The chapter further discussed a number of factors that may have direct influence on the type of school climate in operation at any particular period. These factors range from the type of leadership style put in place by the school administrators, pressing external influence, school physical environment, staff and students morale and motivation. Others are the conflict management styles adopted by the executives as well political and religious differences.

The paper recommended appropriate handling of these factors to ensure a positive school climate.

Sample research topics

1. School Climate and Principals' Administrative Performance in Imo State secondary schools.
2. School Climate and Managerial Effectiveness in Politechnics in Anambra state, Nigeria.
3. Positive School Climate: A Panacea to Holistic Socialization of Children.
4. School Climate as a correlate of Administrative Job Performance of Headteachers in Ebonyi state primary school

Review Questions

1. Identify five characteristics of the school as a social organization.
2. What is the meaning of the term "School climate"? What are

the manifestations and applications in educational management?

3. Discuss five factors that influence the status and maintenance of school climate in an educational institution.
4. Make five recommendations for the improvement of school climate in Nigerian educational institutions.
5. Identify a theory that can be used as the theoretical framework for the study of the school climate in the Nigerian education system, and explain the relevance of the chosen theory.

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Chapter 9

School Facilities Maintenance Culture

Dr. Olaolu P. Akinnubi

Introduction

The school is a unique community that permits actualization of educational aims, goals and objectives through judicious use of the available human and non-human resources. The school enables the administrator to show his expertise in ensuring that the physical facilities are well maintained in order to prolong their usage. The role of classrooms, furniture, computer system, photocopy machine, playgrounds and administrative blocks, among others, in enhancing school effectiveness cannot be overemphasized. In fact, efficient and effective maintenance of the school facilities by staff and students would make teaching and learning more pleasurable. Poor maintenance culture among staff and students has caused a great concern to stakeholders in the education sector. A great deal of fund has been expended on facilities maintenance in schools, but these facilities are not attractive to prospective students due to poor maintenance culture.

In spite of the great significance attached to the provision of school facilities, the school plant in many Nigerian secondary schools is poorly maintained. Taiwo (2000) noted that the physical environment in most secondary schools in African countries is not suitable for teaching and learning due to poor maintenance culture. Otu (2002) submitted that it is very common to see secondary school classrooms with broken windows and doors, collapsed ceilings, damaged roofs, cracked walls, faded paint, broken furniture, non-functional equipment/ electrical fittings and damaged infrastructures. Laboratory equipment, libraries and playgrounds are generally in poor condition in many secondary schools in Nigeria. It is against this background that this paper intently examined the concept of school facilities, maintenance of school facilities, types of maintenance in school and school facilities maintenance culture, among others.

Concept of School Facilities

School facilities are physical structures such as classrooms, furniture, equipment, computers, stationery and the likes that help in effective teaching and learning. They constitute the non-human resources in the school system. They are both permanent and temporary items in the schools. The quality of education students receive can be traced to buildings and other facilities in the school (Ihuoma, 2008). The facilities in the school consist of buildings and equipment meant for academic and non-academic activities, such as roads and paths, sport and game areas, security, Information and Communication Technology (ICT), transportation, cleaning materials, special facilities for the physically challenged people, furniture, farms and gardens-roads, parks and trees and storage facilities. These school facilities help in achieving the goals and objectives of education by meeting the physical and emotional needs of teaching and non-teaching staff and the students in the school.

Efficient and effective school facilities are necessary for the dynamic activities of teaching and learning and at least should, therefore, provide an environment which is secured, accessible, comfortable, safe, aesthetically pleasing, well-ventilated and well-illuminated. The facilities in the school, according to Lawrence (2000), include plumbing, fire suppression systems, mechanical, security, telecommunications, equipment and information technology, furnishings, materials and supplies and building grounds-playgrounds, athletic fields, vehicular access and parking and areas for outdoor learning.

School facilities are useful to both the school and its immediate community. The school manager is expected to put up administrative rules and regulations that cater for the use of school facilities, timely applications, acceptance of appropriate responsibility and liability and preference for local and non-profit organisations. According to Lawrence (2000), the factors that are to guide the community in the use of facilities in the school are:

i. The need for a certificate of insurance based on the use of the facility(ies);
ii. Any form of alcoholic beverage should be disallowed;
iii. The use of tobacco should be discouraged while using school facilities;

iv. The use of school facilities should not be allowed for any illegal purpose;
v. People in the community should not be permitted to make use of school facilities, unless when absolutely necessary. Approval may be granted for recognised groups, organisations and individuals;
vi. The facility use agreement should be signed appropriately and condition(s) of use spelt out;
vii. Requests for the use of facilities should be forwarded to the school manager or any designated officer for approval; and;
viii. Repeated use of school facilities should not be allowed to any organization or group that fails to abide by their conditions of use.

Maintenance of School Facilities

Maintenance involves carrying out activities needed to conserve as nearly, and as long as possible the original condition of facilities. It is the work of keeping something in proper condition. It entails replacing a plumbing, electrical or mechanical device that is malfunctioning at a particular period of time. It further entails carrying out routine activities on devices to make them work effectively. It involves activities that have the aim of restoring an item of a school facility to a state in which it can work effectively. These actions involve the merging of all technical as well as corresponding administrative, supervision and managerial activities.

Safe, efficient and effective facility maintenance is an important aspect of office complexes, industrial sites, hospitals, shopping malls, apartment buildings and schools to ensure that they are functional. Maintenance of school buildings is any work undergone to keep or restore any part of a school building, its services and surroundings to an acceptable level, and to maintain the usefulness and value of the school building at a given point in time. Maintenance in school refers to necessary work undertaken to keep or restore every facility, machinery or building to an acceptable standard.

Thus, it is difficult to decipher the how and why of inexistence maintenance culture, especially of all Nigerian private or public utilities. This is a great puzzle because everybody maintains his/her property! For example, every individual has to maintain his/her car by constant servicing if it is to continue functioning. Nobody waits until his/her car breaks down before servicing it! Why then is this not applied to public utilities such as the ones stated above? Thus, maintaining school facilities must be seen as the responsibility of all users such as teaching and non-teaching staff, students, parents or the community members where the school is situated.

Types of Facilities Maintenance in School

Efficiency of any maintenance programme can be attained if schools plan ahead instead of only attending to emergencies. This will permit some maintenance services to be performed frequently or periodically as the need arises. The four common types of maintenance as identified by Ejieh (2010) are:

i. Preventive Maintenance:
   This type of maintenance involves regular servicing of school equipment in order to prevent it from breaking down. It revolves round necessary actions that need to be taken by both staff and students on school plant in order to prolong its life span. It is an established procedures put in place to guide against sudden break down of machines and other equipment that could negatively affect students' academic performance (Candoli, 1988). This type of maintenance debars furniture, buildings and equipment from expensive maintenance when they break down. Designated officials usually carry out preventive maintenance in the school system in order to make it effective.
ii. Periodic Maintenance:
   This is a type of maintenance that entails servicing school buildings and facilities at a given time-termly, yearly or more. The objective is to prolong the durability of the school buildings and facilities. This type of maintenance includes repairs of leaking roofs and painting that can be scheduled to come up periodically as school facilities continue to age. Buildings and facilities wear out rapidly when they are continuously used without maintaining them.

iii. Replacement Maintenance:

This type of maintenance focuses on replacing parts of machines or equipment as at when due before such machine or equipment breaks down. It is instituted in order to prevent unbudgeted expenses during the school academic session. If replacement maintenance is effective in the school, embarrassment can be avoided in the course of using any machine at a particular time.

iv. Emergency Maintenance:

This type of maintenance occurs when there is sudden break down of an equipment or machine that is frequently used in the school. It covers work done when there is sudden collapse of buildings as a result of a natural disaster. This type of maintenance can be found in most Nigerian schools. Preventive maintenance could prevent emergency maintenance if a little fault would have been taken care of. Both staff and students must be given alternative accommodation during the period of carrying out emergency repairs and they should be well educated on what to do during this period so that teaching and learning would not be jeopardized.

Maintenance Culture

Maintenance culture refers to the ability of users to always ensure that the facilities in the school are made to continue functioning and remain close to their original state. It revolves round cultivating the habit of taking care of available facilities in the school. It is the responsibility of all users to make sure that the facilities in the school are catered for. This is the only means through which facilities usage can be prolonged.

Components that influence maintenance culture in Nigerian schools include awareness, responsibility, personality and attitude, mind-set, motivation, knowledge, training, culture trend, leadership, management commitment, management of organisation, fundamental and policy, operating system organisation, the enforcement and rules. Staff and students in Nigerian schools-primary, secondary and tertiary are deficient in maintenance culture. This phenomenon has negatively affected facilities in the education sector.

Challenges in School Facilities Maintenance Culture

The school community needs to cultivate the habit of ensuring that every piece of furniture is adequately catered for so that the durability of such furniture can be guaranteed. Thus, challenges of school facilities maintenance culture are enunciated as follows:

i. **Lack of education:** Staff and students are not properly educated by the school managers on the significance of facilities maintenance culture. Most times, the users are not adequately informed on the need to carry out little repairs on facilities as this action has possibilities of bringing positive changes on their standard.
ii. **Poor management of facilities in schools**: In Nigeria, maintenance culture is almost non-existent. This is as a result of non-transparency and insufficient provision of resources. People are not guided in developing an asset management policy, therefore, they see it as a normal way of doing this. (Infrastructure Asset Summit Africa**,** 2014).
iii. **Inadequate attention to maintenance culture:** Considering the valuable roles of facilities in the school system, it is sad that their maintenance is not given utmost attention. The school community does not seem to make maintenance of the available facilities a job that must be carried out at any point in time. The students do not see it as a duty to clean their chairs and tables just as they wash their uniform and socks. Culture denotes people's way of life in an environment. In fact, the teachers themselves feel too proud to carry out little maintenance in the staff room before the arrival of designated officials. Poor maintenance culture among school community members has contributed to great wastage of financial resources on school plant (facilities), which resources (money) would have been used to procure new facilities that could go round the staff and students.
iv. **Ineffective punishment:** Punishments are not usually meted out to staff and students caught in the act of vandalising school facilities. Staff and students make use of school physical facilities (such as lecture rooms, toilets, fittings and the likes) in a lackadaisical manner, with the belief that such are government property. These facilities have a direct impact on school effectiveness.

v. **Inadequate funds:** The management of primary and secondary schools in Nigeria are not given adequate fund to maintain facilities in schools by the controlling and regulatory body. This serves as an impediment to them in purchasing and maintaining important equipment and buildings required in the schools.

vi. **Lackadaisical attitude of custodians of facilities in the school:** The custodians are designated officials that are in charge of maintenance of school physical facilities. They are often absent from work without any genuine reason. They give excuses of frequent power failure and bureaucratic procedure as factors responsible for not taking proper care of facilities in the school.

vii. **Diverting money meant for maintenance to personal use:** School heads in Nigeria are often accused of ineffective utilization of funds meant for maintenance as a result of the fact that they divert such for personal use. Unused materials are often abandoned, and some are locked away in warehouses and left for moths to destroy.

viii. **Ineffective implementation of policy on utilization of school facilities:** Policies on utilization of facilities are not effectively implemented in Nigerian schools and this has negatively affected facilities maintenance culture.

ix. **Poor investment in Information and Communication Technology (ICT).** Poor investment in Information Technology (IT) hinders effective information processing in Nigerian schools. Maintenance work lacks update planning strategies that suit the school needs thereby impeding maintenance culture

Prospects of Facilities Maintenance Culture

Effective maintenance of facilities used in schools would in no small measure prolong the life span of such. Prospects of facilities maintenance culture include:

i. Staff and students in the school community should be well educated on the importance of maintenance culture. According to Adedokun (2011), for the community to develop adequately, its members must be well educated on maintenance culture. People must be carried along in maintaining available facilities so that they can be committed to it (Anyanwu, 1994).

ii. Facilities management in the school should be guided by transparency, accountability and provision of adequate resources as these will lead to good maintenance of public infrastructure.
iii. Facilities maintenance culture in the school system should be given utmost attention. The school community should see maintenance of the available facilities as part of their job that must be carried out at any point in time. The teacher themselves should not feel too proud to carry out little maintenance in the staff room before the arrival of designated officials.
iv. Effective punishments should be meted out to staff and students that misuse the school facilities.
v. Funds should be adequately provided for primary and secondary schools' heads in order to carry out regular maintenance of school facilities.
vi. Custodians of school facilities should be more dedicated to their duties and also see the need to imbibe maintenance culture in the school system.
vii. School administrators in Nigeria should utilize funds meant for repairing school facilities appropriately. They must avoid using such money for personal needs.
viii. Policy on utilization of facilities should be well implemented in Nigerian schools in order to enhance facilities maintenance culture. This will enable school managers to guide and use available resources to achieve educational goals.
ix. Investment in Information Technology (IT) is another way of making information processing more easily. This enables the maintenance work to operate an updated planning strategy that suits the school needs.

Implications for Educational Management

Educational management revolves round effective harmonization of available human and material resources in the educational sector in order to achieve predetermined aims, goals and objectives. School facilities maintenance culture has implications for educational management;

i. School facilities maintenance culture will help to reduce expenses usually incurred in facilities maintenance which are normally added up to recurrent expenditure.

ii. It will help the school manager to make adequate budget for development of school facilities.
iii. School facilities maintenance culture will help educational planners to make adequate projection of facilities in the school since the available ones are adequately taken care of.
iv. It will help to prolong the life span of facilities in the educational sector. School facilities maintenance culture has the potential of prolonging the durability of school plant.
v. School facilities maintenance culture will help to achieve educational goals and objectives since the available facilities are effectively put into use.

Summary

The school as a micro system cannot operate without functioning facilities and the only way these facilities can continue to function is for them to be adequately taken care of. Hence, school facilities maintenance culture remains a sine quo non for the attainment of educational goals and objectives. Poor maintenance of physical facilities-furniture, computers, cars among others-has caused great concern to stakeholders in the education sector. An effective implementation of the different types of maintenance in schools, such as preventive, periodic replacement and emergency would go a long way in achieving educational goals and objectives. Since poor maintenance culture among school facilities' users has led to incessant damage of the available facilities, staff and students in the school community should be well educated on its importance.

Tutorial Questions

i. What are school facilities?
ii. Discuss four types of maintenance used in the school system.
iii. Explain the term "Maintenance Culture".
iv. Discuss five challenges facing maintenance culture in the education sector and proffer plausible solutions to the identified challenges.

Sample Research Topics

i. School Facilities Maintenance Culture and Students' Academic Performance in Nigerian Colleges of Education

ii. The Role of the Principal in School Facilities Maintenance Culture in Ilorin-West Local Government Area Secondary Schools, Kwara State

iii. Assessment of Teachers' Perceptions of School Facilities Maintenance Culture in Ilorin-South Local Government Area Primary Schools, Kwara State

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Chapter 10

Quality Management in Education: Fundamentals and Anomalies of School Supervision and Inspection in Nigeria.

Dr. Yunus A. Fasasi & Prof. Nike Y. Ijaiya

Introduction

In Nigeria, education has been adopted as an instrument for national development. This is due to the belief that education is capable of fostering socio-political, economic and technological transformation of any nation. The education system aims at providing knowledge, skills and competencies to all Nigerians so that individuals will be capable of working and contributing to national development. The Government's position as stated in the National Policy on Education is that education is compulsory for every Nigerian citizen and it is to be qualitative, comprehensive, functional and relevant to the needs of the society (Federal Republic of Nigeria, 2013). This implies that education of high quality should be comprehensive, functional and relevant to societal needs as encapsulated in the Policy's objectives.

Incidentally, Nigeria is facing quality challenges in its educational system. In the last few years, poor academic performance, poor skill acquisition and incompetence of graduates from educational institutions are common occurrences at all levels. For instance, Jari (2014) noted that in the Senior Secondary Certificate Examination conducted by the West African Examinations Council (WAEC), failure in either Mathematics or English was over 68% in 2014, 65% in 2013 and 60% in 2012. Jari stated further that a major cause of mass failure was lack of quality teaching, qualified educators and a poor learning environment. In order to deal with the challenges, Obanya (2008) opined that Nigeria would need to build a Quality Management Mechanism (QMM) in education delivery. Quality Management Mechanism is a process which involves both school and government at all levels. When quality diminishes, the educational system becomes endangered.

Mobilisation of resources towards qualitative education delivery and achievement of educational objectives are functions of high quality supervision and inspection. This cannot be achieved on a platter of gold. It has to be consciously pursued and effectively managed. Quality management in education implies upholding the fundamentals and eliminating anomalies of school supervision and inspection.

This paper discusses the fundamental aspects of quality management in education. These are concepts, objectives, principles and types of supervision and inspection. It also discusses the anomalies which constitute impediments to supervision and inspection processes. Finally it offers suggestions on steps towards preventing the anomalies.

Quality Management in Education (QME)

Quality, according to Oyewole (2008), means the degree of excellence and the extent to which a product or service fits the purpose it is meant to serve. It also implies the value of a product or service. It is a reflection of the level or extent to which an objective has been attained.

Afizal (n. d.) noted that quality is viewed differently by stakeholders in an organization. He stated further that an executive, a union, an employee and a client view it as improved production, improved conditions of service, improved work environment and improved value for investments respectively. This definition also centres on excellence, purpose and value, and their levels of attainment from the perspectives of the stakeholders. These are organizational and individual expectations which are supposed to reflect societal objectives. Furthermore, Chartered Quality Institute (2010) defined quality as all features of a product or service which reflect its ability to satisfy stated or implied needs of its stakeholders and general society. Akinpelu (1981) related quality issues to education and concluded that good quality education is one that best fulfils the objectives of an ideal education. In the same vein, the Universal Basic Education Commission (2012) referred to this as a standard which must be met in order to give quality products and services. In the foregoing definitions of quality, terms such as excellence, purpose, requirements and values feature prominently and these describe the aspirations which an organisation strives towards. They are spelt out as the organisation's objectives.

Therefore, quality management centres on management of organizational objectives. The extent to which the objectives are achieved is an indication of the level of quality attained. Thus, Obanya (2008) viewed quality management as a 3-Dimensional model. These are inputs, process and output. Afizal (n. d.) in his own view stated that quality management involves quality control, quality assurance and quality improvement. According to him, quality control implies planned examination of products or services for a certain minimum level of quality. He stated further that quality assurance involves activities meant for ensuring that the process implementation brings forth a product or service which satisfies customer requirements in a systematic and reliable fashion consistently. Quality improvement means an increase in efficiency in all aspects for the benefit of all. In quality management, therefore, inputs, processes and outputs are imperative and should be considered.

The government has instituted supervision and inspection purposely to control, assure and improve quality in the nation's educational institutions. Supervisors and inspectors are quality managers who are charged with the responsibility of mobilizing teachers and other educational resources towards attainment of educational objectives.

Supervisors and inspectors are to be guided by the quality management principles. According to the International Organisation for Standardisation (2015), the principles stated that quality managers should understand current and future needs of customers and society, and link organisation's objectives to needs and expectations. They should also communicate customers' need to all workers in the organization and strengthen the link between the organization and all stakeholders.

Fundamentals of School Supervision and Inspection

Concepts of Supervision and Inspection

Supervision and inspection are described in different ways by different professionals. An attempt is made here to define them in relation to education. Supervision is a combination of two words, 'Super' and 'vision'. It is used to describe the action of an individual who is super or superior in vision and is capable of seeing what others do not see. The word 'supervise' means to direct, advise, guide and oversee. According to Olagboye (2004), supervision is being in charge of a group of workers and being responsible for ensuring that they do their work properly. Thus, a supervisor is a person officially assigned to direct, advise, guide and oversee the activities of individuals or a group of people with a view to suggesting areas of improvement and ensuring the achievement of organisational goals. Relating the concept of supervision to education, Ijaiya (2012) explained it as a major aspect of school administration, a supportive service intended to assist teachers to understand their problems in the class and devise the best ways to solve them in order to enhance their performance.

On the other hand, inspection means checking, evaluating, examining and determining the worth of a programme, a situation or an action. It also means determining the extent of compliance with rules and regulations. For instance, there are tax, sanitary and vehicle inspectors whose duties are to check, determine and dispassionately evaluate whether government rules are obeyed or not. Decisions to release or sanction the offenders would follow their findings. They are expected to be impersonal in the discharge of their official duties. Education inspectors are to play similar roles. However, education inspectors deal with individuals and groups of human beings. They are expected to give human touch to their inspection activities. Olagboye (2004), defined inspection as a process of ascertaining that educational standards are maintained. It is also a process of guidance, assistance and advice on quality improvement.

Therefore, educational supervision is a process of overseeing, monitoring, guiding, checking, directing and evaluating one or more aspects of a school with a view to providing support services and improving activities of head-teachers, teachers and other personnel in schools towards achievement of educational objectives.

Educational supervision and inspection are instruments for quality management, though they differ in their modes of operation. Both may be conducted by designated officials, but inspection is a periodic operation (at least once in three years), and requires writing of reports to higher authorities and for reference purposes.

Supervision also requires report-writing, though many supervisors do neglect this vital aspect of their duty. Supervision is purposely formative while inspection is summative.

Personnel such as head-teachers, assistant head-teachers, heads of departments and other designated officers in schools are involved in the supervision of their schools. They are referred to as internal supervisors and are different from officials who visit schools from outside as inspectors and external supervisors. Internal supervision is more regular, less costly and less formal. It focuses mainly on improvement of instruction and school administration.

Inspectorate divisions of Education Ministries at federal, state and local government levels, the Teaching Service Commission, the Universal Basic Education Commission (UBEC), the State Universal Basic Education Board (SUBEB) and the Local Government Education Authority (LGEA), are the government agencies saddled with making quality improvement in the nation's educational system, that is, those below the tertiary level. While officials in this category are referred to as either supervisors or inspectors, head teachers and their subordinates who play similar roles as quality management agents within their schools are referred to as supervisors only and are never called inspectors (Fasasi, 2013).

Objectives of Supervision and Inspection

Quality education resides in the achievement of educational objectives. Thus, the better the quality, the higher the level of achievement. Supervisors and inspectors are to assure a high level achievement of supervisory and inspectoral goals and objectives. The Government (Federal Republic of Nigeria, 2009 pp 62-63) stated the followings as the goals of inspectorate services:

(a) Set, maintain and improve standards in all aspects of school system;

(b) Ensure uniform standard and quality control of instructional activities in school through regular inspection and continuous supervision;

(c) Obtain information on problems and difficulties of teachers and institutions and offer practical solutions to them; and

(d) Encourage dissemination of information on innovation and progressive educational principles and practices in the school system through publications, workshops, meetings, seminars and conferences.

Principles of Supervision and Inspection

These principles are statements, rules and laws which could guide and facilitate the conduct of supervision and inspection. They are essential to the successful conduct of supervisory and inspectoral duties.

1. Supervision and inspection are an integral part of education system. They are to be conducted at all levels (primary, secondary and tertiary), and on all aspects of education (teachers, non- teachers, learners, facilities, finances, curricular and co-curricular activities, administration, etc). Both are required by the Education Law as part of management and administrative functions, and part of school support services for achieving desired educational objectives and also of the educational system from inception till the present time.
2. All teachers should be supervised and inspected. Teachers of different categories such as the newly appointed, experienced, trained and untrained teachers, teachers in schools located in rural and urban areas, newly transferred and newly promoted teachers require supervisory and inspectoral attention.
3. Supervisory and inspectoral operations should be flexible. The needs of individuals and prevailing situation in school environment should be taken into consideration.
4. Achievement of educational objectives. Supervisory and inspectoral activities should focus on, clarify and evaluate the extent of achievement of educational objectives. This implies that supervisors and inspectors should be concerned with activities that could assist in achieving optimal educational objectives.
5. Supervision and inspection should improve staff-students, school-community and school-government relationships. A positive relationship between a school and all stakeholders will enhance performance and achievement of educational objectives
6. Adequacy of resources. Supervisors and inspectors should be provided with adequate resources (money, facilities, personnel,

professional training and ethical guidance and time) for effective discharge of their responsibilities.

7. Research findings and school improvement. Supervision and inspection should help in interpreting and putting into practice the latest findings in educational research.

8 Self evaluation. Supervisory and inspectoral programmes should be evaluated by participants and outside consultants.

9. Training and retraining. Continuous training and retraining of supervisors and inspectors for personal and professional development are necessary to upgrade and update their knowledge and skills. Prospective supervisors/inspectors must be professionally trained, skillful and experienced in teaching, school administration and supervision.

Techniques of Supervision

1. Classroom observation: A supervisor could make a scheduled or an unscheduled visit to a teacher while teaching a class of students. He makes a live observation of the teaching-learning process. He observes classroom management, knowledge of subject matter, lesson preparation, teacher's personality and students' participation. He discusses findings with supervisees and suggests improvement.
2. Demonstration: A professional and experienced supervisor practically presents teaching step by step. A skill, an event and a concept are practically applied in the presence of supervisees.
3. Teacher-teacher cooperation: This may involve inter-class or inter-school visitation by teachers of similar specialisation. This method yields better result if the supervisor is more experienced than the supervisees. They learn from and share experience with each other.
4. Micro-teaching: This involves a supervisor organising a teaching process in a scaled down class size (5-10 students), time (5-10 minutes), skill imparted (introduction, presentation, questioning, evaluation) and content. The supervisor and supervisee would have a close interaction. It exposes a teacher to different skills.

5. Workshop: The supervisor organises a group of teachers to brainstorm on a particular topic or problem in a face-to-face situation to identify possible solutions.
6. Use of electronic media: Radio, tape recording, video, television, film and other modern information and communication equipment have brought an innovation into supervisory practices. This is referred to as electronic supervision.

Types of Inspection

1. Full General Inspection/Full Scale Inspection: Full inspection is conducted on all aspects of school life. The Inspectorate would constitute a team of inspectors. This is determined by size, curriculum and composition of teachers to be inspected. It lasts for one to three or more days and holds at least once every three years. The school to be inspected would be notified in advance so as to provide required data on the school.
2. Follow-up Inspection: This is a visit to a school after a full inspection has been conducted. The purpose is to find out the extent of implementation of earlier recommendations. It is conducted within a year after full inspection. This, however, depends on availability of facilities at the inspectorate office.
3. Advisory Visit/inspection: This is conducted to encourage and advise the staff of a school on improvement of teaching, learning and school environment. It lasts for one or two days. One or more inspectors visit the school for interaction on teaching methods, classroom management and curriculum in operation.
4. Recognition/Accreditation Inspection: This is conducted on schools seeking accreditation for external examination. It is similar to a full inspection in duration, number and calibre of inspectors required. All aspects of school life are to be inspected and levels of preparation for external examinations are determined.
5. Special Visit/Investigation: Administrative, communal or disciplinary cases may warrant an investigation by the Ministry of Education. A panel of enquiry would be set up to conduct investigations.
6. Opening of School Inspection: A proposed school site is inspected in order to determine its suitability for educational purpose. There

is usually a second inspection before the school is finally approved for operation. Health personnel and construction engineers are involved in addition to the officials from the Ministry of Education.

Anomalies in School Supervision and Inspection

These are activities in school supervision and inspection which constitute impediments to quality management and achievement of educational objectives.

Inspection is generally conducted by external agents from the Inspectorate Division, Teaching Service Commission and Local Government Education Authority. It is externally imposed, judgmental and teacher-focused as it was during the colonial era. An in-school supervision which is expected of principals and their subordinates rarely features in Nigerian basic and senior secondary schools. Although there are local school supervisors and school support officers who are supposed to supervise basic schools in some states of the federation, their activities are occasional and judgmental, like the school inspectors.

It is an anomaly that instructional supervision is hardly conducted in schools. Primary school head teachers and secondary school principals and their subordinates seem not to be keen on supervising their teachers at work. They are more interested in administrative supervision where they oversee the day-to-day running of their schools (Ijaiya, 2012).

Also, there are no professionally trained supervisors and inspectors. Many of the personnel are trained teachers whose training in supervision is severely limited and mostly theoretical.

Teachers' perception of supervision and inspection is still negative. They see the exercise as witch-hunting, an assessment and an avenue for criticizing their performance. Incidentally, the supervisors and inspectors who are quality management officers do not perceive themselves as school support officers.

Government's goals and objectives are not clearly stated in the Education Policy. Hence, many supervisors and inspectors lack focus and fail to perform their jobs. Rather, they pay attention to trivial issues which are not helpful to the attainment of educational objectives.

Corruption in society has negatively influenced the behaviour of both supervisors and supervisees. Some supervisors accept gifts from schools and then close their eyes to areas of deficiencies which they are expected to point out and correct. On the other hand, some teachers who have god-fathers threaten to deal with their supervisors.

Upholding the Fundamentals and Removing Anomalies

Officials of educational ministries and boards, school administrators and teachers should have a clear understanding of supervision and inspection. The main purpose of educational supervision and inspection which is improvement in teaching and learning should be understood by all stakeholders. Particularly, both supervisors and supervisees should have a positive understanding of the purpose.

Government and policy makers should have clearly defined objectives for supervision and inspection. Educational policies before and after Independence, and till date, did not clearly and separately define roles for supervisors and inspectors. The government, administrators and teachers should realize that modus operandi of supervision differs from that of inspection and they should reflect this position in subsequent publications of educational policies.

Professional training for supervisors and inspectors will boost their knowledge and enhance their performance. Therefore, prospective supervisors and inspectors should undergo a pre-service training in universities and institutes of education. In-service training which is being organized at local, state and federal levels is grossly inadequate for a 21st century quality management officers.

Technological and sociological forces are influencing educational development while innovations are springing up within and outside educational environment. As suggested by Nwankwo (1982), educational supervisors and inspectors should constantly explore means of adopting, adapting or offsetting these forces.

Supervisory and inspectoral efforts should be directed to all aspects of education (curricular, co-curricular, and extra-curricular activities, finances, facilities and administration). The efforts should also be directed to all categories of staff in all educational institutions including trained, untrained, experienced, new, male and female staff.

Curriculum development and implementation are an essential component of supervision and inspection. Improvement of this component will enhance achievement of educational objectives.

Implications for Educational Management

1 Education managers should be aware of the importance of supervision as an in-school exercise (by school-heads and their subordinates) and as an externally-arranged exercise conducted by officials of education ministries and agencies. They should also be aware of the importance of inspection as an externally-arranged exercise conducted by officials of education ministries and agencies. Both should be managed and conducted effectively.

2 Objectives of supervision and inspection are to achieve educational goals which are meant to pursue national aspirations. Unless the objectives are actualised, achievement of educational goals would be a mirage. Therefore, educational managers at all levels (educational ministries, agencies and institutions) should be aware of the objectives and work towards achieving them.

3 In the history of educational development in Nigeria, ordinances, codes, laws, decrees, edicts, bye-laws and policies that were formulated had provisions for educational supervision and inspection. Therefore, serving and prospective education managers should study them and determine the extent of their successful implementation. The managers should also be aware of any emerging legal provisions on quality management of education and facilitate availability of resources for their implementation.

4 The importance of supervision and inspection for educational and national development demands that government at all levels provide enabling environment for supervisory and inspectoral exercises. Thus, adequate resources (money, personnel, facilities, time and other logistics) should be made available for the exercises.

5 Managers should be aware of and be guided by the principles of school supervision and inspection.

6 There are different types of supervision and inspection. Each has a specific purpose. Managers should make use of them appropriately.
7 Managers should have a pre-service training in supervision and inspection. Regular in- service programmes should also be organised to ensure continuous professional development of supervisors and inspectors.

Summary

High quality education should reflect the developmental needs of individuals and society. Its management involves a careful identification of fundamentals and anomalies of supervision and inspection. The government has employed school supervisors and inspectors as quality management officers for guiding, monitoring and improving performance in educational institutions and for actualisation of educational objectives. The supervisors and the inspectors need to identify, understand and appropriately apply concepts, purpose, principles and types of supervision and inspection. They should also identify and proffer solutions to challenges that could militate against effective supervision and inspection.

Sample Research Topics

1. Internal Supervision and Goal Achievement in Private and Public Primary Schools in Nigeria.
2. Indiscipline in Public Secondary Schools: The Roles of the Inspectorate Division of The Ministry of Education.
3. Supervisory Leadership Responsibilities and Students' Academic Performance in Nigerian Secondary Schools.
4. Influence of Supervisors and Inspectors' Job Performance on Employability of Secondary School Students.
5. Improving Internal Efficiency of Schools: The Roles of Supervisors and Inspectors.

Review Questions

1 Explain what is meant by supervision and inspection.
2 Identify any five principles of supervision and inspection and discuss their application in educational institutions.

3 What are the objectives of supervision and inspection? Why are these objectives not actualised?
4 Identify any two types of supervision and discuss their significance in the improvement of the educational system.
5 Advance reasons for continuous supervision and inspection in the educational institutions.

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Chapter 11

Unionism in Institutions of Learning

Dr. Bosede O. Famous-Izedonmi

Introduction

Unionism is carried out through the channels of trade and student unions. These are organisations made up of workers or students (including their leaders) who are united in promoting and protecting their common interests and that of the society. A trade or labour union can also be referred to as an alliance of employees of a specialised vocation, business or association for the purpose of securing improvements on their salaries, allowances, working conditions and the society through collective bargaining or agitations as the case may be. On the other hand, a student union can be referred to as an association of students in different institutions of learning, especially tertiary institutions, for the purpose of securing improvements on their welfare through collective bargaining or agitation as the case may be (Encyclopedia Britannica, 2014). Whichever way, unions have a common goal of coming together to improve on the welfare of their members and that of the society (Adeniji & Adekinjo, 2010). Trade unions are formed to create peaceful and harmonious working relationship in organisations as long as management ensures improvement on the welfare of its members and invariably that of society. Student union is formed to create a harmonious teaching and learning relationship for effective teaching and learning activities and peace in schools, as long as management guarantees improvement on students' welfare and invariably that of society. These go to reveal that in the practice of unionism, there is the union on one divide and the employers or school authorities or government (the management) on the other divide. So, the actions, inactions and reactions of management to the welfare of the members of a union or members of a society are the determinants of the choice of action of a union. For instance, the management that wants peace in the workplace or in an institution of learning or society must learn to manage and not resolve conflicts as conflict resolution often leads to aggressive/violent unionism.

Conflicts must come because of the diverse characteristics of the different organisations and the people therein, which most times reflect in their organisational and human behaviour. These may occasionally be in consonance with or in contrary to each other. When human behaviour is in consonance with organisational behaviour or vice versa, there will be peace and harmony in the workplace but when the organisational and human behaviour are contrary to the other, conflict arises. The resultant effects could be protests/demonstrations, sit at work or strike actions (industrial actions). These are some of the weapons workers/students use to show their grievances, the seriousness of their demands and if possible, cause/force management to bend backwards inorder to meet their demands (which of course, is always their main aim).

There are workers' (human) expectations and there are organisational expectations. In most cases, it is the organisational behaviour that triggers the reaction of the workers' behaviour (the trade or student unions) either positively or negatively. When the reaction is positive, there is no conflict but when negative, conflict occurs. Conflicts, in most cases, result to loss of man hours, low productivity, injuries, deaths, disruption of academic calendars, destruction of institutional and/or public properties and so on. Most of the grievances of workers and the reasons for strike actions and/or protests have to do with poor salaries, allowances, conditions of service, inadequate staffing, infrastructure, facilities, workers' unfriendly policies, education policies, the non-payments of approved salaries, allowances, other national issues, among others (Rabiu, Masud, Mahanaz Mohammed & Ahmed, 2013). Students' grievances could be an actual or intending rise in school fees, avoidable deaths of students, unfriendly students' policies, education policies, lack of potable water, irregular electricity supply and other student related issues (Amadi & Urho, 2016). Parents, society and all stakeholders in education always cry out against these industrial actions saying that both sides of the industrial dispute can manage conflicts without violence of any kind (Ayim, Chidi & Ogunyemi, 2012).

Conflict management is the process of using all available means including the informal groups in an organisation to eliminate all variables that will cause conflicts, that is, being proactive in dealing with the sensibilities or expectations of workers. On the other hand conflict resolution is the process of bringing to an end a conflict that has already occurred. It could be violent one; that is, a conflict that was not well managed. Suffice it to say that the beginning of unionism in Nigeria was in 1912 with the formation of the Civil Service Union. Unionism started growing with the enactment of the Trade Union Ordinance of 1938. Other trade unions came up later. They include, the Nigerian Railway Native Staff in 1919, the Nigerian Union of Teachers (NUT) and the Railway Workers Union in 1931, the African Civil Servants Technical Workers Union (ACSTW) in 1942 led by Michael Imoudu, the Federated Trade Unions of Nigeria (FTUN) in 1942 and the Trade Union Congress of Nigeria (TUCN) in 1943 (Vanguard, 2012). In 1965 the Nigerian Association of University Teachers which was formed in 1965 later became known as Academic Staff Union of Universities (ASUU) in 1978, among others. The Trade Union Decree of 1973 No. 28(1) brought all the unions together under one body known as the Nigerian Labour Congress (NLC). The Academic Staff Union of Universities (ASUU), Senior Staff Association of Nigerian Universities (SSANU) and the National Association of Academic Technologists (NAAT) in universities; Academic Staff Union of Polytechnics (ASUP) and Senior Staff Association of Polytechnics Union (SSAPU) in polytechnics, Colleges of Education Academic Staff Union (COEASU) in colleges of education and the Non-Academic Staff of Universities of Allied and Education Institutions (NASU) in all tertiary institutions are affiliates (Davidson, 1977). The Nigerian Union of Teachers (NUT) in the public primary and secondary schools and later the Academic Staff Union of Secondary Schools (ASUSS) in public secondary schools came up in the 1990s.

These are the different trade unions in institutions of learning while the Student Union Government (SUG) is in all tertiary institutions, bearing the same nomenclature. It comprises students only. Membership of these unions was compulsory with check-off dues until the military regime made it voluntary. Their main aim is to ensure better welfare packages for their members which they often achieve through collective bargaining. It is when this process fails that they go on warning strikes or stage peaceful protests/demonstrations.

If inspite of these actions, management or government still refuses to meet their demands, the workers proceed on full blown strikes or the students engage in violent protests/demonstrations. (Omidiran, 2002 & Seniwoliba, 2013). However, there are times students do not engage first in peaceful protests/demonstrations before going on violent ones. In such cases they may have quietly negotiated with management but to no avail. It seems that government or management usually take these warning strikes and peaceful demonstrations with levity, until the situation becomes an institutional or a state or federal issue posing as threat to the social, economic and political growth of Nigeria.

What makes these unions strong in Nigeria is the constitutional backing of the Freedom of Association Clause in Section 40 of the 1999 Constitution and the Trade Union Decrees No 31 of 1973 and No 91 of 1993. In spite of these legal backings, strike actions and protests by the unions have not succeeded in causing their employers or school authorities to meet all their demands; the ones that are met are often coloured by pains, grief, sorrow, death(s), wanton destruction of properties and so on. There have been incessant strikes by different unions in Nigeria to agitate for better conditions of service for their members' rights, from the colonial period. The first general strike of 1945 was led by Michael Imoudu when the colonial government refused to honour their promise of reviewing the Cost Of Living Allowance (COLA). It lasted for forty days in Lagos and fifty two days in the provinces (Harbor-Peters, 2002). Since then strike actions and students' protests have characterised institutions of learning. The military dispensation did not in anyway show that they were trade union friendly because they tried to pocket labour leaders whose resistance led to the proscription of such unions. It is not an uncommon thing in Nigeria in recent times to see several unions embark on strike at the same time. In the universities, ASUU, SSANU, NAAT and NASU can go on strike almost or at the same time.

Consequently, the topic will be discussed under the following sub-headings:

(a) Concept of Unionism
(b) Unionism in Tertiary Institutions
(c) Unionism in Basic and Senior Secondary Schools

(d) Student Unionism in Tertiary Institutions
(e) Implications of Unionism on Educational Management
(f) Conclusion
(g) Recommendations

Concept of Unionism

Unionism is the act of workers or students coming together to bargain or agitate for improvement in their welfare and that of the society with their employers or school authorities or government as the case may be. This is because individuals do not have the strong power and so may not be able to effectively bargain for improvement in their welfare in workplaces or in schools. Unionism cannot thrive without trade/labour and student unions in schools especially tertiary institutions. This is because unionism practices the policies of trade/labour and student unions which have strict practices.

There are many definitions of a trade/labour union. It can be defined as a democratic body established by workers to promote their socio-economic and political interests in their workplaces and in society. The structure of a union depends on the chronological, national, economic, political and legal factors in a country. To this end a union in Nigeria may be different from another in other climes. Hyman (1971) posited that trade union is the carrier of employees' needs inorder to stop slavery and radically transform society. However, Bean (1985) saw a trade union as a body that struggles for the interest of its members and that of the society at large. These two definitions by Bean and Hyman aptly describe the activities of a trade union in Nigeria but that of Bean seems to be more appropriate because it talks about the interest of the workers which could range from wages to working condition among others and the interest of the larger society. Hyman also talked of radically transforming society which is sometimes identified in the activities of a trade union in Nigeria but he limited the workers' interest to wages. In his definition, Fajana (2000) asserted that a trade union is an association of wage and salary earners to safeguard and improve on the salaries and conditions of service of its members, inorder to increase their income and public image in the society. This definition only describes a trade union as a body that is concerned with the improvement on the wages of its members and their class in society but it does not capture the activities of trade unions in Nigeria. In a nutshell, Yusuf (2008) saw a trade union as a forum for checking the excesses of employers through regular consultations on matters that has to do with the proviso of employment and the general working conditions of the workers. It defends members' interests against managements' actions or misdeeds, protects workers from humiliating job experiences and is a vehicle for a revolutionary social change by cooperating with other elements in the society to promote socio-economic development and political advancement. Student unionism, on the other hand, is an association of students in an institution, formed to promote the social, economic and political interests of its members and that of the larger society (Onike, 2013).

It is when organisational behaviour is at variance with the expectations of the workers or students, possibly after consultations and meetings to manage the agitations of the workers or students, that conflict occurs. This is followed at times by peaceful protests/demonstrations or warning strikes for some days or weeks to alert management that they are still ready to negotiate with them inorder to resolve the conflict. Most often, management pays deaf ears to these peaceful protests /demonstrations and warning strikes and this further infuriates the workers and students into believing that management is insensitive to their plight. They therefore, go on violent full blown strikes with the attendant effects of destruction of lives and properties (Aluede, 2001).

Suffice it to say that the presence of unions in institutions is to promote peaceful relationship between workers, students and management. It is when one of the parties fails to meet its obligations to the other after several means to arrive at a compromise that unionism becomes violent in workplaces and schools. For instance, for the past thirteen years, the University of Ilorin in Nigeria has not witnessed violent protests/demonstrations and strike actions from its students and workers. This does not mean that there were no conflicts but the management, workers and students have been able to manage them over the years (University of Ilorin Bulletin, 2016). It has been observed that workers' and students' interests are well protected when they employ the spirit of aggression and dynamic unionism. Onike (2013) posited that in past years, fear gripped management when articulate, versatile and radical student union leaders spoke, unlike in recent times that they have either been cowed, bought over or anointed by school authorities; so their speeches are uncoordinated, weak and unstable resulting in deprivation, victimization and oppression.

In Nigeria, the concept of unionism in tertiary institutions can be divided into three stages as shown below.

-Unionism During the Colonial Period and the First Republic in Institutions of Learning;

-Unionism During the Military Rule in Institutions of Learning; and

-Unionism During the Civilian Rule in Institutions of Learning.

Unionism During the Colonial Period and the First Republic in Institutions of Learning

During the colonial period, the first strike in Nigeria was led by Michael Imoudu in 1945 as a result of their trade union's agitation for an increase in salaries because of the stagnation of wage structure, acute shortage of essential commodities and a rise in the cost of living which caused hardship to both workers and the general public during the raging Second World War (1939-1945). The strike led to the introduction of the Cost Of Living Allowance (COLA) (Fajana, 1995 & Otobo, 1987). Though the strike did not involve tertiary institutions because during the colonial period unionism in tertiary institutions was non-existent, but it seemed to have encouraged trade and student unions in tertiary institutions to forge ahead when they were formed. The first trade union in the universities was the Nigerian Association of University Teachers which was formed in 1965. However, student unionism which started in the 1956/1957 academic session protested against the Anglo-Nigerian Pact in 1960. This made the Nigerian government to drop the idea of signing the Pact. They also protested against the death of Patrice Lumumba in 1961. These actions showed that the essence and necessity of unionism are to positively contribute to the socio-economic and political development of any society.

Unionism During the Military Rule in Institutions of Learning

The period of military rule comprises 1967-1975 (General Yakubu Gowon); 1976-1979 (Generals Murtala Muhammed and Olusegun Obasanjo); 1984-1986 (General Mohammed Buhari); 1986-1993 (General Ibrahim Babangida) and 1993-1998 (General Sani

Abacha) (Yusuf, 2008). These periods were characterised by many strike actions and students' protests/demonstrations as regard their welfare against the despotic military rule and return to democratic government. The strikes between 1979 and 1998 were due to oil crises in the 1980s which led to inadequate funding of education. Tertiary institutions had their fair share of dilapidated infrastructure, inadequate and obsolete facilities, high cost of living, inadequate academic staff as a result of brain drain, withdrawal of subsidy on feeding, no bursary awards to students and non-increase of wages, among others.

The quest to bring an end to these led to many crises by the unions in institutions of learning including the student unions (Oyeniran, 2013). For example, during General Sani Abacha's regime, there was general dissatisfaction in Nigeria: the populace was beleaguered, restrained and there was hunger. The Nigerian Labour Congress (NLC) was mute about the situation and was therefore labeled General Sani Abacha's collaborators. NUT however, battled for a Teachers' Salary Structure (TSS) for its members during this period (Ozano, 2013). ASUU also demanded for improved working conditions of its members and General Sani Abacha's government was forced to negotiate with them. There is another school of thought which perceived that it was corruption that made adequate funding of tertiary institutions a mirage and not the fall in oil prices because there seemed to be cases of corruption during this period when one considers the amount of money the Abacha government looted from the commonwealth of Nigeria. It also shows a classic example of how employers refuse to meet the expectations of their employees and how unionism through the instrument of trade unions fights for the welfare of its members. During General Ibrahim Babangida's regime, ASUU was proscribed twice and its property seized.

There were also demonstrations touching on the effects of the Structural Adjustment Programme (SAP) by student unions which led to many deaths, destruction of school and public properties, opening of prison gates and closure of schools among others because of their violent nature. Prior to this time, they had staged peaceful protests to which the Federal Government paid deaf ears (Yusuf, 2008).

Unionism During the Civilian Rule in Institutions of Learning

The periods of these rulers 1979-1983(Alhaji Shehu Shagari); 1999-2007 (Olusegun Obasanjo); 2007-2015 (Umaru Yar'Adua and Dr Goodluck Ebele Jonathan) and 2015 (Muhammed Buhari) were also characterised by strikes and students' protests. During President Umaru Yar'Adua and Dr Goodluck Ebele Jonathan's civilian rule (2007-2015), strike actions were incessant in Nigeria institutions of learning. At a time, all the unions in tertiary schools went on strike at the same time to press that the needs of their members, students and all Nigerians be met by the governments of the day. State chapters of NUT AND ASSUS were on strike because of non-payment of the 27.5 percent Teachers' Special Allowance (TSA) approved in 2008 instead of the TSS, in seventeen states among other reasons (Nigeria Agency of Nigeria (NAN), 2012). The student unions staged myriads of protests, though not on a national scale, against poor infrastructure, inadequate facilities, rise in school fees, poor medical facilities and negligence. These led to the death of some students, looting and arson.

Unionism in Tertiary Institutions

In the universities, polytechnics and colleges of education, there are several trade unions. This is because these institutions are made up of different groups of professionals of like minds such as the academics, senior and junior non-academics, technologists and allied workers. To this end, there are ASUU, SSANU, NASU and NAAT in the universities, ASUP, SSAPU and NASUP in the polytechnics and COEASU and NASU in the colleges of education. These represent each group of workers and ensure that the welfare of their members is not toyed with inorder to promote a harmonious relationship and industrial peace between workers and their employers. ASUU, which was formed in 1978 (birthed from the Association of University Teachers (AUT) which was started in 1965) has a record of being the most militant union in tertiary institutions because of the aggressive nature of its strike actions which at times go on for a very long time to the intent that half or more or even an academic session can be lost. Suffice it to say that in 1972 when AUT went on strike, General Yakubu Gowon told them to return to the classroom or pack out of their official residential quarters (Wilson, 2002). ASUU was also very much in the struggle against the military regime in the 1980s. This could be the underlying reason for its proscription in 1988. ASUU has embarked on several strike actions to push the Federal Government to yield to its demands and see to its grievances as shown in Table 1.

Table 1: **Asuu's Major Strike Periods**

Year	**Period of Strike**
1994	12 Months$^+$
1999	5 Months
2001	3 Months
2002	2 Weeks
2003/04	6 Months
2005	3 Days
2006	3 Days
2007	3 Months
2008	1 Week
2009	4 Months
2010	Over 5 Months
2011/12	3 Months
2013	6 Months

Source: Adapted From: (1) Ajewole (2014). (2) Ojeifo (2014).

In 1980, there was a strike over salary increments, stoppage of brain drain among others; in 1985, for transfer of senate duties to the Nigerian University Commission (NUC); in 1988 on the 7th August, ASUU was on strike for better wages and university autonomy (as a result all its properties were seized by the military regime). It was permitted to restart its activities in 1990 but was once more proscribed on 23rd August, 1992. In 1992, 3rd September, an agreement was reached that met its several needs including the freedom of workers to negotiate. In 1994 and 1996, ASUU protested when its members were sacked by the General Sani Abacha's military regime. In 2001, there was a strike for the restoration of the forty nine Unilorin lecturers sacked for participating in a nationwide strike. In 2008, there were two one week strikes by ASUU to again press their demands for improved salaries and reinstatement of the forty nine lecturers who were earlier dismissed. In June 2009, ASUU went on an indefinite strike to protest the Federal Government's breach of an agreement it had reached with the Union in 2007. Three months later in October 2009, ASUU, SSANU, NASU and NAAT signed a memorandum of understanding with the federal government which bordered on staff conditions of service and increased funding for universities. On 1st July, 2013, ASUU was on strike for five months and fifteen days for better funding including earned allowances in arrears to the tune of ninety two billion naira and the revitalization of Nigerian universities. Professor Festus Iyayi, an ASUU warlord and a former National Chairman of ASUU, died in the process. SSANU even threatened to go on strike if its members' allowances were not captured in the 2013 budget (Akingbehin, 2014).

In the wake of these strikes, SSANU, NASU and NAAT who always use the successes of ASUU's strikes as bases for negotiations, also presented their demands. In most cases, the unions seem to always be in conflict with one another: ASUU claiming superiority and the others refusing to be seen as inferior to ASUU. During the last ASUU strike, the other unions told the federal government to ignore ASUU's demands and concentrate on the implementation of the 2009 memorandum of understanding; otherwise, they too would go on strike in order to get the same welfare packages if such was approved for ASUU (Wilson, 2002).

In Nigeria, the universities in particular can be said to be characterised by strike actions which do not augur well for effective teaching/learning activities. In fact, between 1993 and 2008, universities closed for about 36 months because of ASUU's strike actions (an average of over two months per year). What a waste of human, physical and time resources especially when their demands are at last partially met (Anyim; Chidi & Ogunyemi, 2012). In the polytechnics, the scenario is the same except that their major contention for some years has been the dichotomy between the university degree and the Higher National Diploma (HND) certificate. However, the most recent strike action by ASUP lasted for ten months, from October, 2013 to July, 2014. ASUP demanded for thirteen things but the government said they could take care of only four; the four are yet to be approved for them. This goes a long way to show government's unseriouness in funding education adequately. It is pertinent to note that most of the demands of the labour unions have to do with finance.

The budgetary allocations to universities in 1999 were 11.12%; 7.0% in 2001; 4.75% in 2004; 6.4% in 2010, 6.2% in 2011; 8.43% in 2012 and 8.7% in 2013 (Ojeifo, 2014). One of the major aims of tertiary education is the preparation of high level human resources for the development of the different sectors of the economy yet government seems to be playing politics with tertiary education; no wonder the certificates from Nigerian tertiary institutions are considered sub standard (Zuokemefa & Sese, 2015). Until government is ready to use its political will to adequately fund education in Nigeria, strike actions may continue to be the only weapon for employees in tertiary institutions to get their demands for quality education that meets best global practices.

Unionism in Basic and Secondary Schools

The NUT for a very long time was the umbrella body for all teachers in the primary (now lower and middle basic) and secondary schools (now junior (upper basic) and senior secondary schools). NUT was established in 1931 after the merger of two teachers' associations in Southern Nigeria: the Lagos Union of Teachers (LUT) which came into being in 1925 (the first President was Reverend Cannon J. O. Lucas) and the Association of Headmasters of Ijebu Schools (AHIS) formed in 1926 with Reverend Israel Ransome Kuti as President. He also became the first President of the NUT which operated mainly in Southern Nigeria (from 1931 to 1954) till he retired. The Northern part of Nigeria had the Northern Teachers' Association in March 1942, following the initiative of Alhaji Aminu Kano. It was registered as a trade union in1951. It became the Northern States Teachers Union (NSTU) in 1966 with the creation of six states from the north.

On 27th May, 1972, NUT (South) and NSTU (North) merged to become one trade union umbrella for teachers in Nigeria with the name Nigerian Union of Teachers (NUT) (NUT, 2016). Thus the NUT became the body representing public primary and secondary school teachers in Nigeria (Obomanu, 2002). It was primarily concerned with the image and professional growth of its members and was registered as a trade union in 1941 with the major aim of taking care of its members' welfare and conditions of service. Trade Union Decree of 1998 made membership of the NUT compulsory for all pubic primary and secondary school teachers including the payment of check-off dues from their salaries (Enang, 2002)

NUT, through memos sent to different Commissions between 1964 and 1972, was able to ensure that teachers' conditions of service became the same as those of the civil servants. Enang (2002) stated that the Commissions were the Morgan Salary and Wage Review Commission in 1969; the Udoji Salary Review Commission in 1972; the National Council on Education in 1978 and the National Salary and Wages Commission in 1993. She went further to say that the Morgan Commission unified the teaching service and made possible the uniform conditions of teachers and management of schools. The Adebo and Udoji Commissions ensured that teachers were granted the Public Servant Status. The National Council on Education ensured the harmonisation of schemes of payment, such as, leave bonuses and new salary structures for teachers. As a result of all these, teachers now have rent subsidy, transport allowances, meal subsidy, entertainment allowances, leave grants and other allowances built into their salaries like other civil servants.

In recent times NUT has renewed its fight for a fresh Teachers' Salary Structure (TSS). The setting up of the Teachers' Registration Council of Nigeria (TRCN) by Decree No 31, 1993 (now, TRCN/Act CAPT 3, 2004), has helped in making teaching a profession; this is the basis for the agitation for TSS. It is logical to have a professional salary structure exclusive for teachers such as the Health And Tertiary Institutions Salary Structure (HATISS). In 1992, the struggle for TSS led to a strike and the federal government said they would implement it; yet after a three day warning strike and a very long strike action to ensure that the TSS was approved, the best the Federal Government could do for teachers, was a Teachers' Special Allowance (TSA) which is 27.5% of their salaries (Obong, 2008).

In spite of the many strike actions embarked on by the NUT for the betterment of its members, in terms of salaries and other working conditions (these led to the closure of primary and secondary schools in the different states for periods up to an academic session in some cases), it has not been able to change the unsatisfactory conditions of service for teachers. This led to the proliferation of private schools in Nigeria with most of them operating below the recommended standard.

This could be the reason why another body the Academic Staff Union of Secondary Schools (ASSUS) came into being in the 1990s and was firmly established on 6^{th} December 2014 in all the thirty six states of Nigeria. Its major aim is to fight for the rights of secondary school teachers and see to their welfare. It was believed that NUT was mostly predisposed to issues that concerned the primary component of the basic education. Adebowale (2013), corroborating this, said merging primary and secondary school teachers is no longer fashionable and it is retrogressive; that going back to NUT is not a viable replacement for the guaranteed welfare of ASSUS members. Whatever the case, ASUSS has made an in road into the fight for secondary school teachers' welfare since its inception led by the first National President, now Life President, Comrade Charles Ifaluyi.

Student Unionism in Tertiary Institutions

The West African Student Union (WASU) was birthed in 1925 by West African students in London. It was led by Ladipo Solanle, to fight the discriminatory practices of the whites against them. This was the platform for student unionism in Nigeria. It created the stage for Nigerian students in Nigerian universities to form student unions. In 1948, student unionism came into being in Nigeria in the University of Ibadan and in 1959, the National Union of Nigerian Students (NUNS) was formed as a representation of all Nigerian students whose major objectives were to safeguard, shield and secure the constitution of the Federal Republic of Nigeria in addition to seeing to the welfare of Nigerian students. The first national president was late Ambassador Emmanuel Obe (Zuokemefa & Sese, 2015). Zuokemefa and Sese posited that leaders of student unions were feared in the past in Nigeria; that they were brave in communicating their opinions to school management and government each time they went astray and that they enjoyed the encouragement of other students. Membership of all students was compulsory with check-off dues until it was made voluntary by the Obasanjo led military regime as a result of the effects of the incessant students' protests on Nigerians (Wilson, 2002). NUNS had a catalogue of protests as shown on Table 2 which led to the killing of students, closure of universities and other higher institutions and so on

Table 2: Major Students' Protests in Nigerian Universities and Other Higher Institutions by NUNS

Year	Protest	Casualty/Result
1960	Against Anglo-Nigerian Defence Pact	Nigerian government dropped the idea of signing the pact
1961	Against Patrice Lumumba's Death	
1971	In U.I over catering in one of the halls of residence	Adekunle Adepoju was killed
1973	Against National Youth Service Corps(NYSC)	
1974	Gowon must go; hand over to civilians in 1976	Overthrow of Gowon in1975
1976	Decadent life of Professors in UI	
1976	Against Dimka led coup resulting in the assassination of Gen. Murtala Mohammed	
1978	Ali must go nationwide protest against increase in tuition fees, costs of meals and poor funding of universities led by Segun Okeowo	Twenty four students died. Three universities were closed. Senior university officials and students were dismissed.

Source: Adapted from: (1) Durosaro (n.d) www.unilorin.edu.ng (2) Ocho, 2002 & Wilson, 2002).

As a result of the incessant protests by NUNS which led to chaos in campuses and perhaps the fact that the General Olusegun Obasanjo led military regime was afraid that the activities of NUNS would one day cripple the socio-economic activities in Nigeria, he proscribed NUNS. In 1980, the Shehu Shagari led civilian government lifted the ban on NUNS; from then on, it became known as the National Association of Nigerian Students (NANS). The change in name did not affect the activities of the student body as shown in Table 3.

Table 3: Major Students' Protests in Nigerian Universities and Other Higher Institutions by NANS

Year	Protest	Casualty/Result
1980	Students' protests in Unilag, BUK, UI, UNN, Advanced Teachers' College Jalingo and Federal School of Survey, Oyo.	
1981	Serious students' crises in ABU, UI, Ibadan Polytechnic, Kwara State College of Technology, University of Ife (now Obafemi Awolowo University).	
1983	A protest against the Vice Chancellor of University of Maiduguri, Prof Jubril Aminu.	Students were expelled but reabsorbed after 3 years and 12 days after late Gani Fawehinmi took up their case.
1986	A Peaceful demonstration in May 1986 by ABU students in remembrance of the 1978 students killed during Ali Must Go riot which later spread to other campuses.	National ban on demonstrations. 9 out of the 15 universities were shut but later reopened after 2 months in July. NANS banned for one academic year.
1988	A protest over purported trial of nine UNN students for arson and property damage.	Closure of ABU and UNN (Nsukka and Enugu campuses).

1989	Anti SAP protest	Closure of several universities, Police stations, government, private vehicles and properties, burnt. Two Benin prisons burnt from which about 600 prisoners escaped. Decree No 47 stipulating a five year jail term and/or a #50,000 fine on any student organizing or participating in protests. NANS was again banned.

Source: Adapted from: (1) Durosaro, (n.d) *www.unilorin.edu.ng* (2) Ocho, (2002)

Suffice it to say that after 1989, students' protests have continued in all the higher institutions in Nigeria due to same reasons mentioned above in addition to the proscription of Student Union Government (SUG), high prices of textbooks sold by lecturers, among others. For instance, UNILAG's SUG was proscribed in 2005 by the then Vice Chancellor, Prof Oye Ibidapo-Obe because of students' violent protests in the school. The ban was lifted in 2015. These incessant students' protests with their above mentioned attendant effects, in addition to dismissal of staff and rustication of students, proscription of student unions and frequent closure of schools, placed Nigerian tertiary education at the lowest ladder and gave her certificates low recognition in international ratings. This has affected the admission processes for post graduate studies at home and abroad with the British government blacklisting graduates from Nigerian universities from 1988 and even from the labour market (Dashen & Jacob 2002; Okotoni & Okotoni, 2003).

This could be one of the reasons why militant student unionism on a national basis seems to have been discarded for "dialogue", that is, student unionism has been politicised and the leaders bought over by school authorities or/and politicians. Another school of thought says management of tertiary institutions may have learnt to manage conflicts with students instead of resolving them. The truth is that if proper dialogue can help to manage conflicts, it is good to employ them but it does not seem to be the case in Nigerian tertiary institutions. This is because the perennial problems in these schools seem not to have been attended to. Inspite of this, students' protests/demonstrations for students' welfare and other state/national issues by NUNS and NANS at the national level in time past as shown in Tables 2 and 3 seem to be things of the past. NANS protests/demonstrations, in recent times, only take place in each institution as shown in Table 4.

Table 4: Some Major Students' Unrest in Nigeria's Tertiary Institutions

Year	Protest	Casualty/Result
1992	Many institutions of higher learning protest against deregulation of Nigerian currency and hardship in the society.	Many students died. There were better conditions of service for workers. Schools were shut for months.
1998	Ambrose Alli University Ekpoma, students' violent protest against cult activities.	Many students died and the school was closed down.
2002	Lagos State University (LASU) students' protest the brutal murder of a student union leader.	Closure of school.
2003	Increase of price of petroleum products by many university students in Nigeria.	Peaceful in some universities but violent in some.
2005	Olabisi Onabanjo University (OOU) students' protest against the killing of students by host community.	Fifty vehicles were completely damaged and the palace of the king of the town was burnt. Closure of school.
2005	OOU, Aiyetoro Campus students' protest against the killing of a student by the Police.	Aiyetoro Divisional Police Headquarters and the branch of Wema Bank were completely burnt. Closure of school.

Year	Protest	Casualty/Result
2011	Ambrose Alli University students' unrest over increase in school fees, lack of potable water and suspension of student union government executives.	Indefinite shut down of the school.
2012	Ajayi Crowther University students' unrest due to the avoidable death of a student, Elvis Abu Paul, as a result of the negligible treatment he received at the school's medical centre.	School Gate, Department of Economics, The Faculty of Management Sciences, and the Health Centre destroyed.
2013	Usman Dan Fodio University, Sokoto students' unrest over poor living conditions at Dundoye Campus and erratic power supply.	Indefinite shut down of the school.
2013	Ebonyi State University students' unrest over high school fees.	Closure of school.
2013	Nassarawa State University, Keffi (NSUK) students' protest over shortage of water.	Two students were killed by soldiers.President Goodluck Jonathan approved #20million for the construction of a borehole.
2014	Akwa Ibom State Polytechnic, Ikot Obura students' unrest over refusal of student union.	Four students were injured.
2014	Petroleum Training Institute, Effurun students' unrest over electricity and water supply.	Closure of school.
June 2014	Obafemi Awolowo University (OAU), Ile Ife, three days students' unrest over hiked school fees; they demanded a reversal	Closure of school
Year	**Protest**	**Casualty/Result**
Nov 2014	Obafemi Awolowo University (OAU) students' protest over hiked school fees.	Booed President Goodluck Jonathan and hurled stones at him when he came for a meeting in the school.

Year	Protest	Casualty/Result
2014	Ibadan Polytechnic students' protest against striking ASUP since 2013; they gave twenty four hours ultimatum.	Ultimatum not heeded to.
2014	Caleb University Imota, Lagos students' unrest over stoppage of a muslim student from praying in the school by an official.	Cars and properties destroyed. Closure of the school.
2014	UNIOSUN Ikire Campus, students' unrest over death of a student as a result of an accident on their way to Akunyungba Falls without permission; they feared that some students would be punished.	Closure of the school.
2015	LASU students' unrest over their welfare.	The Vice Chancellor was chased from campus. The abortion of the University's convocation for March 19th and 20th 2015.
2015	University of Uyo (UNIUYO) students' unrest over hike in transport fares.	Massive destruction of properties. VC, DVC (Admin), Council Affairs Unit razed. Equipments, exams and records, finance/accounts. Internal audit and cash offices were destroyed. The University's Computer maintenance dept was vandalised.
2015	OAU students' unrest over irregular power supply, non-availability of potable water in the halls of residence and alledged underfunding of education in Nigeria including the call for the probe of management for paying lip service to their welfare.	Prevention of free flow of traffic in and out of the campus. Closure of the school indefinitely on 1st December 2015.

Year	Protest	Casualty/Result
6^{th}-8^{th} April 2016	University of Lagos students' protest because of poor infrastructure and facilities; poor potable water supply, irregular electricity, rise in prices of sachet water and bread, etc	Closure of the school.
11^{th} April 2016	Benue State University, Makurdi students' protest over one hundred percent school fees increase for new entrants. University of Port Harcourt students' protest over an increase in school fees and no fees no examination by the school's management.	Two students were killed in University of Port Harcourt. Closure of the two schools.
9^{th}-10^{th} April 2016	Adekunle Ajasin University Akungba Akoko students' protest over the death of a student who was knocked down by a motorcyclist and died in an ambulance on the way to the medical centre.	Destruction of school and public properties. Closure of the school.

Sources: Adapted from: (1). Aluede, O., Jimoh, B., Agwinede, B. O & Omoregie, E. (2005); (2). Alabi, Akanbi & Owoade (2002); (3). Dada, (2014); (4). Faturoti, (2014); (5). Jegede, (2014); (6). Nebianet, (2015); (7). News Agency of Nigeria (NANS), (2015); (8). Odu, (2013); (I). Ogunyomi, (1994); (9). Omole, (1995); (10). Onoribholo, (2011); (11). Onwurah, (2000); (12). Onyenoru, (1996); (13). Popoola, (2015); (14). Sanni, (2012); (15) campusportalng.com; (16). esnow.wordpress.com; (17) nigeriainuniversiynews.com; (18). saharareporters.com; (19). thenationonlineng.net (20).www.dailyschoolnews.com.ng;(21).www.mgnewswatchtimes.ng.com;(22).www.nigeria.orientnews.com; All Retrieved December 12th 2015. (23). loadedvilla.com/blog/2 Retrieved April 22nd 2016.

Implications of Unionism on Educational Management

The implications of unionism on tertiary institutions of learning cannot be overemphasised. This is because each time any of the unions go on strike or protest, such institutions are closed for a period of time, lives are lost, properties are destroyed, man hour lost, academic calendars are disrupted, students get more involved in many vices, such as prostitution, internet fraud, armed robbery, cultism, homosexuality, lesbianism, drug trafficking among others (Omidiran, 2002). For instance, a cursory look at Table 1 revealed the incessant shut down on teaching/learning activities in Nigerian universities from 1994 to 2013. One of the resultant effects is the production of graduates whose quality is said to be questionable and certificates termed sub standard. This is because they are rushed into examinations when they resume from strike actions and/or protests. For instance, whenever ASUU, ASUP and COEASU go on strike, like they did in 2013 and 2014, students did not graduate as at when due; this was wastage to the students, parents, government and the society. The SSANU, SSAPU, NASU and NAPU strike actions also result in loss of man hours, crippled academic activities in higher institutions resulting in facilities not ready and open for use by the academics and students and loss of money as regards products produced by the institutions. The NUT strike actions usually keep primary and secondary schools closed while the SUG protests leave many dead, properties destroyed and schools closed.

One of the resultant effects of these strike actions and protests was the emergence of private participation in education at all levels. There was a shift from public to private institutions by those who could afford it. This is commendable. However, those who cannot afford it do not have access to these private schools because of the cost especially at the university level. They therefore, have no option than to remain in public schools and suffer the consequences of strike actions and/or protests. There is again wastage on the part of government because the lecturers/staff are always paid for not working (during and after strike) while the students always suffer losses.

A reasonable number of students who would have been admitted into any Nigerian university, migrate overseas and even to neighbouring countries such as Ghana, Benin Republic, among others for tertiary education. The education fees they pay there would have contributed to the Internal Generated Revenue (IGR) of universities in Nigeria. In the 1970s and 1980s, there were foreign students in Nigerian universities that made the universities truly universal, in terms of dispensation of knowledge and generation of funds. This cadre of students is no longer there because of strike actions and/or protests resulting in disruptions of academic calendars; that is, students know when they resume school but are unsure of their dates of graduation (Oyetakin & Odunayo, 2013). Schools' infrastructure and facilities rot away and these cost management/government some money to fix when the strikes and/or protests are over.

Conclusion

Unionism in Nigerian tertiary institutions has suggested that though strike actions and protests/demonstrations are not the best ways to ensure that management meet the demands of workers and students, it seems that they are the only language management in Nigerian institutions of learning understand before they address the needs of their workers and students. This does not in any way contribute to national development (Ames; Harriet; Merryll & Yosuf, 2012). This is because when conflicts occur, the education industry is shut down: teaching/learning activities are disrupted thereby delaying the preparation of high level manpower needed for the development of the different sectors of the economy. This is wastage. The loss of lives and destruction of properties also constitute wastage. Parents/guardians, students and society at large experience wastage because some of these students engage in unwholesome activities during the long wait for schools to reopen.

Recommendations

Conflicts are bound to occur. It takes two or more parties to be involved in conflicts; therefore, management of educational institutions should endeavour to apply some theories of administrative behavior, if not all, in their daily interactions with their employees and students inorder to manage conflicts. This is because one of the important functions of theories is to clarify, demystify and make sense of what may appear to be a confusing situation. In as much as employers/management expect(s) certain defined human behaviour from workers or students for optimum performance, the workers or students also want to meet with the demands of life as enshrined in Maslow's Hierarchy of Needs. For example, the Scientific Management and Human Relations Theories will be useful in the processes of management and may to a large extent, help to curtail the negative part of unionism, even in schools. The tenets of these theories are that workers should be adequately remunerated for the job they perform, they should be trained from time to time, expertise should be considered when assigning jobs (not round pegs in square holes) and their participation in decision making, on issues that concerns them ensured, workers and students should be treated as humans by putting into consideration their psychological, socio-economic and political needs, among others. It is believed that when these tenets are adequately upheld by management, conflicts will not escalate to strikes and violent protests/demonstrations but will be properly managed.

Management therefore, should apply the principle of conflict management instead of conflict resolution so as to avoid the attendant negative effects of strike actions and protests (Njoku & Nwosu, 2007). This means management should be able to identify issues that will result to conflicts early enough and nip them in the bud through the strategy of adequate or proper communication. Adequate or proper communication can reduce conflicts through the awareness of perceptions: active listening, empathy, the non-verbal communication perspective, talking, organised and clear presentations, establishment of grievance resolution procedures in schools such as complaint committees, suggestion boxes, interactive sessions and meaningful negotiations and bargaining. Whereas conflict resolution on the other hand, depicts that conflict has already occurred; that is management did not apply the strategy of adequate or proper communication to manage conflict; so, there is violence, with each party asserting his right until the process of problem solving is applied by identifying the cause (s) of the conflict so as to remove it and bring normalcy to the organisation through dialogue or mediation, where a third party is involved, such as the courts, litigations and so on (Best, 2006; De Bono, 2005; Njoku & Nwosu, 2007; Peretomode, 2014; Tosi, Rizzo & Caroll,1986; Thomas,1976).

Summary

This topic is on unionism in institutions of learning. Unionism practices the policies of trade/labour or student unions; trade/labour or student unions are the channels for unionism. The concept of unionism is the coming together of like minds of the same or different profession(s)/occupation(s) working together in an organisation (in this context), including institutions of learning, inorder to protect or agitate for the rights and welfare of their members and the society through collective bargaining. When the processes of collective bargaining fail they embark on industrial actions such as strikes and protests/demonstrations (Omidiran, 2002). These strike actions and protests/demonstrations could be accompanied with or characterised by deaths, destruction of properties, closure of schools and so on.

The different trade/labour unions in institutions of learning are ASUU, SSANU, NASU and NAAT in the universities; ASUP, SSAPU and NAPU in polytechnics; COEASU, NASU in colleges of education. NUT and ASSUS in primary (lower &middle basic), junior (upper basic) and senior secondary schools respectively. The student union is the SUG in tertiary institutions. Membership of these unions is voluntary and they all have a common goal of ensuring that the rights of their members are protected and the provision of better welfare packages for their members is guaranteed.

The strike actions and protests by these unions do not augur well for national development and they constitute wastage to parents, students, government and the society at large because of closure of schools, destruction of properties, disruption of academic calendars leading to students not graduating on record time, loss of man hours, loss of lives and production of half baked students among others. Therefore, government/management should ensure that conflicts are managed and not resolved.

Review Questions

1a. Define unionism.
 b. Explain the concept of unionism in institutions of learning.
 2. What is the difference between trade/labour and student unions?
 3. Name the different trade unions in the tertiary, primary (lower and middle basic), junior (upper basic) and senior secondary institutions in Nigeria and their acronyms.

4. Discuss the reasons for unionism in institutions of learning.
5. Strike actions and students' protests are better weapons for meeting trade/labour/student unions' demands in Nigeria. Discuss.

Sample Research Topics

1. Unionism and Quality Education in South South Nigerian universities.
2. Student Unionism as a Correlate of Students' Academic Performance in Nigerian Tertiary Institutions: A Case Study of South West Universities.
3. An Analysis of Teachers' Participation in Unionism in Edo State's Basic and Senior Secondary Schools

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Chapter 12

Management theories and their Applications to School Administration

Prof. Noah B. Oyedeji

Introduction

Several authors have written on management theories and their evolutionary development starting with classical to neo-classical, neo-behaviorists and system theories all of which have contributed to the administration of schools in one way or the other. Babalola and Atanda (2006) said that as human beings continued to increase in number, management moved from simple to complex. To get the best from workers, scholar have studied past organisational practices resulting in different management theories some of which focused on productive efficiency while some others are concerned with people's motivation.

If business organisations have benefited from management theories, there is no reason why school organisations cannot, because they are formal organisations established with the aim of achieving specific goals and objectives. Therefore, all theories that apply to business organisations are equally applicable to school organisations. Harris (2006) identified as many as one hundred and two theories of administration and according to Oyedeji (2013), if the theories are followed, anomalies experienced in education are likely to reduce.

This chapter therefore, covers the following areas: Education as a system theory: functions and principles of administration; and motivation and leadership theories and how they contribute to educational efficiency and effectiveness.

Education as a System Theory

Wikipedia on line, the free encyclopedia (2016) defined system theory as the trans-disciplinary study of the abstract organisation of events which are independent of their substance.

A school is considered as a system just like a business organisation because it is a formal organisation set up to achieve specific objectives. An organisation is a social system in which survival depends on the system's ability to maintain its processes. According to Oyedeji (2013), there are three main elements in the education systems which include: input, management process and outputs benefits. These are shown in figure 1:

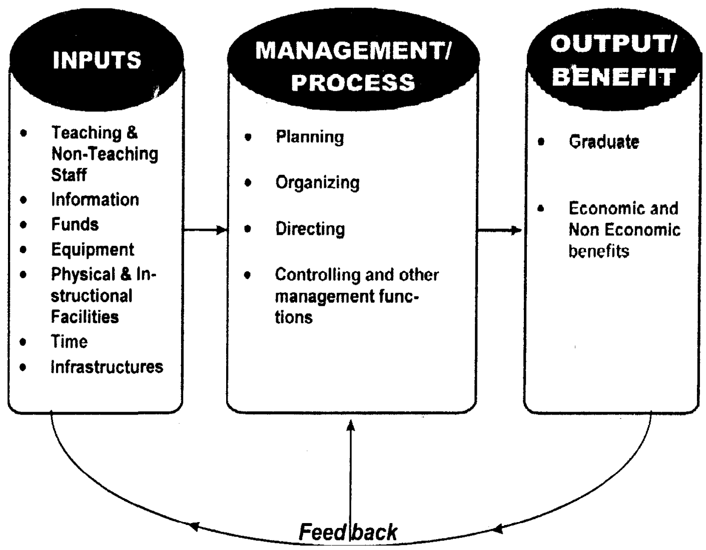

Fig.1. Inputs, Management and Output Relationship
Source: Oyedeji, N.B. (2013) "Education Anomaly and the Educational Administrator

Inputs

In figure 1, the inputs in education include funds, academic and non-academic staff, equipment, information, instructional and physical facilities, infrastructures and time. Education system can only function well when the above resources are available.

Management Process

This is the directing, planning, controlling and organisation of education resources for the achievement of educational aims.

Outputs/Benefits

The outputs/benefits in education include the production of graduates and their employment into the world of work for national development.

Functions of Administration

Frederic Taylor and Henri Fayol were scientific managers who identified functions of managers which are directing, organisation, planning and controlling. According to them:

1. **Organisation**
   Organisation is the division of employees and students into sub-groups and creating sub units such as the grouping of students into Basic 1 to 9. Work is also divided into processes to be performed by people who specialize in them. This is normally referred to as division of labour and specialization. For example, each teacher in the secondary school handles specific subjects such as English language, Mathematics, Physics, Geography, and History as opposed to teacher who handles all subjects at the lower basic level.
2. **Planning**
   Planning is identification of past, present and future activities to be performed in order to achieve specific goals which could be short, medium and long term. School programmes and educational development plans must be made for short, medium and long periods so as to attain educational aims.
3. **Directing**
   The manager or principal must ensure that teachers perform their duties as at when due and students complete their assignments promptly through adequate motivation and supervision.
4. **Controlling**
   The principal must eliminate all forms of waste (time, materials and funds) so as to meet the set standard.

Principles of Administration

Henri Fayol, in addition to formulation of management functions, also identified principles of management. The principles are quite useful to the school system. Some of them are:

1. Division of labour in which processes are divided to those who are able to accomplish them in the best way. An example of

specialized subject teachers in secondary schools has been mentioned earlier.

2. There should be adequate discipline of students and staff members in order to increase their performance and productivity respectively.
3. Members should be treated equally in the school especially, in similar circumstances.
4. Members should be given a chance to initiate changes in the organisation for optimal development
5. Members should have esprit de corps in order to reduce conflicts in the organisation.
6. Employees are accountable for their actions. So, they must account for the funds and materials put in their care.
7. Span of control must be adequate in which just the number of employees that a manager can adequately supervise be assigned to him. In the school situation, forty students are considered adequate for a teacher in a secondary school, while 30 students are for technical institutions. This is called Student/Teacher ratio.

Motivation

Thierauf (1977) defined motivation as those inner drives that activate an individual to action. Maslow (1954) believed that whatever we do springs from needs and he put them into a hierarchical order as shown in figure 2.

Fig. 2 Maslow Hierarchy of Need

a. **Physiological need:**
This includes food, shelter and sleep. Staff and students need them for survival.

b. **Safety need:**
In order to provide safety for students, older ones are discouraged from beating the junior ones unnecessarily and security guards take care of students in the hostel and classroom areas. Life insurance may be purchased for staff members. Firefighting equipment and vehicles are purchased for fire matters.

c. **Social need:**
Social clubs such as boy's scout, Girl Guide and debating societies are encouraged so that students can interact freely with one another.

d. **Self esteems need:**
This may be met by recognizing achievements of staff and students and giving them their due respect.

e. **Self-Actualization need:**
This is the promotion of self fulfillment. The staff and students are given challenging assignments from time to time. Higher achievers and slow learners are given opportunities to develop at their own pace.

Douglas McGregor classified people's behavior into categories X and Y. category X related to a traditional view of direction while category Y is the integration of individual and organisation goals. According to him, people in category X have inherent dislike for work and because of this; they must be coerced and forced to work. They are not ready to accept responsibilities, have little ambition and want security above all things. Whereas people in category Y normally like to work, are committed to organisational objectives and are ready to accept responsibilities. They have high imagination and are creative. A principal who utilizes this theory will know what kind of leadership style, for example, autocratic or democratic; to use that will achieve the aims and objectives of the organisation.

The Hawthorne experiment was on motivation and on the effects of (1) illumination on workers' productivity, (2) supervision of workers' productivity, (3) effects of conditions of service (such as pay and methods of pay, length of working hours, office temperature and rest periods) on productivity.

Bureaucracy is another theory propounded by Max Weber. Harris (2006) defined bureaucracy as a rational efficiency and an ideal situation. He identified characteristics of bureaucracy to include:

1. Division of labour and specialization,
2. Spirit of impersonality,
3. Rewards based on merit,
4. An organisation which is hierarchically structured,
5. Set of rules and regulations that are employed,
6. Office not appropriated by officials.

Hertzberg (1968) proposed a two-factor theory where he said that human needs are basically two: (1) basic level needs for people to avoid pain and (2) secondary level needs for them to grow psychologically. His theory is similar to that of Abraham Maslow's, while Abraham Maslow classified human needs into seven. Hertzberg classified them into only two.

Psychological aspects of administration were recognized by Mary Follet who advocated the application of psychological principles to administration.

She observed that the actual services of the businessman are not only the production and distribution of goods and services but also giving opportunities for individuals to develop themselves through a better organisation of human relationships. She felt that the process of producing goods and services is as important as the welfare of the people. The school authorities should have human feelings for staff and students.

Leadership in school

Online Business Dictionary (2016) said Leadership involves:

1. Sharing visions with others to follow willingly,
2. Providing clear vision,
3. Balancing the conflicting interests of stakeholders, and
4. Providing the information, and methods to get the visions realized.

According to Oyedeji (2013), leadership is a function of some given personality attributes. This is based on the notion that an individual's behaviour is partly the product of his personality. For example, if the principal of a school has such attributes as dependability, objectivity, judgment, scholarship, initiative, drive, emotional stability, maturity, a high degree of personal integrity, decisiveness and intelligence, it may be said that he is an effective leader. But because of some of the problems of this approach such as difficulty in exhausting personality attributes, attributes overlapping and lack of weight attachment to each of the attributes have resulted to the study and analysis of situational factors, groups, and the nature of the groups' task. In practical life, different groups sometimes have different successful leaders at different times. The approach suggests the need for studying the situation before appointing leaders such as vice chancellor, principals, and head teachers.

Two kinds of leadership behaviour are often identified and compared.

They are *autocratic* and *democratic*.

1. Authoritative/Autocratic behaviour
   The principal who uses this style makes decisions alone and then informs his subordinates, who must abide with such decisions without questions.
2. Democratic behaviour
   Where the manager uses this style, he does not make decisions until he has presented the problem to his subordinates and listened to their advice and suggestions. Decisions are not taken alone by the principal.
3. Laissez faire behaviour
   The principal who uses this approach also makes decision alone but he does not compel his subordinates to abide by them. He tries to encourage them to accept the decisions.
4. Committee style
   This approach involves delegating duties (which may include the manager himself as a member) and also right to make decisions to a group. The decision will reflect majority opinion in freely discussed problems.

Implications for School Administration

The understanding of management theories by educational stakeholders such as head teachers, principals, provosts, rectors, vice chancellors, ministries of education, education commissions, National Board for Technical Education (NBTE), National University Commission (NUC) etc, will enable them to adequately motivate students and staff of their respective institutions. They will be able to provide quality leadership, discipline, direct and control effectively.

Above all, they will be able to plan adequately for the progress of their institutions.

Summary

Many authors have written on management theories and principles beginning with classical to neo-classical, neo-behaviourists and system theory. Such people include Fredick Taylor, Henri Fayol, Douglas Macgregor, Max Waber, Elton Mayo, Herbert Simon, Chester Barnard, Mary Follet, Lynda Urwick and host of others as identified by Harris (2006).

If business organisations have benefited from management theories there is no reason why school organisations cannot because they are both formal organisations. Therefore, all theories and principles that apply to business organisations are equally applicable to schools as confirmed by Oyedeji (2013) who asserted that management theories and principles have helped in one way or the other to reduce anomalies experienced in education.

Review Questions

1. Discuss systems theory as applied to education.
2. Using a diagram, discuss the components of management and education as a system.
3. (a) Discuss Abraham Maslow's theory of motivation and how it can be applied to a school organisation.
   (b) Discuss what a principal can do to motivate his staff and students bearing in mind Maslow's motivational theory.
   (c) Compare and contrast Hertzberg and Abraham Maslow's theories of motivation.
4. (a) What is bureaucracy?
   (b) Bureaucracy slows down the progress of school organizations. Discuss
5. (a) Discuss the **four** major functions of a principal.
   (b) Identify any **four** principles of management and state how educational managers can implement them.
6. (a) Planning is the first priority in organising a school. Discuss.
   (b) Discuss the importance of the manager's controlling function to the progress and continued existence of a school organisation.
   (c) Explain some reasons why discipline, motivation, budgeting and supervision are forms of controlling in a school organisation.
7. (a) What is leadership?
   (b) How can a leader emerge in a school organisation?

(c) Discuss types of leadership styles. Do you think there is an ideal leadership style? Justify your stance.

Sample Research Topics

1. Students' motivation and academic performance in secondary schools in Kwara State, Nigeria.
2. Instructional facilities utilization and students' academic performance in Oyo State secondary schools.
3. Principal's leadership styles and staff effectiveness in Basic schools in Nigeria.
4. Principal's leadership styles and teachers' productivity in Nigerian technical colleges.

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Chapter 13

School Personnel Management

Prof. Felicia I. Ofoegbu

Introduction

Management is a universal and unavoidable organizational process by which an individual or a cooperative body relates and directs action and resources to common goals. It is a series of action conceived to ensure common effort participation, intervention and involvement in the efficient and effective attainment of given objectives. The concept of the art of managing resources may be referred to as personal or is limited to the individual when it relates to the correlations necessary to organize ones (own) specific dispositions in order to achieve or realize one's own goals as seen or expected by the individual within a specific environment. On the other hand, management may, in the main, concern the organization of a group of individuals for a common purpose by enquiring into their respective skills, examining their levels of performance and differentiations and the blending of all that may be regarded as positive personal elements into a most successful human machinery to achieve the most suited or expected common objective. Such is exemplified in a group of workers in industry, in general administration or in a football team where success is not attributed to individual skills as in the manner of a tree not constituting a forest.

The school, as an organization, is a more complex entity than just bringing together groups of individuals or students, in that the students, the academic staff or teachers, the non academic or supportive staff, the parents and guardians, and each stakeholder constituent group may require a different form of management in order to achieve a harmonization of their talents as a contribution to achieving set goals. The consolidation of the activities of such varied groups and individuals operating in the same environment (school) should achieve the set objective which in this case is the formation of the students and pupils into successful beings as individuals and collectively thereby meeting the academic (and even moral) purpose for which the institution is established and of which it would be proud. Hence an acceptable template for personnel administration in the school is unavoidably multifaceted and not pliable enough to accommodate the various contributions for successful outcomes.

McFarland (1979) defined management as the process by which managers create, direct, maintain and operate purposive organizations through coordinated, cooperative human efforts. The processes involve decision making functions even in difficult situations and in the context of new variables and unexpected changing situations decisions which guide the directions of activities in the overall interest of the organization (school). Thus continued, appropriate and directional decision making is the hallmark of management. To this extent managing towards the achievement of set goals is the ultimate function of the manager. Sapre (2002) stated that school management is a set of activities directed towards efficient and effective utilization of school human and non-human resources in order to achieve envisaged goals.

The efficiency with which any organization, be it social, religious, educational, public and private, can operate will depend on the extent to which the personnel are administered or utilized. (Ajayi & Ayodele, 2001, Mukoro, 2014). Every manager gets things done through the people under his charge. He (the manager) must be able to work effectively with the people towards the attainment of organizational goals and resolve efficiently and satisfactorily the many varied problems that may be encountered in the management of the people concerned. Such would call for appropriate responses and decisions.

The school, as an organization, consists of large numbers of people whose opinions, ideas, habits and behaviour are varied and may mirror the full range of interests and conducts experienced in the wider community (Robbins, 1992). Thus the concentration of such large numbers of people in a relatively confined space tends to create some psychological difficulties among the members. Consequently, schools as establishments are not easy to run. There is the need for a manager who has adequate knowledge of the work and people involved in particular assignments. The other factors of production, such as money and appropriate facilities could be replaced and any risks insured against but a team of hard working, dedicated and loyal staff may not be readily replaced. Thus, in an institution where staff are poorly motivated, promotions stagnated and remunerations in terms of salary and other benefits are lacking or unduly delayed, frustration could set in and the staff might become listless, unenthusiastic and unproductive all at the expense of the organization's objectives. Effective managers must realize that human resources are valuable and crucial to the success of any organization and should therefore take active steps to attract the right people and ensure that the organization builds and fully utilizes the human resources to achieve the organization's stipulated goals.

The Meaning and Concept of Personnel Management

Personnel or human resource management is a part of the role of every person who has a responsibility or who is held accountable for the work of others. The concept of personnel management has variously been interpreted by several experts including Jones and George (2006) who stated that it is all the roles and practices managers engage in to attract and retain employees and ensure that they (employees) perform at a high level and meaningfully contribute to the achievement of organizational goals. Simply put it is the skillful handling with result orientation of the human beings (resources) in an organization. It is the basic function of management since every managerial or supervisory position operates through people working on purpose to achieve desired results. The manager uses both his and his subordinates' ability to get things done. Obviously no leader can do it all alone; he can achieve very little on his own; he is dependent on the efforts of others to attain organizational objectives. He must therefore, ensure that the subordinates know what to do, how to do it, when to do it, and that there is a clear understanding of the objectives.
The management of persons is one of the most important and crucial managerial divisions in organizations typified by schools. It is the division charged with the responsibility of handling people. The main responsibility is to recruit, select, develop, induct and motivate employees, and resolve conflicts that may arise among the workers in the exercise of their duties. With regard to the school system, personnel management comprises the process of getting qualified teachers and supporting staff with a view to providing educational

services which are very necessary for the attainment of the objectives of the educational organization.

It may also be seen as a process of recruitment with selection and retention of the right type of the best people and engaging them in duties where their creative and artistic aptitude and skills could best be turned to practical use (Akpakwu, 2012). An important corollary is motivation of these persons through incentives, training, retraining and job enrichment programmes. The aim of staff personnel management in the school system is to support the organization in attracting, retaining and developing the kinds of personnel which the organization would require for the effective execution of its tasks and duties. The benefits also include highlighting the system purposes, assisting individual members to achieve a positive and unit standard of performance, and the furtherance of the career development of individuals. Others are the provision of effective leadership and creation of conditions and climate conducive for maximum voluntary growth and individual effectiveness as well as influencing ordinary personnel to perform well in an ordinary fashion (Avolio & Yammarino, 2013).

Thus the personnel division plays several key roles in the process of achieving the goals of the school system. These roles translate into operational terms which include manpower planning, recruitment, selection, induction and training and development which are discussed below. Each situation calls for informed decision making, some prompt for short term measures and others for long term incidents and considerations. This chapter, therefore, discusses personnel management as it relates to staff and pupils in the management of schools and similar educational institutions under the following sub headings which are discussed below.

Manpower Planning:

Manpower planning may be viewed as the consideration of the totality of the human resources necessary to achieve a given objective, that is, the human means necessary for a particular end. As a process, it is necessary to ensure that the educational institution will have the suitable and appropriate quality of all the categories of staff ready for immediate use when and where they are required to carry out useful work. The school personnel department assesses on a continuous basis the staff needs of the school. The information obtained is used to project the recruitment of both professional and non-professional persons. It is like catering for today to ensure success tomorrow.

There are two main elements in manpower planning. These are the positions to be occupied and the people that will occupy them. These two parameters change over time due to the changes that occur in the individual and in the internal and external environments of the system. Hence there are usually two phases to be considered in manpower planning: short term and long term manpower planning.

Short term manpower planning is concerned with filling current vacant positions with existing personnel. It involves taking advantage of openings in some areas by moving people around some positions or by moving a particular person from a particular position into another one. The long term planning focuses on the more distant future while addressing the totality of positions in the organizational structure and the attributes of persons required to fill such positions. It may involve acting continually on the same principles in the interest of the immediate and near future of the organization.

Importance of Manpower Planning

i. The process provides management with the means and opportunity to anticipate shortages or surpluses of labour (teachers) thereby permitting the development of strategies for avoiding difficulties or correcting them before they become serious.
ii. It allows managers to anticipate recruitment needs in terms of both the number and types of skills to be sought.
iii. Guided planning addresses by way of analysis the sources of supply of labour in order to focus recruitment efforts on the most likely supply sources (Young, 2004).
iv. It provides for the identification of replacements or backups for present basic and major personnel.
v. Careful planning integrates manpower plan with financial plans and forecasts.

Recruitment of Personnel

Recruitment refers to those activities which in personnel administration are designed to attract the numbers and quality of manpower needed for effective execution of the work of the system concerned which in this case is the school. It is a systematic method of assuring or securing a pool of qualified persons willing to work in the (school) system. The aim is to develop and maintain adequate human resources on which the educational organization can depend. The gap between the present and anticipated personnel requirement is realized through the recruitment process.

Recruitment Process

The recruitment process is a systematic method of guaranteeing a pool of qualified persons willing to work in a school system. Its primary purpose is to show clearly that the action of engaging workers (teachers) can and should be well mapped out. It also demonstrates the linkage of the recruitment activities with other processes in personnel function. According to Cole (1996: 328), recruitment in the school as an organized and planned activity should be based on the following premises.

i. Extant rules and regulations: The existence of a recruitment policy which guides such activities and allows for modifications according to need. An element of preconception is assumed.
ii. Programming: The course of recruitment activity ensures that the exercise of recruitment should be a selection process whereby those who fail to meet the job requirements and specifications are otherwise not found eligible and so are dropped.
iii. Locating potential personnel sources: The recruitment processes may include an external search for personnel usually not restricted to any geographical location or institution. Such is achieved by using the instruments of advertisement.
iv. Coordinating personnel search: Recruitment exercises include the determination of the quality of manpower required, the requisite qualifications and relevant experience and knowledge.
v. Control of the recruitment process: This is achieved by limiting the number of applications through the short listing method.

Potential Personnel Sources for Recruitment

There are two main areas of interest:

- **Internal sources**: Although it is generally conceded that a school will need to engage some teachers and supporting staff from outside sources especially for vacancies at the lower level of the structure, it is also considered a sound definite action to promote or transfer serving members of staff from one position to another. The general management procedure of promotion to better and more attractive positions within the institution is an avenue of encouragement for staff. Such internal movement of suitable individuals is usually from positions of lower responsibility to higher ones in the primary interest of the organization and then the individuals concerned. Recruitment from outside becomes necessary when the existing personnel in the system cannot meet the necessary requirements.

- **External Personnel Sources:** These are numerous and diverse in terms of availability. The extent to which these sources can be cultivated to locate potential candidates depends to a considerable degree on recruitment policies and plans. If the recruitment effort is to succeed, it must produce a pool of applicants well in excess of the number of openings otherwise the selection process only exists in name. This implies that a variety of personnel sources should be constantly explored and maintained.

The major external sources of supply include the following:

i. The universities, polytechnics and other tertiary institutions where the mission is primarily education as well as the placement bureau of colleges of education
ii. National Youth Service Corps (NYSC) Secretariat
iii. Employment agencies (public and private).
iv. Labour unions and professional associations
v. Referrals from personnel in similar systems and institutions.
vi. Consulting and recruitment agencies
vii. Advertisements in newspapers, technical and trade journals, radio, television and other social media services.
viii. Unsolicited applicants – walk- in or write-in candidates, referrals. (own unpublished communication).

Guidelines for Recruiting Personnel

These are predicated on the following considerations:

i) Size and quality of the existing staff
ii) Staff load and development need for additional personnel

iii) The intent of recruitment for the programme
iv) Budget implications
v) Goals and determining the means by which they can be realized
vi) Providing the means and facilities to attain the ends.
vii) The degrees or qualifications and their equivalents from recognized institutions that are acceptable to the organization (school). (Own unpublished communication).

Selection

The fundamental objective of selection is to fill existing vacancies or intended positions with qualified individuals who are most likely to turn out well on the job and find adequate positional contentment and fulfillment to continue to remain and grow in the system. Then again there are those who will most likely be effective contributors to system goals and who will be sufficiently motivated to attain high level of self-development. According to Akpakwu (2012), a selection is a process of choosing the right candidate from a pool of applicants for an educational job.

After the collation of applications comes the screening exercise which involves the elimination of the less qualified and less promising candidates from the list of applicants. Screening applicants before selection is necessary. However, the selection process may be subject to extensive internal and external influences which may unfortunately neutralize organizational efforts to employ staff on the basis of merit. Among the situations that encourage conscious contradictions in the implementation of the school's policy on recruitment and so mar the exercise are:

i) The decision to select or reject a candidate hinged on baseless subjective judgment.
ii) A harsh economic situation offers a ready excuse.
iii) Non application or a misrepresentation of accepted selection techniques.
iv) A wrong interpretation of the information provided by those responsible for the exercise
v) Political considerations and expediencies, nepotism, popularity, seniority, physical appearance, hero-worshiping and ethnicity give rise to undue compromises and so distort the selection process.

vi) The selection tool for predicting a selection performance cannot be relied on for estimating the long term behaviour of persons selected.

vii) The information gathered through interviews, tests, reference and biographical data may be incomplete, erroneous and sometimes misleading.

Methods of Selection

The personnel division is responsible for preparing the methods of operation for the selection of potential workers. These may include obtaining information about a candidate's background from individual or group interviews.

It is generally assumed that the best indicator of what an individual will do in the future is what he has done in the past. Thus, an essential element in the process of selecting personnel is comprehensive knowledge about the candidate's background. The system would want to know, for example.

a) The applicant's work as well as performance history

b) How others outside the organization, may have viewed the actual or potential performance.

c) Facts relating to age, family background, marital status and educational preparation; these may be presented as curriculum vitae.

d) Information will be sought on how the applicant reasons by focusing on

i) Conceptual skills which are indicative of the thought process and intelligence; a high level is necessary.

ii) Technical skills which provide information about his ability to perform in positions with technical requirements

iii) Inter-personal relations which give clues as to whether the candidate will fit into the organization's social system, his attitude towards other people and whether his social disposition corresponds with that needed for success in the specific position for which he is being considered.

iv) Work motivation that is the acceptance and response to supervisions to carry out general and specific assignments.

v) Emotional stability and physical and mental health: Professional staff are expected to perform consistently at a high level of mental and physical efficiency. Hence, chronic illnesses on the part of members of staff lead to inefficiency.

vi) Teaching performance; Appraising the professional qualification of a candidate namely, teaching skills, style of instruction, and the understanding of the teaching and learning processes involved (Own unpublished communication).

Several techniques and procedures are used to secure information on the suitability of a candidate. They include interviews, written tests, and review of academic records, where applicable. However, an interview remains one of the most important tools for securing information and impression about a candidate. The interview can yield data and information about prospective teachers and other workers which cannot be deduced from other methods. Each type of interview is designed to minimize the amount of time devoted to the session. The importance of the position to be filled determines the time spent.

Types of Interviews

i) Preliminary interview is used for screening purposes. Its aim is to eliminate those candidates who for a variety of reasons are clearly not qualified for the job or position.

ii) Decentralized interview: This takes place between one that is aspiring for the job and the person who is holding the office under whose authority the prospective staff will work. It is diagnostic and in depth and aimed at determining closeness or appropriateness between persons and position specifications.

iii) Team interview: This involves several persons who will interview the candidates simultaneously.

iv) Group Interview: This involves a single interviewer who discusses positions and openings with several candidates at the same sitting.

v) The last type is the final selection interview devoted to clarifications of conditions of employment (Own unpublished communication).

Employment, Decisions and Offers of Appointment

After candidates have been evaluated for a position in the school system individual decisions must be taken regarding each applicant. The eligibility list so derived adheres to merit principles and a list of successful applicants eligible for appointment is produced in a diminishing order of rank (from the highest to the lowest) for appointment for available vacancies. The final selection of personnel is generally based on the merit principle which implies that vacancies should be filled by those candidates who best meet the established qualifications.

Induction Process

An induction process is a systematic organizational effort to minimize problems which confront new personnel so that they can contribute maximally to the work of the school while realizing personal and position satisfaction. A school system can recruit and select personnel but until the individuals become fully adjusted to the work to be performed, the environment in which they are to perform and the colleagues with whom they will work, they cannot be expected to give their best for the attainment of the goals. The induction process should also provide technical assistance to new appointees as might be necessary to enable them to attain full integration.

Appraisal of Personnel

Performance appraisal may be defined as the process of arriving at judgments about individuals' past or present performance against the background of their work environment and about their future potentials for the organization. The appraisal process is an administrative activity designed to assist personnel achieve individual as well as organizational goals. Its main purpose is to help determine the degree to which goals are being accomplished and to determine what improvements can be made (Aderounmu and Ehiametalor, 1985).The process should be relevant, unbiased and practical.

Staff Training and Development.

Training is teaching personnel how to carry out their duties and assisting them in acquiring the knowledge and skills they need to be effective on the job (George, 2006). It comprises the methods used to give old and new teachers added skill and knowledge to perform their job effectively and efficiently. Development, on the other hand, is building up the skills and knowledge of the members of staff so that they will be prepared to take on new responsibilities and challenges. In this way members of staff are provided with specific identifiable knowledge and skills for use in their present and future responsibilities through training and development. Thus good staff training as well as development is vital for the success of the organization.

Rationale for Training and Development in Education

The training and development of staff in the educational system are not only to improve the job knowledge of staff but equally to:

i) Increase productivity; Proper and adequate training and development of staff increase their knowledge and skills which subsequently improves the quality of their performance and production.
ii) Develop high morale; When members of staff are endowed with improved skills confidence and satisfaction radiate from such staff. This in turn translates into more commitment and enthusiasm which are indicative of high morale.
iii) Increase future personal needs. Training programmes develop workers and prepare them for future leadership positions and practices in educational organizations.
iv) Enhance personal growth. Training and development enhance staff's professional and social growth. They also create a broader perception and self fulfillment and a worthy body of functional units that encourage individual development.
v) Enhance institutional growth. Training and development increase the sense of belonging among staff and prevent manpower obsolescence. The trained staff brings into the organization newly acquired knowledge and skill for better effectiveness and greater attainment of stipulated goals.
vi) Reduce instructional and personal supervision. A trained staff supervises himself, he accepts responsibilities and expects to be given more freedom and autonomy in carrying out any duty assigned to him. The rationale is to reduce the cost and burden of instructional and personal supervision.

vii) Improve health and safety. The educational system is not immune to accidents which are generally caused by either deficiency in equipment or by staff who are not properly trained to handle such equipment. Proper training can reduce work related accidents and thereby create a safer work environment (Akpakwu, 2012).

Types of Training

Various types of training are available for staff of educational institutions. They include:

- On-the-Job training which is training provided by co-workers or supervisors together with knowledge gained by staff from performing his function. Its aim is to keep the staff up to date with the changes in the goals of the organization, its technology, and public needs and desires (Akpakwu, 2012).

The following advantages though not exhaustive accrue from this method.

- Flexibility with relevance to what the staff is doing (present demands of work).
- Inexpensiveness: Since trainees learn while working, there is no need for expensive off-site facilities like classrooms, teaching aids and other learning devices. Staff are thus allowed to remain in the organization to acquire skill and knowledge that will encourage them and enhance their performance as well as social status.
- Immediacy of feedback. Immediate feedback on a worker's performance is provided.

Classroom Training: It implies acquiring knowledge and skills in a classroom setting. All the numerous management development short courses offered by universities, colleges of education, polytechnics and other educational institutions are examples of classroom training. Such training includes the use of written materials, group discussions, videos, and tapes.

Simulation Training: In this method, trainees learn on the factual or on imitative representation of the equipment. In such trainings, the equipment should be similar to the type the trainee will actually use on the job so that the transfer of learning can be easily made.

Computer Based training: Of recent, there have been calls for adequate and relevant computer-based training programmes in education to enable staff not only to acquire knowledge and skills but also to improve the efficiency and effectiveness of their performance and that of the system. Computers lend themselves well to instruction, testing, drill and practice through simulation. Computer-based training applies interactive technology which reduces learning and teaching time by an average of 50% (Ellet, 2001). It is cost effective once they are conceived and manufactured. Other advantages include instructional consistency, mastery of learning, increased retention and increased trainee motivation (Akpakwu, 2013).

Types of Personnel in Education

The most commonly used classifications of personnel operating in the educational system are described below:

i) Academic or teaching staff: Looking at the organogram of the schoo,l teachers are the leaders among several janitors. They have been the generators and distributors of knowledge and skill over time. The importance of teachers and the role they play in the classroom is central to the success of education.
ii) Instructors and technical staff. These support the academic staff. They are indispensable in subject areas that require laboratory or workshop practical experiences.
iii) Administrative or non-academic staff: These are personnel whose major roles in the organization include planning, organizing, implementing and supervising the activities, policies and programmes of the school. They constitute an important group in the work force of the education system (Nwagwu, Ijeoma & Nwagwu, 2004).
iv) Inspectors and supervisors: This group of personnel includes both academic and senior non-academic staff that is selected to perform the specialized functions of inspection and supervision. They have the responsibility of monitoring and evaluating the activities and programmes operating in the education system.

Although schools are there to serve students, the degree of excellence of the services in educational institutions depends on the quality of the teachers. Recruiting and retaining good teachers are perennial problems for most principals particularly when many trained teachers are reluctant to teach. This has consequently translated to shortage of well qualified and competent teachers (Ofoegbu, 2011). It is however observed that this problem is not uniquely peculiar to Nigeria but is one that is widespread in many parts of Africa. There is no ready solution to the problem, but there are actions that the principal can take to address it both in terms of meeting the needs of their schools and subsequently the needs of education in the country. Such activities are imbedded in personnel management. These are especially in the areas of Pupil Personnel Management.

Pupil Personnel Management: This is concerned with those aspects that directly affect the student or call for his attention. They include admission processes, discipline and counseling.

The school should be a joyous place; an environment where children feel welcome and safe, where they sense that there are people who are anxious about their wellbeing as individuals and where they feel they can survive and grow physically, intellectually and emotionally (Clarke, 2007). Schools exist for children, not for their teachers, their principals or parents and not even for the educational departments. Thus the way schools are structured, both physically and organizationally and the way they are managed should be driven by the human and educational needs of their students. Some areas of student personnel management are discussed below.

a) **Selection and Admission**

One of the major task areas in the administration of educational institutions is the selection and admission of students. Every school regardless of ownership is required to have selection and admission procedures. The purpose of the procedure is to determine the basis on which a school will decide who and who not to admit. Whatever the procedure, the admission policy will need to focus more on issues of students' school readiness into specific levels of schooling. Each school's admission policy will be different but the following guidelines cover important stages

i) Application Forms
ii) Information about the school

iii) Distribution of Application forms
iv) Return of Application forms
v) The Selection process.

Application forms need to include information on the necessary documents and copies of such documents must be provided by the applicants. Such documents should include evidence of identification (ID), birth certificate, vaccination forms, school reports, home address, phone numbers and e-mail address. The school, on its part is expected to provide unambiguous information on the period and points of sale of the forms and the closing date for the selection of candidates.

b) **Induction/Orientation Process**

Once a child has been admitted it is important to integrate him into his new school environment as quickly and as effectively as possible. A well planned and supportive induction programme will get new students off to a positive start and it is well worth the effort made.

c) **School Discipline**

The issue of discipline is probably the most time consuming and taxing activity in pupil management in schools. Effective teaching and learning, the core business of the school, cannot take place in the absence of good discipline. The discipline that takes place in schools is informal and occurs in the classroom on a daily basis. According to Clarke (2001) informal discipline is the foundation of a well disciplined school. Therefore, when it is effective the need to use more formal disciplinary measures is substantially reduced. Investing time and energy in improving classroom management skills of teachers is well worth the effort. The only drawback is that teachers themselves often seem to feel that discipline needs to be imposed by the leadership of the school to effectively solve classroom problems. A high standard of discipline is everybody's business; it requires team work. To achieve this, however, there is the need to put in place policies, structures and systems.

Counseling

If a school is to be a happy place, it is important to have an appropriate counseling structure for students who may be faced with immense and diverse challenges in their personal lives, and in their relationships, and families. These challenges differ widely in our diverse school populations and among principals and staff. The spirit of *in loco parentis* where by school tradition, the role of parents and guardians are filled by the principals and staff who are expected to provide counseling services to the students is highly needed. Unfortunately, for most schools, providing counseling is a real challenge although they may sometimes make incidental references to it. In many instances, neither the principal nor teachers are trained as counselors nor are they aware of its implications.

The first thing to understand about counseling is that it is a process and not a technique. The counseling process consists of three parts

i) It is a set of techniques, skill and attitudes
ii) These techniques and attitudes are used to assist individuals to clarify and accept responsibility for their own problems.
iii) Through this understanding and acceptance of responsibility, individuals are able to use their own resources to solve their problems (Clarke, 2007).

Thus the purpose of counseling is not to provide people with answers or fix their problems but to assist them to identify, manage and solve such problems using their own resources (Redman, 1995).

Summary and Conclusion

Personnel management is a dynamic process which responds to time, place and circumstances. It is not an easy concept to interpret since it encompasses all the processes of getting and retaining qualified personnel (teaching and non-teaching) with a view of providing instructional services necessary for the achievement of stipulated educational goals.

This chapter discussed personnel management as it relates to staff and students in the management of schools and similar institutions of learning. However since the themes and sub themes involved in the concept are many and varied, only major functions and principles were presented with some details. The focus of this chapter was on manpower planning, recruitment and selection, induction, training and development, and the appraisal of personnel. The author recognizes that a well structured and organized personnel management is a sine qua non for the successful administration of the educational system. Every member of staff and student irrespective of gender or socio economic status is important and relevant to the objective of the organization (Nwagwu, Ijeoma & Nwagwu, 2004). Therefore, all palpable efforts should be made to accommodate the interests, needs and welfare of every member of the organization.

Implications for Educational Management

The need for personnel or human resource management is pertinent to the growth and development of any organization including the educational system. The major reason is that no matter the nature and level of technology of the system, there is the need for the interaction of the human elements with other inputs of production.

Human resources within the context of the school system have serious implications for teaching and learning effectiveness. The school is a human organization; its instructional programmes are highly human and the quality of educational institutions is measured by the nature of learning which takes place within the school environment. Therefore, staff personnel management should ensure that the best of trained personnel are attracted, selected and retrained so that the students can learn more effectively with all the available resources at their disposal.

Review Questions

1) What is the rational for training and developing staff in the school system?
2) Identify and discuss some of the functions of personnel management
3) Identify and discuss the factors that may contradict the implementation of a recruitment policy.
4) Critically examine the various types of training for staff in organizations.
5) The selection of staff is a difficult task; why? Suggest ways of improving the process.

6) One of the major task areas in school management is the selection and admission of students. Discuss this notion.

Sample Research Topics

1. Personnel anagement Practices and Teachers' Quality in Anambra State Secondary Schools.
2. Technology and Effective Human Resource Management in Secondary Schools.
3. Appraisal Procedures and Teacher Effectiveness in Ebonyi State Secondary Schools.
4. Development Programmes Opportunities and Teachers' Effectiveness in the Classroom.

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Chapter 14

Research Methods and Statistical Analysis in Educational Management

Dr. Adebola S. Ifamuyiwa

Introduction

The current trends in the field of behavioural research and data processing have been how to embark on research studies using well defined methodology and appropriate statistical techniques for data analysis and hypotheses testing. The concern of this chapter is to provide detailed information and useful guides to researchers in Education and Social Science disciplines on research methods and the use of appropriate statistical tools. Specifically, the chapter discusses research methods (including the characteristics of educational research, research design, population, samples and sampling techniques, instrumentation, data collection procedure and method of data analysis) and statistical analysis in educational research (which include appropriate descriptive and inferential statistics that are available and useful for providing answers to research questions and for testing hypotheses). Practical examples to illustrate the use of the discussed descriptive and inferential statistics in educational research are also provided to serve as a useful guide.

Characteristics of Research in Education

Research in Education refers to the different approaches and methods through which problems on different aspects of Education including"student learning, teaching methods, teacher training, and classroom dynamics" are solved. As submitted by Anderson and Arsenault (1998), educational research:

- attempts to solve an educational problem;
- involves data collection from primary or first-hand sources or uses existing data in a new setting;
- depends on observable experience or is based on empirical evidence;

- stresses accurate observation and proper description;
- uses careful and systematic procedures with appropriate analyses;
- often leads to the development of generalizations, principles or theories that will help in understanding, predicting and/or controlling similar problem(s) in future;
- requires expertise-familiarity within a specific field of Education, competence in methodology and technical skill in data collection and analysis;
- is an attempt to find an objective and unbiased solution to the problem using validated procedures;
- is a deliberate and unhurried activity often directed at providing answers to the research questions raised and testing of hypotheses; and
- is a careful record and report of the process of a study to other persons interested in the problem.

Methodology

Methodology, in research, is basically concerned with the selection of an appropriate design for the study, population, sample and sampling techniques, instrumentation, data collection procedure and selection of appropriate statistics for data analysis. This, in essence, is to sensitize readers to how to articulate the various segments or subthemes contained in the methodology section of a research report.

Research Design

Research design, as a concept, refers to the plan, structure and strategy used in the process of conducting a research to aid the provision of a solution to the research problem through an effective control of variances, namely: **systematic, error and extraneous variances**. A good design in research, according to Okpala (1995), is expected to maximize systematic variance, minimize error variance and control extraneous variance. This, in research, is what is known as strict adherence to the 'maxmincon' principle.

Variance, in research, is not too different from the variance encountered in statistics which describes the variation or spread of the values in a given distribution from the mean value of the distribution. Hence, variance in design refers to the variability that could be attributable to the independent and dependent variables under consideration in a study known as systematic variance or variability of potential nuisance or extraneous variables called extraneous or confounding variance or variability attributable to error in measurement called error variance.

Systematic variance is associated with the main variables of the study as reflected in the hypothesis or research question. To maximize this, the researcher should ensure that the methods, treatments, independent variables, etc., are not alike in all respects. Error variance is associated with factors such as individual differences and measurement errors (e.g., fatigue, guessing, inconsistency of responses, etc.,). To minimize this, the researcher needs to set up controlled experiments as well as use valid and reliable instruments. It is important to minimize error variance so as to give systematic (experimental) variance a chance to show its significance, if this is the case. Extraneous variance is associated with factors external to the study which can influence the dependent variable. To control this, the researcher needs to randomize participants and treatment conditions, eliminate the factors (where possible), include or build-in the factors as attribute or moderator variables, match the participants, or use statistical control.

It is thus imperative that controlled experimental conditions be set up with research design for it to achieve its purpose. Doing this may result in any of the following basic designs:

(a) experimental group, control group, randomized subjects design;
(b) experimental group, control group, matched subjects design;
(c) pretest, post-test, control group (randomized and matched) design;
(d) simulated before – after, randomized design;
(e) three group before – after, randomized design; and
(f) Solomon four group, before – after randomized design (Okpala, 1995).

A researcher should ensure that the design, irrespective of the type, should have high internal and external validity. Some of the factors that might hinder internal validity of a design include: history, maturation, testing effect (e.g., pretest), instrumentation (changes in instruments, administration and scoring), statistical analysis, selection bias, mortality, and selection-maturation interaction.

In addition, the choice of any research design should depend on the **type of study** under investigation, whether it is any of the following: ***descriptive survey, correlational study, quasi-experimental study, case study, historical research or expost facto study.*** This is a very important consideration in the selection of research design for any study because it has a strong implication on sampling, instrumentation, data collection and choice of statistics for data analysis.

The Population and Sample

Population, in a research setting, refers to the entire subjects/participants from whom information related to a study is to be collected. This includes all the related participants in the research field or discipline from whom direct or indirect information is sought. In most cases, the research field is usually too large and non-enumerable for a researcher to completely cover (i.e., go through) hence, the reason for selecting a sample to represent the population.

A representative sample in a study refers to the exact subjects/participants involved in the study after due process of sampling has been followed. The major concern of a researcher is to describe the sample in a way that readers would have a mental picture of the people that constitute it. The process of how the sample was constituted should be indicated and well explained to ensure its representativeness. This could involve any of the following common sampling techniques: **simple random sampling** (which involves the selection of samples that are equally likely in an enumerable population), **stratified random sampling** (the selection of samples from a population that necessarily needs division into component groups), **multistage sampling** (the selection of samples involving the use of two or more stages of selection and sampling techniques), **proportionate sampling** (the selection of samples based on a proportion involving equal percentage chosen across the groups) and **purposive sampling** (the selection of samples based on some stated conditions/criteria).

Instrumentation

Instruments refer to all the tools used for the conduct of a research. They can either be a measuring instrument (achievement test, attitude scale, etc.,), classification instrument (ability level scale, learning style rating scale, etc.,) or procedural instrument (treatment package, teaching/learning guides, etc.,). Instrumentation however, implies the total procedure involved in ensuring that a research tool is designed, developed, validated and well described. Here, a researcher is expected to do the following:

(a) describe the instrument in such a way that a qualified person can identify it among other instruments;
(b) indicate whether the instrument was adopted (if so, acknowledge the source), adapted (if so, indicate the modifications and acknowledge the source), or developed (if so, indicate the process of development); and
(c) indicate the extent of validity (particularly **face**, **content and construct**) and reliability (using any of the common methods of estimating reliability of instruments viz: **test, re-test, split-half, equivalent form, Cronbach's alpha and Kuder-Richardson formulae (either KR_{20}** or **KR_{21}**) of the instrument, and describe how these were established.

The test re-test method is useful where the researcher has the luxury of time to administer the instrument on the sample twice at three weeks' interval. The two outcomes are then analysed (i.e., correlated), using an appropriate statistical technique like the Pearson's Product Moment Correlation (PPMC) coefficient. Where time is a factor, the equivalent form or split-half methods may be considered. The equivalent form method implies administering an instrument in two similar or equivalent forms. The administration is done once or on the same day and the outcomes are analysed, using the appropriate statistical technique. The split-half method entails administering one instrument once on the samples but the outcomes are scored using odd and even number items to generate two results which can be analysed using an appropriate statistical technique like PPMC. However, the split-half correction formula must be applied to the obtained correlation coefficient ($r_{½}$) in order to obtain the reliability coefficient (r) of the whole test which is often interpreted as a measure of internal consistency of the instrument. When an instrument has a correct or wrong response format (e.g., multiple choice objective test items), the Kuder-Richardson formulae (version

20 or 21) is a better method for obtaining the reliability coefficient of the instrument, especially if time is not on the side of the researcher. The instrument would just be administered once. On the other hand, where the instrument has Likert scale (with 4 to 7 levels) response format (e.g., questionnaire with strongly agreed, agreed, disagree and strongly disagree response format), the Cronbach's alpha coefficient formula is a better measure of internal consistency (reliability) for such an instrument which again needs just one administration on the samples.

Data Collection

This refers to the stage where the researcher is ready for field work in terms of collection of relevant data or administration of the experimental treatment on the selected samples in order to be able to collect and collate the data (information) needed for answering stated research questions and hypotheses. As opined by Okpala (1995), in the field work, the researcher's concern borders more on how to choose the most appropriate method and how to avoid bias and error. To achieve a high quality data collection, the investigator or researcher should be guided by up-to-date knowledge of the research problem and insist on the use of well-trained research assistants for the process, i.e., research assistants who can use multiple methods to check out conflicting evidence.

Data Analysis

Once a researcher has done an observation of the subjects or participants and has obtained relevant information, the next important activity is data analysis. The stage of data analysis in research is as important as any other component of the research process. This is the stage where an appropriate statistical tool is chosen for the analysis of well collected data. An inappropriate analysis of data can lead to inappropriate conclusions, regardless of how well the study is conceived, designed and conducted. Such is considered unethical in research.

It is important to point out here that a wrong statistical analysis cannot make right the outcome of a study, hence the process of data analysis should be given its deserved consideration. Also, data collected from poorly conceived and executed study cannot be made right (or correct) by any statistical analysis, no matter the sophistication and robustness of such a statistical tool or technique. The choice of a statistical technique for the purpose of data analysis therefore, should depend on the nature of the research problem, the research design as manifested in the hypotheses to be tested or questions to be answered, data collected (and type) as indicated by the levels of measurement scale in the instrument(s) used, as well as the purpose of the study.

Statistics

By definition, statistics is a scientific and analytic method of collecting, organizing, analysing and presenting data for meaningful and logical interpretations. It is also the study of the methods of collecting and analysing data in such a way as to minimize any uncertainty in the conclusions drawn from the data and be able to assess the degree of such an uncertainty.

Statistics is not just the collection of data, it is a scientific approach to information processing that deals with theoretical and practical methods. It is thus a comprehensive technique for dealing with numerical data in order that appropriate decisions on and use of the collected data can be made. Basically, statistics serves to:

- summarize and describe data, and
- make inferences about the data.

There are two major types of statistics. These are *descriptive* and *inferential statistics.*

i. **Descriptive (deductive) statistics**

This is concerned with statistical tools and techniques that describe and summarize data without making inferences to larger groups of related data. The aim of descriptive statistics is to present data in a convenient, usable and clear form. For instance, the grade point average (G.P.A.) obtained by a student at the university is a summary of all that has been earned by the student in the courses taken. An agriculturist investigating the effect of fertilizers on a yield of crops may take the mean yield of crops as a summary data. These are statistics that attempt to describe the characteristics of the data in a meaningful way, hence they are referred to as descriptive statistics. Topics under descriptive statistics are frequency distribution, percentages, ratio, measures of central tendency (mean, median, mode), measures of variation (range, standard deviation and variance), and measures of correlation (r).

ii. **Inferential (inductive) statistics**

This is concerned with statistical tools and techniques that enable one to draw inferences from a population using a representative sample from the population. Inferential statistics is concerned with the drawing of inferences, estimations, predictions and hypothesis testing. As a result of the fact that inferences are not always certain, the technique of probability is often used in determining the level of confidence at which conclusions can be made by a researcher using inferential statistics. Topics in inferential statistics include chi-square, t-test of significance, correlations, analysis of variance (ANOVA), multiple regression analysis (MRA), analysis of covariance (ANCOVA), factor analysis, discriminant function analysis (DFA) and path analysis.

Data and their Characteristics

Data are assignments of values into observations of events and objects. They can be classified by their coding properties and the characteristics of their domain as well as their ranges. All data have certain clearly recognized characteristics for every statistical approach as well as a specific requirement in explaining the appropriate type for any particular statistical procedure. The knowledge of the characteristics of data is meant to guide:

(a) the selection of research topics;
(b) the generation of research questions and or hypotheses; and
(c) the selection of statistical procedure (involving data collection and analysis).

Types of Data

Statistical data are information collected in the process of investigation. They may be *numeric* or *non-numeric*.

i. ***Numeric data*** consists of values that can be quantified. This may be discrete (data existing independently of each other and having whole number values) or continuous (data which together form a continuum and allow for in-between values or fractional values). Examples of discrete data are: the number of students offering statistics, the number of cars sold by a company, the number of children in a family, nationalities of citizens, and ranking according to positions. Examples of continuous data are: the weight of babies in a welfare clinic, the height of students in a class, chronological age, achievement test scores, and degrees of temperature.

ii. ***Non-numeric data*** cannot be quantified. Examples are sex, socio-economic status, income group, religious group and nationality. These types of data can only be divided into ordinal or categorical data. Ordinal data have values that can be put on ordinal scale. Examples are age groups and wrestlers' weight class. Categorical data can only be put into categories. Examples are sex, socio-economic status, state of origin and marital status. For example, sex occurs in two categories (male and female) while socio-economic status may be categorized as high, moderate and low.

The Scale of Measurement

Measurement of data is expressed by means of various scales of value. Four basic scales in educational research are : *nominal, ordinal, interval* and *ratio*.

i. **Nominal Scale:** This refers to those data which have been distinguished from all other data by assigning them a name. Measurement at this level involves assigning it classes or categories, i.e., classification and identification where there is no order of magnitude. For example, the numerals 1 and 2 may be assigned to male and female respectively to classify sex. The only arithmetical operation possible with nominal data is counting.

ii. **Ordinal Scale:** This refers to those data which have been assigned an order of sequence as in days of the week, faculty or department, rank in the university, ranking in a beauty competition, etc. This scale possesses the property of magnitude. On this scale, it is possible to classify members of a group, and to compare any two of such members in terms of magnitude or size, i.e., less than, or greater than. For example, if 5 students scored 20, 30, 40, 50 and 60 marks in an achievement test, the teacher can rank these students in order of their performance. While a score of 60 is better than a score of 30, a teacher cannot however, say that a student who scored 60 is twice as good as one who scored 30. The arithmetical operations possible with ordinal data are counting and ranking (i.e., showing less than or greater than).

iii. **Interval Scale:** This refers to those data which are measured in terms of differences in standard units between one object and another, as in IQ scale of children in a class. The property of order is present. Data are measured in terms of differences in standard units between one object and another but the zero point does not coincide with a true zero quantity of attribute. There is no absolute zero but equal intervals. For example, using a calendar, an instrument that has an interval scale, the difference (in the number of days) between the 6th and 12th day of a month is the same as that between the 12th and the 18th day of the same month. The arithmetical operations possible with interval data are counting, ranking, addition and subtraction.

iv. **Ratio Scale:** This generates data indicating equal intervals with absolute zero, e.g., meter rule. It is possible to make ratio statements concerning the attributes being measured. Data generated with a ratio scale instrument can be subjected to all the arithmetical operations mentioned in the previous scales and even more, namely; counting, ranking, addition, subtraction, multiplication and division. Examples include percentage scores in an achievement test, and the length of a table as 6.5cm.

Variables

A variable is an occurrence (usually denoted by alphabets, e.g., x, y, p….) which can assume any value from a prescribed set of values known as the ***domain*** of the variable. This can be

i. discrete variables: which take on whole numbers and are said to be enumerable (e.g., number of students in a school) or

ii. continuous variables: which are measured occurrences or events and can take in-between values from given sets of values (e.g., height, length) and as such could be fractional or decimal in value.

The other categories of variables usually encountered in educational research include: dependent, independent, moderating, intervening, and extraneous variables. Whether dependent or independent, variables can be classified as:

i. Univariate Data – These are data which involve only one variable within a population. Studies with univariate data are of the simplest type and belong to the older order of research. In such studies, all variables are held constant except the one being studied and are usually analysed with descriptive statistics. Descriptive statistics involving frequency counts, percentages and graphical representation are sufficient to analyse such data.

ii. Bivariate Data – These are data which contain two variables. Studies such as those which measure students' achievement in two subject areas, for example, English Language and Mathematics for each individual within a certain population, are of this type and are usually analysed by *t*-test or Chi-square statistics depending on the type of data.

For discrete bivariate studies, the best method of analysis is the use of non-parametric statistics like Chi-square while the *t*-test of significance appears to be the best method for analysing continuous bivariate studies.

iii. Multivariate Data – These are data which contain within them a number of factors or variables (usually more than two)and are usually studied using appropriate multivariate analytical techniques such as the analysis of variance (ANOVA) test, analysis of covariance (ANCOVA) test, multiple analysis of variance (MANCOVA) test, multiple regression analysis (MRA), factor analysis, and others. For example, the multiple regression analysis is appropriate for determining the contribution (relative or combined) of three or four independent variables to the variance in a dependent variable.

Data Analysis Using Appropriate Statistical Technique

The choice of an appropriate statistical technique particularly, with respect to managing data by means of the analytical methods afforded by statistics, to a great extend depends on (i) the nature and characteristics of the data, and (ii) the ability of the statistical technique to handle the particular data under consideration. This can be selected from the nature of statistics with respect to data analysis; viz., descriptive and inferential statistics.

Descriptive Statistics

Of recent, a lot of researches mostly qualitative in nature like action research, documentation, case and policy studies are carried out using simple descriptive statistics like mean, mode, median and standard deviation. In addition, the percentage of each frequency count/distribution could be found, and graphical illustration involving the use of bar charts, histograms, pie charts and frequency polygons could be drawn to convey or give the true picture of the variables involved in a research without necessarily subjecting the data to any vigorous statistical technique.

As a matter of fact, studies that border on the school curriculum and management, syllabus coverage, grading system, comparison of school examinations, population and gender issues are better handled with descriptive analysis. Questionnaires and interviews (both structured and unstructured) are commonly used in data gathering for such research types. This then leads to contingency tables involving "levels of data collection as well as sources of data collection technique". See Table 1.

Table 1: Contingency Table Showing Levels and Sources of Data Collection

	Sources of Data Collection			
Levels of Data Collection	Principals	HODs	Teachers	Students
School				
Classroom				
Teacher				
Student				

Actual responses from the various sources can then be filled into each of the cells or levels, and expressed qualitatively. These can then be analysed descriptively using frequency counts and percentages or by diagrams involving bar or pie charts.

An example showing pupils' enrolment in a school for four years using both bar and pie charts is illustrated in Fig. 1 and Fig. 2.

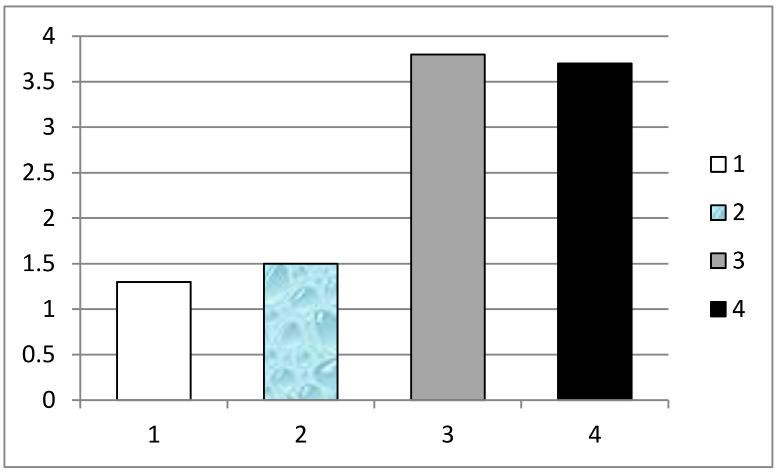

Fig. 1. Bar Chart showing Distribution of Pupils Enrolment for Four Years

KEY: 1 – 1990 2 – 1995 3 – 1996 4 – 1999

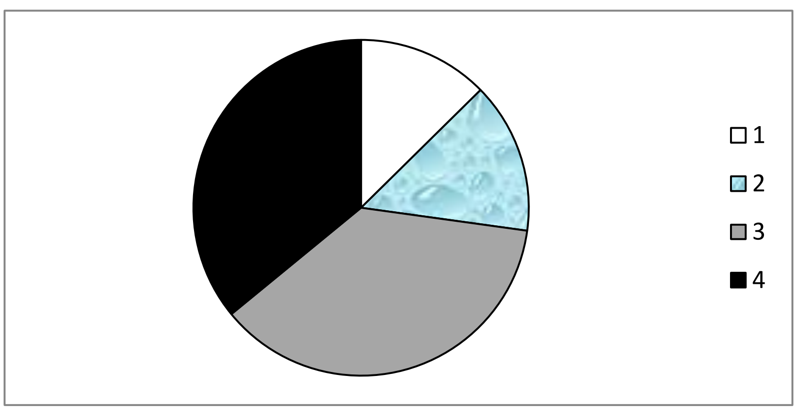

Fig. 2 Pie Chart showing Distribution of Pupils Enrolment for Four Years

KEY: 1 – 1990 2 – 1995 3 – 1996 4 – 1999

The diagrams can easily be interpreted by the researcher and this is one of the advantages of pictorial diagrams in data analysis. The diagram is easy to interpret by all. From Figs. 1 and 2, it is clear that the largest or highest enrolment of pupils in the school was recorded in the year 1999 while the least enrolment was recorded in the year 1990. Where the variable(s) being analysed had frequencies, percentages could be added. Other common pictorial diagrams for graphical illustrations of data include the histogram (which is similar to a bar chart except that the bars are joined without spaces between them), frequency polygon and cumulative frequency curve (ogive).

Inferential Statistics

Inferential statistics deals with hypotheses testing, drawing of inferences, estimations and predictions in classical research. Such inferential statistics may be ***parametric*** or ***non-parametric***. **Parametric statistical** techniques are used in analysing data which are continuous and fall within interval or ratio scale of measurement. Parametric statistics include correlation analysis, *t*-test of significance (independent or paired samples), multiple regression analysis (MRA), analysis of variance (ANOVA), analysis of covariance (ANCOVA), discriminant function analysis (DFA) and path analysis.

Illustrations:

(i) If, in an investigation involving two groups (A and B) of students, the interest is in testing the hypothesis that there is no significant difference between the mean scores of two groups of students in an achievement test, the simplest and most appropriate statistical technique that can be used for data analysis is the independent *t*-test of significance, defined as:

$$t_c = \frac{A - B}{\sqrt{\frac{S_A^2}{N_A} + \frac{S_B^2}{N_B}}}$$

With degree of freedom (df) = $(N_A + N_B) - 2$.

Note: The *t*-test formula may not however be necessary again since researchers now have the choice of calculating three different versions (one-sample, independent-samples and paired-samples) *t*-test using the Statistical Package for Social Sciences (SPSS) computer method.

The choice of which version to use resides in the researcher and the type of data collected.

(ii) For tests of a relationship between two independent variables (X and Y) involving parametric data, Pearson Product-Moment Correlation (PPMC) statistic is the appropriate statistics to find the degree of relationship (i.e. correlation coefficient, r). This is defined as:

$$r = \frac{N\Sigma XY - (\Sigma X)\ (\Sigma Y}{\sqrt{[(N\Sigma X^2 - (\Sigma X)^2\ (N\Sigma Y^2 - (\Sigma Y)^2)]}}$$

Where the range of r varies from-1.0 to +l.0

Note: r is a correlation coefficient which reports the degree of relationship or association between two variables in terms of how high or low, positive or negative the relationship is. The significance/insignificance of such a relationship could also be obtained or computed using the SPSS computer method to replace manual computation with the given formula.

(iii) If it is a test of prediction involving one dependent variable (Y), and more than one independent variables (Xi, X_2, X_3, ... X_n), simple linear regression analysis is the appropriate statistics for data analysis.

(iv) For tests of prediction involving one or two dependent variables (Y_1 and Y_2), and between two and five independent variables, the appropriate statistics for data analysis is multiple regression analysis (MRA). This is because the MRA will give the multiple correlation coefficient as well as the composite and relative contributions of the predictor variables to the variance in the dependent variable(s). An analysis of variance test can also be obtained to confirm the significance or otherwise of the multiple regression analysis carried out. The SPSS computer method is now available for computing MRA. The print-out from MRA will indicate the correlation coefficient (Multiple R), the coefficient of determination (R^2), the adjusted R^2, the table of analysis of variance with significant value as well as the Beta weights for obtaining regression equation connecting the independent and dependent variables.

Example: If a researcher is interested in predicting students' achievement in statistics (dependent variable) using their self-concept, achievement motivation, text anxiety and locus of control scores (four psychological variables) (independent variables), the multiple regression analysis is the appropriate and right statistic to use.

(v) For data involving more than two groups (that is, investigating whether a significant difference exists among the independent variables X_1, X_2, and X_3, for instance) on one dependent variable/factor, one-way analysis of variance (ANOVA) test appears the most suitable statistic to use in finding the differences between and within the mean scores of the various groups to give us the F- ratio. The formula shall be ignored because the SPSS computer method is available to compute and obtain the required F- ratio.

Example: If a researcher is interested in finding out whether any significant difference exists among the scores obtained by students from three faculties (Science, Social Science and Education) in a common GNS course taken by students across faculties in the same university, then the one-way analysis of variance test is the most appropriate statistic to use.

(vi) For data involving factorial designs where a researcher is interested in main and interaction effects of some independent variables on one or two dependent variables, the analysis of covariance (ANCOVA) test is appropriate where the dependent variables are not linearly related and are taken separately while the multiple analysis of variance (MANOVA) test is appropriate for more than one dependent variables, especially if the variables are somehow related.

Example: A researcher wishes to test the efficacy of three teaching methods as well as the interaction effects of gender and socio-economic status of parents on students' achievement in Statistics. To control for initial difference in ability, a pretest was administered to the participants.

The three independent variables give a 3 x 2 x 3 factorial design for which ANCOVA is an appropriate statistical tool for data analysis.

A factorial matrix gives the different levels of occurrence of each of the independent variables in a study. For the example above, the teaching method exists at three levels (the teaching methods including the control group/method), gender occurring at two levels (male, female) and socio-economic status occurring at three levels (high, moderate, low) for a 3 x 2 x 3 factorial matrix.

Note: The statistical techniques described above are all **parametric statistics** applicable to continuous variables with interval and ratio scales.

Before concluding the discussion on inferential statistics, the **non-parametric** statistical methods for dealing with certain types of data that are not normally distributed would be mentioned. The assumptions that the mean and standard deviation scores are the common attributes of all data are usually not true for all cases, because not all data are parametric in nature. The data world sometimes looks more like a staircase (not normally distributed) than a bell-shaped curve (normal distribution). For instance, in a beauty competition involving maybe, ten ladies, the judges would have to rank their appearances in order of merit after scoring them. To study a ranked situation of this kind, a statistical method based upon the assumption of normal distributions of means and of standard deviations would simply *not* be appropriate. Data with such characteristics demand a statistical method which will take into account the particular characteristics of such data in prescribing appropriate statistics for its analysis. Such data are better analysed using non-parametric statistical methods.

As a general rule, non-parametric statistics are less powerful than the parametric techniques and make no assumptions about parameters or about the form of the distribution underlying the data. Less powerful means that, in general, they require larger samples in order to yield the same level of significance when compared with parametric techniques. They do not differentiate between groups as sensitively as the parametric statistics do.

Illustrations

The under listed are the major non-parametric techniques commonly used in research:

(i) Chi-square (χ^2) test

It is perhaps the most commonly used non-parametric statistic. It is defined as

$$\chi^2 = \frac{\sum(f_o - f_e)^2}{f_e}, \text{ with df} = (c - 1)(r - 1).$$

Where χ^2 refers to the computed Chi-square value, f_o means observed frequency (o), f_e means expected frequency (E), c is the column total and r is the row total in terms of number of levels of the variables.

Chi-square is used in causal comparative studies. It is an appropriate statistics for obtaining a group difference and significant relationship. It is also used in instances where one needs to differentiate between observed and theoretical frequencies or for testing the mathematical significance of the line of best fit obtained from observed frequency distribution. The Chi-square test is applicable when the data to be analysed have two or more variable(s) from independent samples, each of which is categorized in two or more ways. When there are two or more variables, a contingency table might be required to compute the Chi-square value. Of all the non-parametric statistics, the Chi-square test is probably the most important and most widely used.

Example: If one seeks to investigate students' opinions about the popularity of four professions, namely: law; medicine; teaching; and banking; a Chi-square test will enable one to determine whether there is a significant group difference or not in the students' opinions.

Note: The single variable here is 'popularity of profession' and each respondent is expected to select one of the four categories.

(ii) Rank-Order Correlation

The Spearman rank-order correlation, sometimes called Spearman's rho (ρ) is defined as

$$\rho = 1 - \frac{6\sum d^2}{N(N^2 - 1)}$$

, and is useful in obtaining the degree of relationship between two variables whose values are ranked or described by frequency distributions. It is a non-parametric statistics that has its counterpart in a parametric form as Pearson Product-Moment Correlation.

Example: If one seeks to determine the degree of a relationship between the scores/ranks awarded by two judges to ten children involved in a music competition, the Spearman rank-order correlation coefficient will be an appropriate statistics to use.

Other non-parametric statistics include:

(iii) Wilcoxon matched pairs, signed-rank test;
(iv) Wilcoxon rank sum test;
(v) Sign test;
(vi) Median test;
(vii) Kruskal-Wallis test;
(viii) Kendal coefficient of concordance;
(ix) Mann-Whitney U-test; and
(x) Kolmogorov-Simonov test.

The following table (Table 2) is a summary of both parametric and non-parametric tests for testing hypotheses.

Table 2: Classification of Statistical Techniques and Guide to their use

No of group	**Type of analysis**	**Purpose**	**Type of data**		
			Categorical	Rank order+	Measured++
ONE	Univariate	Descriptive	1. One way frequency table, bar, pie charts or diagrams, modal class conversion to proportions	7. Array, ranking, cumulative frequencies and proportions	13. Frequency distribution, histogram, frequency polygon or ogive, percentile, averages; measures of variability, skewness and kurtosis
ONE	Univariate	Inferential	2. Binominal test, Chi-square goodness of fit test	8.Kolmogorovs mirnov goodness of fit test	14. Normal curve theory, z score and *t*-tests, Chi-square test.
TWO	Bivariate	Descriptive	3. Two way frequency tables, comparative diagrams;	9.Bivariate arrays; rank order correlation coefficient	15.Scatter diagrams, prediction equation, Pearson correlation

			conditional and marginal proportions		coefficient, standard error of estimate
		Inferential	4. Chi square tests of independence and experimental homogeneity	10. Testing significance or rank order correlation coefficient	16.Bivariate normal distribution, testing significance of Pearson correlation coefficient
TWO OR MORE	Univariate	Descriptive	5. See cell 3	11. Comparative tables and cumulative proportions	17. See cell 13
		Inferential	6. See cell 4	12. Kolmogorovsmi rnov two sample test, Mann - Whitney U-test	18. *T*- test of homogeneity of variance, analysis of variance

Source: Leedy, P.D. (1974).Practical Research: Planning and Design, pg. 122

Testing Hypotheses

Both parametric and non-parametric tests are used for testing hypotheses. A hypothesis is an intelligent guess that can either be rejected or retained after a statistical analysis. There are two types of hypotheses, namely: null hypothesis (H_o) and alternate hypothesis (H_1).

(i) Null Hypothesis (H_o) is an assumption about a particular parameter and usually stated in a null form, e.g., there is no significant difference between the means of two groups (say A and B, for instance).

(ii) Alternative Hypothesis (H_1)is any other hypothesis that is different from the null hypothesis, and it is usually stated in an affirmative form, e.g., there is a significant difference between the means of two groups (say A and B).

Procedure

In order to test the significance or otherwise of any hypothesis, there is the need to:

i. set up the hypothesis in either a null form (in most cases) or an alternative form;

ii. use an appropriate statistical technique to analyse the data collected; and
iii. draw inferences or conclusions from the result of a statistical analysis in support or rejection of the stated hypothesis using the value at a specified level of significance.

Types of Errors

Two types of errors are usually referred to in hypothesis testing. They are type I and type II errors. A test is designed to "minimize" the errors and hence, the concern of researchers should be how to reduce type I and type II errors.

Type I Error (which for short refers to the rejection of the null hypothesis (H_o), when it is true) is committed if the null hypothesis that should have been retained or accepted is rejected. This occurs when the hypothetical value which ought to fall within an acceptance region is taken to fall outside the acceptance region.

Type II Error (which for short refers to the acceptance of H_o when it is false) is the reverse, i.e., a null hypothesis is retained or accepted when it should have been rejected.

In both cases, the decision rule should be that the probability of committing (Type I Error) $\leq$ 0.05 level of significance. Consider the decision table below.

Decision Table on Type I and Type II Errors

Null Hypothesis	Accept H_o (H_1 is rejected)	Reject H_o (H_1 is accepted)
H_o is true (H_1 is false)	**Correct decision**	Type I Error
H_o is false (H_1 is true)	Type II Error	**Correct decision**

Examples:

- In business, producers' and consumers' risks are common threats; while a producer's risk results in type I error, a consumer's risk often results in type II error.
- If a student who cheats in an examination appears before the disciplinary committee of the school and the committee sets the

student free, then the committee has committed type I error when the null hypothesis that the student is guilty is tested.

Practical Examples Using Manual Computation

Example 1:

An examination is given to two classes of 40 and 50 students respectively. The mean score for the first class is 74 with a standard deviation of 8 while the mean score for the second class is 78 with a standard deviation of 7. Is there any significant difference in their performance?

Solution: This is a clear case of a difference in two means for which *t*-test is appropriate.

Start by setting up the null hypothesis as follows: H_o: $M_1=M_2$(i.e. they have equal means, no significant difference in means)

Using the *t*-test formula for parametric data; by calculation and substitution of values:

$t_c = -2.49$: We take the absolute value of $/t_c/ = /-2.49/= 2.49$

$\therefore$ $\mathbf{t_c} = 2.49$ (t calculated)

At 5% level of significance and df= 88 (90 – 2), the table value of t is 1.96, showing that $t_c > t_t$, i.e. 2.49 > 1.96. Thus, the null hypothesis is rejected; implying that there is a significant difference in their performances. In other words, there is a significant difference between the mean scores of the two classes of students in the given examination.

Example 2:

Assuming that a researcher wants to find out whether the levels of anxiety and social interaction among a group of students are related, he should use the following information.

Social Interaction	**Anxiety Level**				
	No	Low	Average	High	Total
Interaction	3 (5.36)	4 (6.70)	8 (7.14)	10(5.80)	25
No interaction	9 (6.64)	11 (8.30)	8 (8.86)	3 (7.20)	31
Total	12	15	16	13	56

This is a 2 x 4 contingency table, involving anxiety levels and social interaction. This is a non-parametric data. The Chi-square test is an appropriate statistic to use.

Solution:

1. State the hypothesis: H_o: $U_l = U_2$ (i.e., an increase in anxiety leads to an increase in social interaction; or no significant difference in the two variables) or

Research question: Is there any significant group difference between anxiety and social interaction?

2. Compute the expected frequency (**f_e**) of each cell, using
$$fe_1 = \frac{fr \times fc}{N} = \frac{12 \times 25}{56} = 5.36 \text{ and } fe_2 = \frac{25 \times 31}{56} = 6.64,$$
and so on

3. Compute the χ^2 by setting up a contingency and calculation table to compute the Chi-square value as follows:

f_o	f_e	$f_o - f_e$	$(f_o - f_e)^2$	$\frac{\sum(f_o - f_e)^2}{f_e}$
3	5.36	-2.36	5.5696	1.04
4	6.70	-2.70	7.29	1.09
8	7.14	0.86	0.7396	0.10
10	5.80	4.20	17.64	3.04
9	6.64	2.36	5.5696	0.84
11	8.30	2.70	7.29	0.88
8	8.86	-0.86	0.7396	0.08
3	7.20	-4.20	17.64	2.45

Thus, $\chi^2 = \frac{\sum(f_o - f_e)^2}{f_e} = 9.52$ (calculated Chi-square)

At 5% level of significance and df = 3, i.e. (4 – 1) (2 – 1), χ^2_t (table value) is 7.82.

Thus, $\chi^2 > \chi^2_t$ i.e. 9.52 > 7.82, hence, the null hypothesis that the level of anxiety has no effect on social interaction is rejected. Thus, there is a consideration or retention of the alternative hypothesis that anxiety has an effect on social interaction.

Statistical Analysis Using the Computer

Computer program like the Statistical Package for Social Sciences (SPSS) is now available for data analysis. The SPSS is now a useful and an important tool in the research process for the purpose of data analysis using the computer because it provides a simple and rapid access to the researcher's data and makes available a wide variety of statistical techniques. With a good knowledge of computer and statistics for data analysis, the two examples manually solved above can be analysed using any version of the SPSS (version 20 is the recent in public now), if all the variables and data involved are well stored or programmed into the computer.
In order to use the SPSS, it is necessary that the user understands some quasi-natural language like variable identification (age, sex), input format, variable list, value labels, sub file list, input medium, missing values, read input data and statistical sub-program procedures, cross tabulation, and so on.

Implications for Educational Management

Practitioners in educational management, like in other field of study, require sound knowledge and competence in research methods and statistical analysis so as to be able to take accurate decisions about Education matters and solve problems. Knowledge of research methods and statistical analysis will empower managers of educational institutions in Nigeria with skills to carry out a simple research on problems they encounter on the field. This will reduce incidence of solving problems with a rule of thumb. Decisions will then be based on sound findings. Specifically, the following are the implications of the knowledge of research methods for educational management:

(i) One implication of the knowledge of research methods and statistical analysis in educational management is in the area of preparation for a career in the field. This is because such knowledge obviously constitutes the tools needed for success on the job. The knowledge of research methods provides good training to the new research worker in the field and enables him to do a better research. It helps him to develop disciplined thinking or a ‘bent of mind’ to observe the field objectively. Hence, those aspiring for career in the field could learn the skill of using research techniques and a thorough understanding of the logic behind them through research methods and statistical analysis.

(ii) Knowledge of how to do a research will inculcate the ability to evaluate and use research results with reasonable confidence. In other words, the knowledge of research methods and statistics is helpful in the field of educational management and planning as practitioners in the field are increasingly called upon to evaluate and use research results for action.

(iii) The knowledge of research methods and statistical analysis provides the assurance and satisfaction that it is possible to acquire a new intellectual tool, which can become a way, of looking at the world and of judging every day experience by practitioners in the field. Accordingly, it enables one to make intelligent decisions concerning problems facing educational management and planning in practical life at different points of time. Thus, the knowledge of research methods provides tools for looking at things in life objectively.

(iv) It is important to note that, in this scientific and technological age, researchers and especially educational management and planning practitioners are in many ways consumers of research results and that the intelligent use of such research results can only come from the ability to judge the adequacy and appropriateness of the methods by which they have been obtained. Thus, the knowledge of research methods and statistical analysis helps the consumers of research results to evaluate such results towards empowering them for taking rational decisions.

(v) The knowledge of research methods and statistics is equally important for educational managers in studying management and planning relationships and in seeking answers to various educational management problems. It provides the intellectual satisfaction of knowing a few things just for the sake of knowledge and also has practical utility for educational management practitioners in terms of being able to do research in a more efficient manner. This again flows from the fact that research in educational management is concerned both with knowledge for its own sake and with knowledge for what it can contribute to practical concerns. This double emphasis is perhaps especially appropriate in the case of educational management. On the one hand, its responsibility as a discipline in education is to equip practitioners with knowledge of the principles and practice of education for functional educational management practices. On the other hand, because of its management orientation, it is increasingly being looked to for practical guidance in solving immediate problems of educational management and planning.

Summary

This chapter has provided information highlighting the major issues in educational research methods as well as the meaning and the various divisions of statistics and their functions. The various components of research methodology were described and discussed. In addition, statistics, whose function is to describe data and statistics whose function is inferential with respect to the collected data were also discussed. Illustrative discussion of data analysis using appropriate parametric and non-parametric statistical techniques then followed. A summary of both techniques for testing hypotheses was presented with worked examples, using both parametric and non-parametric statistics. The two types of hypotheses were also discussed pointing out the types of possible errors in the process of making decisions when testing hypotheses. Mention was also made of statistical packages (e.g., SPSS) and computer for data management and analysis which are the current trends in worldwide research and data analysis.

Review Questions

1. List the characteristics of research instruments. Briefly discuss the usefulness of the characteristics in educational research.
2. Discuss any five ways of obtaining estimates of the reliability of measuring tools/instruments.
3. List and discuss the various components of methodology in educational research.
4. Differentiate, using illustrative examples, between descriptive and inferential statistics.
5. When is each of the following statistical tools most appropriate for data analysis in educational research?

(i) Pearson Product-Moment correlation (PPMC);
(ii) Independent *t*-test;

(iii) Spearman rho correlation;
(iv) Analysis of variance test (ANOVA);
(v) The Chi-square test; and
(vi) Multiple Regression Analysis (MRA).

6. Discuss the importance of research design in educational research. With examples, differentiate between research design and research type.

Sample Research Topics

1. Gender difference in married men and women's attitude to sex education in a metropolitan community.
2. Students' self-concept, locus of control, self-efficacy and personality type as determinants of achievement in entrepreneurial training courses.
3. Sex and the socio-economic status of parents and Junior Secondary School students' learning outcomes in Social Studies in Ogun State.
4. Undergraduate students' preference for profession choices in Federal, state and private universities in Ogun State.

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Chapter 15

Time Management in Schools

Dr. Umemetu Momoh

Introduction

Modern day schools have become so complex that students are inundated with much academic work load amidst other social engagements, all of which take time. The major challenge to students is the ability to manage their time in such a manner that their aim of being in school is fulfilled. They need to be imbued with management skills like organising, directing, controlling and evaluating activities in such a manner that predetermined goals are accomplished. This entails getting things done through planned coordination of human and material resources to ensure effectiveness and optimal efficiency. Managing time therefore, pre-supposes that set goals be achieved within a specified time limit.

Time is never enough to achieve one's dreams, even if one has more than 24 hours a day. The important thing is how well one plans to utilize the available time on specific activities that can lead to the achievement of set goals. Time is a valuable resource which should never be wasted on frivolities. This is more so when there is a huge and sometimes conflicting demand for it for various activities such as study, work, leisure, making money, shopping, and even rest, among others. For students, time management is the key to academic success; the best students are those who use their time effectively. The cliché 'When you fail to plan, you plan to fail' is relevant here because when a student plans ahead bearing in mind that time is limited, he is bound to succeed in his endeavours.

Unfortunately, it appears that many students enter examination halls ill-prepared. This could be the reason school administrators continue to lament poor inputs, including students in the system, as the reason for poor performances especially in public schools, whereas the main issue is that not much time is devoted to student-teacher relationship to ensure a well-processed student output (Momoh and Ogonor, 2014).

Similarly, it appears that lateness and absenteeism which lead to loss of productivity, negative morale, customer dissatisfaction and management problems in organisations have been major issues administrators at all levels has to grapple with. A lot of man hour is lost as a result of lateness to duty, and its impact in an organisation has a multiplier effect. Lateness to duty hinders productivity on a very large scale: staff struggle to meet deadlines and the manager is tensed in a bid to ensure that tasks are completed on schedule. With time, the organisation's reputation becomes damaged and patronage is discouraged. These issues can be related to the school system as students are most often seen loitering the streets or strolling down to school at a time when the first period is underway or over. In a country like Nigeria, poor transportation and traffic system could be responsible for this situation. More often than not, students share largely in the blame for late coming due to poor time management. They are unable to plan their time properly so they can sleep and wake up early to prepare for school alongside study, relax and perform domestic chores. It is common knowledge that today's youth spend most of their time engrossed in social media and use of all sorts of computer gadgets. Overtime, this affects students' academic performance. The need to be acquainted with time management skills to deal with these issues therefore becomes imperative.

This chapter discusses time management in the school with a view to setting priorities and adjusting routines or patterns of behaviour for the demand of time to be met. The following subtopics will guide the discourse:

i. The Concept of Time Management
ii. Indicators of Effective Time Management
iii. Time Management Skills
iv. Time Management Techniques
v. Managing Time with a Time-Table
vi. Challenges to effective time management
vii. Strategies for Effective Time Management
viii. Implication for Educational Management
ix. Summary and Conclusion

(i) **The Concept of Time Management**

Time in the context of this paper, is a plan, schedule, or arrangement of when something should happen or be done'. Ifedili (2001) asserted that time is a very important but most often neglected resource in literature and that the success of any administration, is the ability to manage the available time by adopting the right strategies in carrying out designated tasks. The principle behind time management is doing the more important things first; one could be faced with many conflicting tasks to be attended to, hence the need to plan and arrange them according to importance and attend to them as such. In this case, it must be noted that some tasks need to be urgently attended to because they are more important than others. How equitably time is shared in attending to these tasks poses a major challenge to time management.

Time management has been described as an act or a process of coordinating, planning, directing and controlling the amount of time devoted to specific activities, programmes or tasks in order to enhance effectiveness and efficiency in an organisation (Balduf, 2009). This brings about effective goal achievement of such an organisation. Unlike financial and material resources, time cannot be accumulated for future use, so, if not well spent, it is wasted. There is the need to set and prioritise goals as well as decide how much time to allocate to specific tasks.

Furthermore, using motion and time, Fredrick Taylor's Scientific Management Theory reveals that the best way to complete tasks is to calculate the time needed for the various elements of a task to be completed. This will determine how long it should take a person to complete a task when the correct movements are made. This gives room for efficiency and goal attainment. To increase effectiveness, efficiency and productivity therefore, care must be taken over the amount of time spent on specific activities to ensure that one is working on the right task.

A study carried out by Momoh and Ogonor (2014) to find out how primary school head teachers in Nigeria allocated their time among the different tasks in the school, revealed that school heads spent more time on administrative activities to the detriment of the more productive aspects of teaching and learning; out of six hours they had to spend in school, about one hour, fifteen minutes was spent on general tasks as against the more important tasks of instructional supervision and pupil personnel. This is due to lack of planning and poor time management.

Time management includes personal activities of students based on their needs and expectations. This is more so among undergraduate students unlike their counterparts who are in secondary schools under the guidance of their parents and schools (Ogonor and Nwadiani, 2006). They were of the opinion that time management is more useful to undergraduates as it helps them make decisions about their activities because they are considered to be adults who should effectively plan their time to positively affect their academic performance.

If time is effectively managed, it will enable one to take more control of one's life, get the most out of life, live more effectively, calmly and enjoyably. It can also increase productivity and help to get more work done with less stress, disorganisation and frustration thus leading to a healthier and happier life.

(ii) Indictors, Techniques and Skills of Effective Time Management

Indicators, techniques and skills of time management as discussed below are adapted from the 'Management Study Guide' (2008) educational portal on management related issues.

Indicators of Effective Time Management:

i. Effective planning,
ii. Setting goals and objectives,
iii. Setting deadlines,
iv. Delegation of responsibilities,
v. Prioritizing activities,
vi. Spending the right time on the right activity.

Effective planning: The saying 'when you fail to plan, you plan to fail' is apt here. The manager in an organisation must take time to plan in advance. He can prepare a task plan and allocate time to each activity. It must be noted that a task must be completed before embarking on another and this must be within the stipulated time. It is advisable to co-opt those who will execute the task in the planning process so that at the outset, impediments to time frame can be resolved by setting goals and objectives. Good planning is the key to getting most activities done.

***Setting goals and objectives*:** Realistic and achievable targets must be set. Adjustments can be made and employees appropriately motivated to carry out their tasks. In the school, the head should hold a staff meeting to plan for the term. This should be done a week or two before resumption. The school head must ensure that all stakeholders; teachers, parents and the school community are carried along in the planning. When they are a part of the planning and decision making process, implementation becomes easy.

Setting deadlines: Set realistic deadlines bearing in mind that there are other activities in the organisation equally yearning for attention. Workers should be encouraged to work hard to complete tasks ahead of deadlines. School heads must also be mindful of the fact that both students and teachers need time to rest, plan for the following day's class, do assignments and engage in other curricular activities.

***Delegation of responsibilities*:** No manager has all the expertise or 'know how' to do it alone, so, tasks should be delegated based on the expertise, educational qualification, background and skills of employees. School heads must identify and tap from special skills of some staff members which can be utilized for the overall good of the school. This way, he is not overloaded with administrative duties to the point of inefficiency.

***Prioritising activities*:** The manager in an organisation must assess tasks based on their level of importance so that the more important tasks are carried out before less important ones.

***The right amount of time should be spent on the right activity*:** Time allocated to each activity must be fairly distributed. This way, time is not wasted on tasks that can easily be done away with.

(iii) Time Management Skills

Time management skills which should be imbued in both staff and students in the school include:

Setting clear goals – From the outset, goals should be clearly stated and written. All staff members and students must be conversant with the goals and the school head should always be on ground to provide leadership that will lead to their attainment.
Breaking tasks into manageable bits**:** This is important to avoid work overload, stress and fatigue. Students in particular should be given orientation on how to wisely manage their time within and outside the school so as to achieve meaningful tasks.
Reviewing progress of work**:** This will give room for assessment of work done, what is left undone and ensure that all tasks are carried out to the letter within the given time frame. For instance, a review will provide information on topics that have been taught and those yet to be taught in a particular term or session. Extra time can be created to ensure completion, especially for the certificate class.
***Prioritising* -** Since time is never enough to complete tasks, there is the need to prioritise. Tasks should be arranged according to their importance and time allocated to them in the same manner.
Organizing work schedules and meeting deadlines: This will push staff members to complete tasks on schedule. Students too should be given deadlines to submit assignments. This however, can only work in an organised setting and with an organised leader.
List making**:** 'To do' lists will serve as reminders and ensure that no task is left undone. Time should be allotted to different tasks.
Perseverance**:** This is the key to the accomplishment of goals. Even if one does not succeed in a particular task, another trial might eventually lead to success.
Avoiding procrastination**:** Time is of the essence in carrying out assignments. Procrastination will only lead to waste of time as 'tomorrow never comes'. So whatever has to be done must be quickly completed bearing in mind that time waits for no one.

As a team leader, the head of any organisation must lead by example; if team members are expected to be punctual to work, he has to be in the workplace early. Secondly, the manager must ensure orderliness by first being orderly and organised. He should monitor and create time to inspect employees' work environment to ensure that there is order in the manner they keep files and documents. This will aid easy retrieval of information, as at when needed, thus saving time. Employees should be exposed to training programmes that will instill in them time management skills. This could be in form of workshops where tasks are assigned to be completed within a specific time limit. Employees must have easy access to the manager for consultations, advice and guidance, approvals, prompt response and so on. This gives room for proper co-ordination. As a key driver in the organisation, any manager desirous of success and goal attainment must deliberately be conscious of time and good time management tools with which the workers can carry out tasks in time. These include notepads, registers, pens, folders and so on. Very importantly, the manager must be a good listener and give approvals on time.

(iv) **Time Management Techniques**

The following time management techniques can be employed to ensure best possible use of time:

- ***Set your priorities***: Clearly state what you intend to do and set the time limit. High priority tasks should come first to be followed by tasks which can be done a little later.
- ***Stick to your plan***: Do not deviate from your plans but strive towards completing all tasks within the time limit.
- ***Remain focused***: When there is a task to be completed, face it and avoid distractions in any form in the middle of the work. Once you lose focus, getting back on track will take time. This, however, does not mean that time for relaxation and tea breaks should not be taken, but it should be entrenched as part of the work plan. This will help to eliminate stress on the job.
- ***Be organised***: Keep files in their proper place, staple important documents and put in proper folders. This saves a lot of time. Keep a note pad and pen handy and do not write contact numbers or e-mails on loose papers. You will waste a lot of time searching for them.
- ***Be disciplined***: Avoid taking unnecessary time off work when there are pressing issues to deal with. Being punctual at work helps to plan the day better. Avoid playing games on computers or

cell phones during office hours. It is unprofessional to work only when the boss is around; this is ‘eye service’. Eat only during lunch hours; eating while working not only makes you feel sleepy but it also breaks continuity.

(v) **Managing time with a timetable**

Time management is a challenging task for managers and administrators. The concern of a good manager should be what can be achieved within a time frame. Ifedili (2001) however decried the prevalence of bad time management among many administrators in Nigeria. Now, we hear ‘African Time’, a cliché for lateness. If a function is billed to take off at 10am, the time on the invitation card will read 8am to given room for ‘African Time’. This is indiscipline and should not be condoned in an organisation aiming to succeed in its programmes and activities. This is more so in the school system that runs on a calendar as directed by the Ministry of Education. In the school, the manager or administrator (principal, head of school, etc) is expected to plan and control how the working hours are spent daily by everybody to effectively accomplish the set goals, hence a time table is prepared to guide both the students and their teachers. Every single activity in the school is time bound. The goal is to ensure smooth running of the system and increase productivity.

A timetable indicates all the activities undertaken in the school including the entire educational programme. It shows how long one should spend on common tasks. Good time planning leads to increased productivity, gives room for freedom, helps track progress and helps to focus. A good time table provides a realistic, simple and flexible schedule that prevents overload and eliminates wastage of time and energy, especially if the work is equitably distributed among staff members. It directs teachers and students’ energy and attention thus placing persons in their proper places. It also ensures that due attention is given to every subject and activity as subjects are arranged according to their importance and nature.

Time, being the most valuable asset that any individual has on his hands, must be managed effectively. Without a timetable to guide school activities on a daily basis, the entire day would be a haphazard scenario; students will go home without learning and teachers will accomplish anything. On a personal level, set a new timetable every day, include the smallest details into it and be sure to follow it despite any temptation to deviate from it.

(vi) **Challenges to effective time management**

Distractions and interruptions constitute the major challenges to effective time management in an organization. This is manifested in different forms:

Phone calls: These are the most common forms of distractions and interruptions in the work place. If not curtailed, a worker can spend more than half of his working hours talking or making calls. Most of these calls add no value to the task and each call could go on endlessly.

Internet*:* In modern times and with advancement in technology, most other distractions come from the internet: Facebook, Twitter, Youtube, WhatsApp, among others. This has constituted a very high level of indiscipline among workers who spend so much time on all these gadgets, fiddling away and chatting rather than doing their work. For students, it is even worse as it can constitute a major distraction from their study.

Procrastination: It is a time wasting venture that puts forward a task that should be accomplished at a particular time.

Lack or poor use of time management tools: Where the necessary facilities and materials are not in place, time is wasted.

Meetings: Unending meetings where issues not in the agenda are discussed, waste time.

Multitasking*:* This involves engaging in different tasks at the same time. The time spent switching from one task to another decreases the quality of each of the task. This strategy might seem efficient but in reality, it is ineffective.

Unexpected visitors: Most often, friends, relations and acquaintances walk into offices at official hours to gist or discuss issues best left for after work. Similarly, when students, especially those in boarding schools, are visited during school hours, they become distracted. This should not be condoned.

(vii) Strategies for Effective Time Management

The following strategies can be adopted to address the challenges of time management which have been discussed above:

- Distractions from cell phones at the work place or school can be reduced through the use of voice mails in the phones. A specific time can be set aside to call back.
- Managers should restrict the use of communication through social media and mete out sanctions to violators. This will reduce the rate of these time wasting devices especially among young persons. Students should not be allowed to use them in the classrooms.
- One must be prepared to accomplish tasks through proper planning. Contingency plans must be made for the unexpected.
- Working environment should be conducive and all teaching and learning materials should be provided. Provisions should be made for all necessary working tools such as books, internet facilities, computers and support staff like typists that will facilitate the work. Students should have access to libraries and library holdings and internet services. Adequate training should be provided on their use.
- There should be planned designated recreation places with officials in place to regiment the activities. Time for recreation should be in the class timetable to enable students to plan.
- Meetings should be time bound and agenda strictly followed.
- Tasks should be planned in such a manner that a little at a time is carried out for effectiveness. Important tasks should take priority over less important ones. This way time is saved and productivity increased. Procrastination should be avoided.
- Time limits should be set for visitors' reception at the workplace. Even so, such visits should be strictly official and brief. Social visits should be scheduled for after work.

Implication for Educational Management

Educational managers are saddled with the responsibility of coordinating human and material resources for the achievement of a common goal. This includes ensuring that staff and students manage their time effectively for goal attainment. This paper has, therefore brought to the fore the need for educational managers, school principals and heads of school to ensure that all activities in the school are captured and planned for as part of the school calendar. School heads must learn to delegate activities to others to save time as they cannot do it all.

This chapter has also highlighted the need to ensure strict adherence to the timetable for the smooth running of the system. Supervision becomes an indispensible tool here to ensure that delegated duties are carried out as stipulated. Similarly, students should be monitored closely to comply with stipulated time for activities carried out in the school.

At all times and for every step taken in the administration of the school, educational managers will by this paper, be conscious of time as that phenomenon that can make or mar whatever laudable plans the school has.

Summary

This chapter examined the concept of time management, highlighted the indicators, skills and techniques of time management adapted from the 'Management Study Guide', it discussed how the time table can be used to manage time and also strategies for effective time management.

Conclusion

The purpose of managing time is not to make one a slave to schedules, but to free one from inefficiency and ineffectiveness. It can therefore, be concluded that the secret to time management is planning, reducing tasks to smaller, more achievable chunks and avoiding all forms of distractions and interruptions. Time is like energy, it should not be wasted.

Review Questions

1. Discuss the concept of time management.
2. How can time be effectively managed in an organisation?
3. List and discuss time management techniques in an organisation.
4. What are the challenges to effective time management?
5. What are the strategies that can be used to surmount the challenges to effective time management?

Sample Research Topics

1. Principals' Time Management and Administrative Effectiveness
2. Time Management Techniques Adopted by Heads of Schools.
3. Time Management Strategies and Job Performance of Teachers

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Chapter 16

Introduction to Economics of Education

Dr. Adedapo Atolagbe & Dr. Stephen Afolabi

Introduction

This chapter is designed to give readers a general knowledge of economics and education, its meanings, components, concepts as well as the relationship between these. It also explains the interrelationships between the two concepts by identifying how education contributes to economic growth and development.

Economics of education is a combination of two concepts: economics and education. Therefore, it is most appropriate to have a good understanding of the two terms in order to explain the concepts of education properly.

Education is defined as 'the process of acquiring knowledge and functional behaviours required by individuals for decent living in a given society while economics deals with the rational decision of making choices among several competing needs. That is, how someone makes a choice on what to produce, how to produce it and for whom to produce in society. Economics studies human behaviour in relation to making choice among competing needs. In economics, scientific and statistical tools are employed to carry out an analysis of human behaviour in making a rational choice among different alternatives. Economy refers to the interplay of factors that result in the production, distribution and consumption of goods and services in a country.

Eneasator (1996) identified the following, among others, as the scope of economics:

1. Creation of wealth.
2. Equitable distribution of income.
3. Allocation of productive scarce resources.
4. Appropriate use of human capital in a way that ensures full employment.
5. Growth and development of the nation's economy

6. Responsible planning and costing programmes that ensure efficient use of a nation's resources.

Economics of education is a specialized field aimed at establishing a relationship between education and economics through the application of economic concepts and principles to educational planning and administration. Its major concern is application of available limited resources to provide qualitative and quantitative education in a nation. Economics of education explains the relevance of education to learners, and societal resource needs for achieving education process (Akpan, 2002).

Economics of education gives a clearer understanding of why and how investment decisions in education are made. It projects short, medium and long term effects and outcomes of financial outlays on education and how best to design and implement public policies that affect the distribution of educational resources.

The main goal of economics of education is to create room for improved educational efficiency and effectiveness to help improve the knowledge of what drives education outcomes and results so as to better understand the links between education systems and the labour market and maintain a network of professionals.

In other words, economics of education is that branch of Economics that deals with how education is funded as well as how to ensure efficiency in the allocation of educational resources.

Nwadiani (2000) described economics of education as a branch of Education that looks at how educational wealth is created, shared and used for the purpose of influencing education and the economy in general in a way that benefits society. From these definitions, three critical elements emerge and these are the production, sharing and use of available social wealth in the education sector.

Blaug (1972) submitted that the content of economics of education should be drawn from various related areas and disciplines which should be those that were influenced by education.

It was in the opinion of Blaug (1972) that the content of economics of education should cover the following areas: occupational structure of the labour force, labour and employment issues, regional labour movements within a country and labour mobility across international boundaries, the amount of personal income and its distribution, and the level of investment and economic growth. Within this context, economics of education will embrace such areas of economic activities that portray, expand and justify investments in education.

This chapter of the book discussed the following topics relating to the economics of education, Viz:

(i) Why do we have to study economics of education?
(ii) Association between education and economy.
(iii) Basic concepts in economics of education.
(iv) Demand for education.
(v) Education as consumption or an investment.
(vi) Measuring social and private returns to education.
(vii) Educational efficiency and productivity.
(viii) Measuring educational output.

(i) **Why do we have to study Economics of Education?**

Studying economics of education is very important because of the following:

1. The rising cost of providing education and the pressure on the nation's limited resources make economics of education important as a field of study. It provides strategies for reducing the rising cost of education.
2. It provides economic techniques for streamlining the output from educational institutions to match the manpower needs of the economy. This is to control the rate of unemployment among school leavers.
3. Economics of education explains the investment criteria for education. That is, it provides the basis for investment in human resources (human capital).
4. It analyses the relationship between the private demand for education and supply of educational facilities.
5. The knowledge of economics of education guides educational policy makers in making decisions in view of the economic values of education and its contributions to economic growth. Education, being only one of the sectors of the economy, depends on other sectors for survival and ensures a proper link to other sectors (agriculture, health, defense and administration).

For example, school enrolment could be projected to meet the manpower requirement in these sectors.

6. It tries to answer some questions for the purpose of economic planning: Such questions may include:

(i) What type of education do we need and in what variation?
(ii) How do we impart knowledge?
(iii) Who should benefit from education?
(iv) What is the cost of and who should pay for education? Private individuals or the public?
(v) How are the manpower produced and how efficiently are they utilized?

7. Economics of education helps educational managers to efficiently utilize limited resources. Its knowledge helps to prioritize the use of the limited resources for educational development.

The political process has an enormous influence on education and increased political influence in education has led to the unplanned growth of our educational system. According to Nwadiani (1992), politics plays a major role in the allocation of resources to education as well as the determination of educational policies, determination of education content and the learning environment.

(ii) **Association between Education and Economy**

Education and the economy operate in a way that the two are mutually dependent. The criterion for educational investment is basically economic. Budgetary provisions for education are based on economic decisions such as what resources are to be devoted to education and in what quantity. Economic models are adapted and used in education because it requires a lot of money to finance it. The investments by government and private individuals in education are premised on the assumptions that:

i. An educated person earns more income than someone who is not because the productivity of a man is determined by the quantity and quality of education which he possesses.
ii. Individual income reflects his level of education and productivity.
iii. The general economic development of a country is related to an individual's level of productivity.

The relationship between economy and education is best illustrated in figure 1 below:

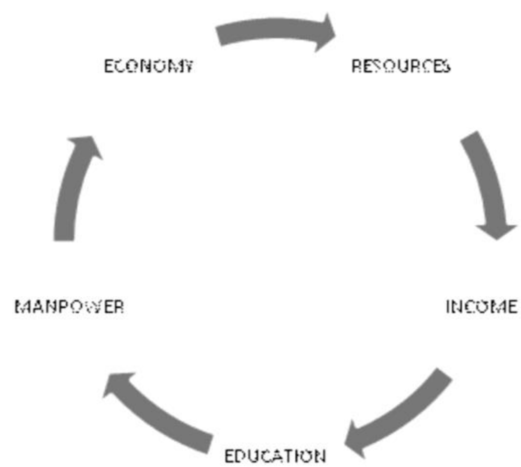


Figure1: Relationship between Economy and Education
Source: Adapted from Akangbou, O.S. (1987). The Economics of Education: An Introduction

As seen in figure one, the relationship between economy and education is cyclical.

Economy takes rational decisions on what resources should be used to produce goods and services, how they are to be produced, for which set of people, and how to make efficient use of resources to effect economic growth and development.

The income of a nation, in turn, determines how much resources are devoted to education. In other words, what goes into education determines what comes out of it in terms of the quantity and quality of graduates. This means that a well funded education will bring out good results, one of which is providing manpower that is required for the development of the economy.

Eneasator (1996) was of the opinion that education will raise the level of a country's development when it:

(i) Increases the productivity level of the literate population.

(ii) Reduces overall cost of informing and educating individuals.

(iii) Stimulates the desire for learning that can boost economic growth especially skill acquisition which may be more relevant to the economy;

(iv) Strengthens rewards by increasing labour wages.

Because of these positive relationships between education and the economy, the Nigerian government launched mass literacy programmes like the Universal Primary Education, adult literacy, nomadic education and Universal Basic Education (UBE) with a view to universalizing access to education.

(iii) **Basic Concepts in Economics of Education.**

1. **National Income**

National Income is a loose term given to the monetary measure of the over-all annual flow of goods and services in an economy. Alternatively, it is called National Product. National Income is the totality of all incomes earned by the factors of production for productive activities in a country in one year. It is measured mostly in two ways:

(i) The Gross National Product.

(ii) The Gross Domestic Product.

Gross National Product is the total value of all economic goods and services produced in a country in a given year including net earnings from abroad, that is, the value of exports less imports. On the other hand, the Gross Domestic Product measures the value of all economic activities done within the country in a given year. The main difference between the two measurements is that the G.N.P includes foreign earnings while the G.D.P excludes them. National Income helps to determine the wealth of a nation and can thus be used as an index of economic development and growth of that nation.

2. **Per Capita Income**

This is the national income per head, that is, an income that can be attributed to each individual of a country.

Mathematically, this is calculated as the national income in a particular year divided by the population for that year.

$$\text{Per Capita Income (PCI)} = \frac{\text{National Income (Y)}}{\text{Population (P)}}$$

The bigger the PCl, the higher the standard of living of the people in a country.

3. **Growth Rate**

This is the change in any measure of development over a period of time. We shall be concerned with two measures – the growth rates of national income and population.

(i) **Income Growth Rate:** This is a measurement of the income of a country over a period of time relative to its income at the beginning of the period. The beginning of the period is referred to as the **base year** and the end of the period as the **target year**. In calculating the income growth rate, the base year is the denominator and the difference in income over the period is the numerator, that is, the income in the target year minus the income in the base year.

$$\text{Income growth rate} = \frac{Yn - Yo}{Yo} \times \frac{100}{1}\,\%$$

Where Yn = income in period n, i.e., target year

Yo = income in period o, i.e., base year.

It is usually stated in percentage terms.

(ii) **Population Growth Rate:** This is the change in the population of a country over a period of time relative to its population at the beginning of the period.

$$\text{Population growth rate} = \frac{Pn - Po}{Po} \times \frac{100}{1}\,\%$$

Where Pn = Population in period n, i.e., target year and

Po = Population in period o, i.e., base year

If the population in country A increased from 750,000 in 1980 to 800,000 in 1983, we can say that the population growth rate of country A over the 1980-83 period was 6.67%.

This is obtained as follows

$$\text{Population growth rate} = \frac{800{,}000 - 750{,}000}{750{,}000} \times \frac{100}{1}$$

$$= \frac{50{,}000}{750{,}000} \times \frac{100}{1} = 6.67\%$$

4. **Average Growth Rate**

Average is defined as the summation of all units produced or purchased divided by the number of producers, consumers or individuals involved. It is measured in terms of Income and Population

(i) **Average Income Growth Rate:** It is the change in a nation's yearly income over a given period of time.

(ii) Average income growth rate $= \dfrac{\text{Income growth rate (Period o- n)}}{\text{Number of years (period o – n)}}$

If a country's income growth rate was 14.3% over a period of 3years, then her average income growth rate would be 14.3% /3 = 4.77%. That meant the average income in that country grew at 4.77% per annum.

(iii) **Average Population Growth Rate:** This is the annual change in the national population of a country over a period of time relative to the duration of the period.

Mathematically, it is calculated as:

Average population growth rate $= \dfrac{\text{population growth rate (period o - n)}}{\text{number of years (period o – n)}}$

Based on the illustration given on the population growth rate of country A for the period 1980-83, the average population growth rate of country A was 6.67% divided by 3 = 2.22%. It meant that on the average, the population of country A grew at the rate of 2.22% per annum.

5. **Physical and Human Capital**

Physical capital refers to the acquisition of machinery, monetary resources and raw materials for the attainment of further development of an establishment or a nation. An annexation to existing stock of capital means an increase in the productive capital of the economy. Human capital, on the other hand, refers to the provision of a skilled labour force which has received requisite educational training. The labour force require adequate training for it to contribute effectively to the rapid growth of the economy. These two types of capital have been found to have contributed immensely to the rapid growth of nations because a country without a skilled labour force cannot effectively develop even when it is endowed with abundant physical resources.

Four similarities are shared by physical and human capital. Firstly, they both increase the productive capacity of a nation. A man without tools, machines or knowledge will not be a productive worker. Secondly, these two types of capital require a long period of time before they pay off. In fact, the stream of returns to educational investment for most people covers a period of 25 to 45years. Similarly, the stream of returns to a building or machine covers a period of not less than five years. Thirdly, human and physical capital require a lengthy building period. The one for human capital formation is, however, generally longer. Fourthly, these two types of capital depreciate over time.

6. Expenditure and Cost

Expenditure refers to the amount of financial resources that is directly spent by a producer or consumer in the process of producing or purchasing goods or services. Expenditure could be on current or capital items. Current expenditure is the money outlay on goods and services consumed within the current year under consideration. This is sometimes called recurrent expenditure because it recurs regularly, year after year.

Capital expenditure, on the other hand, is the money spent on buildings and equipment which have long life benefits or services over a period of many years. Thus, the difference between re-current and capital expenditure is mainly in the expected length of life of the commodities or services that are purchased. However, expenditure, whether re-current or capital, may not reflect the true cost of the commodity or service. The true cost of producing goods or services includes the cost of all resources used and the alternatives sacrificed for a particular choice.

7. Consumption and Investment

Consumption refers to the use of goods or services that provide immediate satisfaction. For example, the consumption of soft drink. On the other hand, investment refers to the production or use of economic goods or services that would provide satisfaction for a long period of time. In this instance, the purchase of a building, a refrigerator, a television set, etc, is said to be an investment.

8. **Cost-benefit Analysis**

Cost-benefit is a tool used to appraise an investment in order to correctly determine its yields or returns to any investment project. It involves assessing the costs of the project, the expected benefits from the project and comparing the costs with the benefits to determine the returns on the project. The direct and indirect components of both the cost and benefits are usually taken into consideration.

When the returns are obtained, the next best alternatives are used as a basis for determining the profitability of the project. If the yield of return is greater, then, the investment is worthwhile, if otherwise, it is not worth it.

9. **Index Numbers**

Index numbers are used to measure the level of change in any activity over a period of time. The beginning of the period, which is designated as the base year, is given a value 100. Here, 100 actually stands for 100% but the percent is not written. The target year's index is calculated relative to the base year. This is obtained as follows:

$$\text{Index in year n} = \frac{\text{Value in year n}}{\text{Value in base year}}$$

Table 1.1 will help us to fully grasp the concept.

Table 1.1: Calculating School Enrolment Index

Year	Enrolment	Index (1975 = 100)
1975	1,200	100
1976	1,250	1,250 ÷ 1,200 = 1.042
1977	1,310	1,310÷ 1,200 = 1.092
1978	1,400	1,400 ÷ 1,200 = 1.167
1979	1,100	1,100 ÷ 1,200 = 0.917
1980	1,200	1,200 ÷ 1,200 = 1.00

From table 1.1 above, it can be seen that the index of any year is obtained by dividing the enrolment in that year by year 1975 enrolment. When you look at the result above, you will notice that the enrolment continued to increase from 1975 until 1979 when it dropped to 1,100. The 1979 index of 91.7 is less than that of 1975, the base year. The change in index is a sign of change in school enrolment during the 1975-80 periods.

Average Cost: This is the addition of all costs of producing or purchasing economic goods and services divided by the total sum of units produced or purchased.

$$AC = \frac{TC}{Q}$$

Where Tc = total cost
Q = units of goods or services and
AC = average cost.

Assuming a pure water factory produced 5,000 units of sachet water at ₦500 the average cost will be 10kobo, that is,

$$AC = \frac{₦500}{5,000} = ₦0.1$$

Marginal Cost: This is the addition to the cost of producing or purchasing one more unit of goods or services. For example, if a company produces 300 units of a commodity and decides to increase its production level to 301 units, the cost of producing the 301st unit is referred to as its marginal cost of production.

$MC = TC_{n+1} – TCn$
Where TC_{n+1} = total cost of producing or purchasing n + 1 units
TCn = total cost of producing or purchasing n units
and MC = marginal cost

Table 1.2: Marginal Cost of Production

Unit	Total cost (₦)	Marginal cost (₦)
11	100	-
12	110	10
13	123	13
14	136	13
15	151	15
16	166	15

17	182	16
18	198	16
19	213	15
20	228	15

The marginal cost of producing the 15th unit will be:

$$MC = 151 - 136$$
$$= ₦15$$

10. **Efficiency and Productivity**

Efficiency refers to the difference between the output of a producing entity and the inputs used in producing the output expressed as a ratio. An activity is said to perform efficiently when an amount of inputs yields the highest attainable outputs. It is about using each resource in educational productivity efficiency by making the best use of each given input. The measure of educational efficiency can be presented mathematically as:

$$Et = \frac{Qt}{Xi, t}$$

Where Qt = Educational Outputs) in time t
Xi, t = inputs in time t, I = 1, 2, 3, ….n;
and Et = efficiency of the education system.

Productivity, on the other hand, is the expression of immediate costs relative to their benefits. In efficiency, an attempt is made to see how outputs produced can be kept at the same level even when input level is reduced. In the case of productivity, the objective is to see that future costs are reduced relative to benefits or costs held constant while benefits are increased.

(iv) **Demand for Education**

The importance of education cannot be over-emphasized. It has proved to be a veritable vehicle for national transformation in human history, a vehicle for individual and societal development. It is with the above knowledge of education that governments at different levels in Nigeria have hugely invested in education. Nigeria commits a substantial amount of her resources to the education of her citizens.

This is because Nigeria has high expectations from education as an instrument of social change and development.

The Nigerian educational enterprise has been growing at a very high rate. Schools have witnessed large enrolments, and the number of schools has greatly increased to meet the demand occasioned by large enrolments. The general belief is that education is the best way of bringing about the desired transformation and modernization of the economy.

Factors Affecting Demand for Education

Four major factors influence the demand for education by individuals:

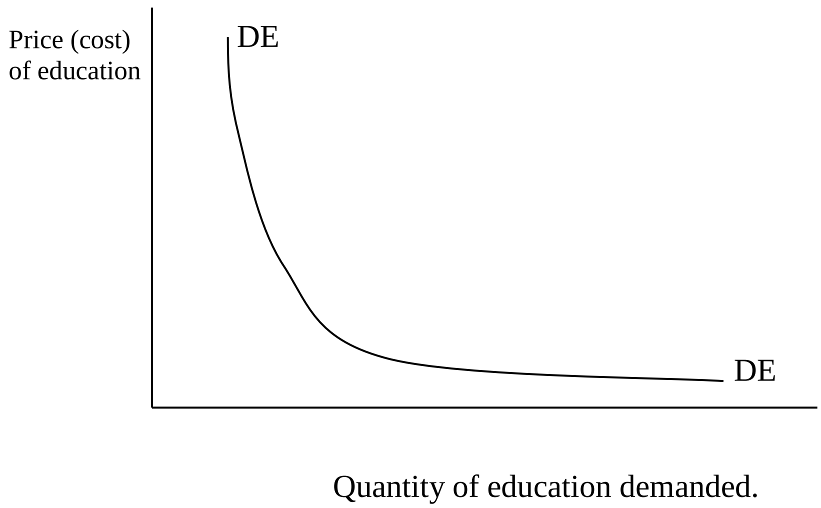
a. the price to be paid for the educational training.
b. the benefits to be derived from the training acquired.
c. the availability of an adequate family income to meet the cost of education.
d. the availability of non-educational alternatives.

(a) The Price of Education:

The price paid by individuals for a certain amount of education can determine the number that will enrol for that educational prorgamme. The cost of education involves the payment of tuition fees, purchase of textbooks, stationery, transport, uniforms, maintenance allowance, etc. When these are fully paid for by individuals, there is the tendency for the quantity demanded to be lower than when they are highly subsidized. Whenever a government is desirous of increasing enrolment and improving the demand for a particular level of education, the practice is usually the removal of school fees (tuition) and then the free supply of textbooks, uniforms and school bags.

The relationship between the price (cost) and the quantity of demanded education follows the normal demand relationship which states that more education will be demanded at a lower price.

Fig. 2: Demand for education based on the price factor



(b) **Benefits from Education**

The benefits or satisfaction to be derived from the acquisition of a certain amount of education can be categorized as follows:

i. a higher income level during the individual's working life
ii. a greater psychological satisfaction with regard to achieving one's life goals or ambition; and
iii. a greater contribution to the quality of life in the individual's community.

All these forms of benefits exist once an individual has acquired a particular educational qualification. In Nigeria, it would appear that parents have always demanded for more education for their children because of their belief that secondary and higher education increase their chances of earning a better life income. Also, some parents provide university education to their wards because of their desire to be the first among the few families that have doctors, lawyers and engineers in their villages or towns. This is because of the high value attached to such disciplines by the Nigerian society.

(c) **Family Income**

The per capita income of the people of a nation can determine the quantity of education that they demand. For example, in a subsistence economy where little income is earned, savings may be too little, and people may not be able to send their children to school because of this. If they want to send their wards to school by all means, they have to save more to afford the price of education and also forgo the contribution of that child to the family's farm. From late 50's to early 60's, it was common for a time table to be drawn up for each child to go to school up to a certain level, get a job and then sponsor his younger brothers and sisters to school. Financing education in those days was always seen as a family venture.

(d) **Availability of non-Educational Alternatives**

An individual chooses the goods and services he buys, if he has the choice. If however, he has no choice, then he will either buy it at whatever price or do without it.

In the case of education, individuals have to consider the various alternatives that are available. To some people, it is believed that instead of investing-huge sums of money on the education of their children, it is better to involve them in the family business right from youth. In such cases, the children have low levels of educational attainment. In other instances, parents enrol their wards in skill acquisition and entrepreneurial trainings instead of pursuing higher education, more so, in this era of few job employment opportunities for graduates of higher educational institutions. For some parents, there are no alternatives to higher education: as a matter of policy, it is higher education first before any other considerations. In such cases, those parents' homes or states have turned out to be the area with the highest number of highly qualified persons.

(v) **Education as Consumption or an Investment**

In this section, an attempt is made to justify education as an investment or consumption. Both government and individuals take decisions as to the amount and type of education to demand for and invest in. It is sometimes argued that some people desire education for its own sake while others demand for it for the expected social and economic returns. The fact that more and more education is demanded for by Nigerians over time suggests that individuals and/ or their parents feel that education is a profitable investment.

By definition, consumption refers to the purchase of goods or services to provide immediate satisfaction. Expenditure on education is believed to be a social service that yields no economic returns. Education is seen as a consumption on the premise that land can be developed but labour cannot. Both individuals and governments are involved in taking decisions on the amount of investment to make on education. Government's investment in education is usually referred to as a social investment while that undertaken by individuals is referred to as a private investment.

The Costs of Education

Durosaro (2000) described educational cost as synonymous with educational expenditure. He said the real cost of education is defined as the real resources used in the production of educational capital asset in the form of the educated student. Akangbou (1987) divided education cost into two parts which he called components of the costs of education. The first component is called direct cost, and it is the amount of money spent by governments and private individuals to purchase educational resources. These are the direct monetary expenditures on education by governments and individuals or their parents. The second component is the indirect cost of education which refers to the earnings or income forgone by pupils and students when they decide to undertake an educational training programme. They are called opportunity costs of schooling.

Educational cost may be either private or social in nature. Private costs of education which are borne by individual students and their families are payments of tuition fees, costs of books, uniforms and transport. The social costs of education are borne by the public through the government. These cover all items such as payment of teachers' salaries and allowances, expenditure on books, stationery, transport and other educational goods and services.

Ogbodo (1982) and Oyeniran (2008) placed education cost under capital and recurrent costs. Capital costs cover items such as purchase and development of school land, school buildings, classrooms and laboratories, and other durable institutional equipment. These costs do not recur regularly but they do have implications for recurrent costs in terms of maintenance costs on such fixed assets, usually for not more than one financial year. Resource inputs, which are recurrent in nature, have to be reviewed periodically. Hence, they fall under recurrent expenditure. They are often called operational costs, since they are necessary to keep the operation going.

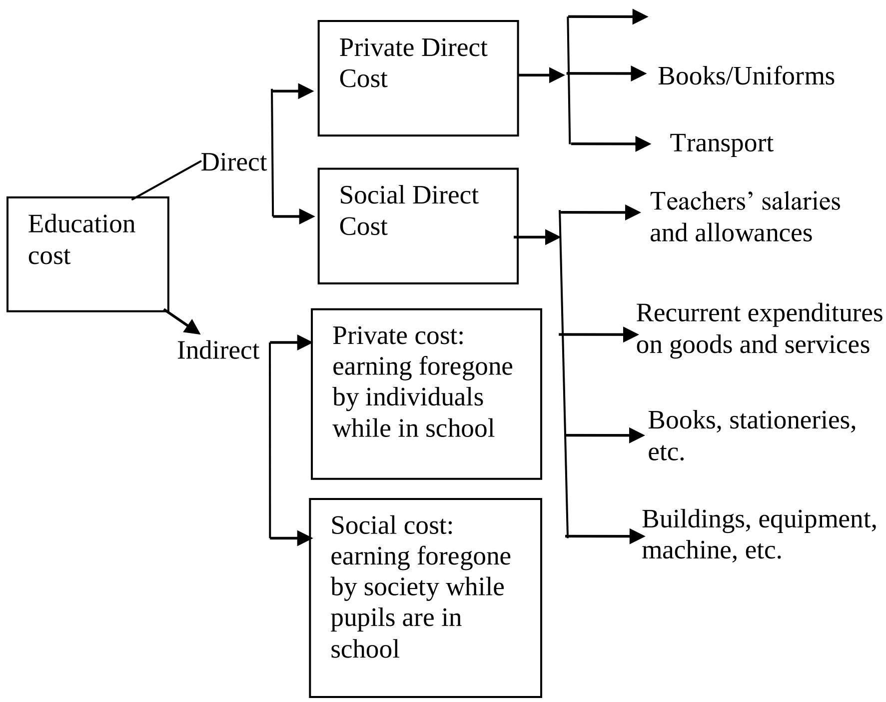


Figure 3: Education Cost Tree
Source: Atolagbe (2011) Public Cost, International efficiency and academic performance of Kwara State public secondary schools.

(vi) **Measuring Social and Private Returns to Education**

Returns on educational investment can be calculated by using any of the following three methods.

a. Cost-Benefit Ratio (CBR) method
b. Net discounted present value (NOPV) method; and
c. Internal Rate of Return (IRR) method.

(a) **The Cost- Benefit Ratio Method**

BCR is the ratio of the benefits of a project or on investment expressed in monetary terms relative to its costs. All benefits and costs are expressed in discounted present value.

BCR takes cognizance of money realized when a project is executed vis- a –vis the costs of executing the project. The higher the BCR, the better the investment. The general beleif is that a project with a higher benefit than its cost is a good one that must be picked among alternative projects.

$$BCR = \frac{Pv\ benefits}{Pv\ costs}$$

Where Pv benefit = present value of benefits, Pv cost = present value of costs

It involves basically three steps:

Step 1: Calculate the total amount of money made from working as a graduate over a certain period of time to determine the benefits. For instance, if a graduate earns ₦10.6million in 35years of employment, then the benefits will be ₦10.6mllion.

Step 2: Determine the total cost of training/ producing a graduate (both private and social costs) that is, under the assumption that it will cost above ₦4.5 million to produce a university graduate by today's standard in Nigeria.

Step 3: Divide the total benefits of N10.6million by the total cost of N4.5million.

10/4.5 = 2.22

This means that for every ₦1 invested by the Nigerian society on university education, 2.22 naira will be generated in terms of increased productivity in the future.

(b) **The Net Discounted Present Value Method**

This method takes into account the changing value of money by assuming a rate at which the cost and benefits from education would be discounted to present day values. In effect, the method tries to determine what the naira value will be in the future compared with its present equivalent given the rate of discount.

NDPV is calculated by summing the naira valued benefits and then subtracting all of the naira valued costs with discounting applied to both benefits and costs appropriately.

Cost Benefit Analysis will yield a positive NDPV if the benefits exceed the costs.

$$NDPV = \sum_{t=o} \frac{(\text{Benefits} - \text{Costs})t}{(1 + r)}$$

Where: r = discount rate
t = year
n = analytic horizon (in years)

If the NDPV is positive then the educational project is considered profitable. If it is negative, then it is unprofitable.

Working Example

Let us assume the streams of social costs and benefits of education (B.Ed) degree programme is as shown below.

(a)

Social costs	Year 1	Year 2	Year3	Year4
Total ₦35,000	₦35,000	₦35,000	₦35,000	₦140,000

(b) Social benefits, i.e., pre-tax earnings differential.

Age groups	22-25	26-30	31-35	36-40
Amount Per Annum (₦)	₦225,000	₦250,000	₦300,000	₦325,000
Age groups	41-45	46-50	51-55	56-60
Amount Per Annum (₦)	₦350,000	₦375,000	₦400,000	₦425,000

We can calculate the NDPV if we assume a discounted rate of 5percent. Using the formular for calculating NDPV, we have selected a number of years.

Selecting Year 1 and Year 2 with age group (22-25)
Example 1: NDPV for project year 1

Social Costs = ₦35,000
Social benefits = ₦225,000
r =0.05

Therefore,

$$\frac{B_1 - C_1}{(1 + r)1} = \frac{225{,}000-35{,}000}{(1 + 0.5)}$$

$$= \frac{225{,}000 - 35{,}000}{1.05}$$

$$= \frac{190{,}000}{1.05}$$

$$= 18095.23$$

Example 2: NDPV for project year 2(same age group)

Social Costs = ₦35,000
Social benefits = ₦250,000

$$\frac{B_2 - C_2}{(1 + r)^2} = \frac{250{,}000 - 35{,}000}{(1 + r)^2}$$

$$= \frac{250{,}000 - 35{,}000}{(1.05)^2}$$

$$= \frac{215{,}000}{1.1025}$$

$$= 195012.34$$

The NDPV can be calculated for each year from age 22 to 60 when he is expected to retire from service.

Internal Rate of Return Method

The Internal Rate of Return is a capital budgeting method usually adopted to measure and compare the profitability of an investment project. It is also referred to as the discounted cash flow rate of return or the rate of returns. It works on the same principle as the NDPV, but instead of assuming a rate of discount, it derives an internal rate of return that equates the stream of benefits to the stream of costs.

Thus the IRR is calculated as:

$$\frac{B_1 - C_1}{(1 + r)} \quad + \quad \frac{B_2 + C_2}{(1 + r)^2} \quad + \ldots \frac{Bn + Cn}{(1 + r)n} = O$$

Where B_1 = Benefits from education in year 1

C_1= Cost of education in year 1

r = the internal rate of return

The calculation of internal rate of return is usually very tedious, but a "discounted cash flow" is usually worked out with the help of a computer to obtain the internal rate of return required. Even this requires "trial and error" on some of the rates of return.

The logic is that if at a rate of 8%, the computer says:

$$\sum_{t=1} \frac{B_1 - C_1}{(1 + r)^t}$$

is positive and at 10% it is negative, then the IRR lies between 8 and 10 percent. You can then run another programme using rates between 8 and 10 percent, depending on how large the positive and negative figures are.

(vii) **Measuring Educational Output**

Educational output is intangible. It cannot be measured in the very same way industrial output such as the number of motor cars or cartons/ crates of drinks are measured. However, it is necessary to look at the objectives of the educational system to be able to determine what it can produce each year.

One of the objectives of educational system is to encourage its citizens to acquire knowledge through schooling. The system is expected to train the citizens by providing them with the knowledge required for each level of education. Thus, any person that is able to complete each of these levels is treated as an output of that system.

The "length of schooling index" of educational output is however flawed because it never introduced quality into the education output. At the end of each level of education, students are required to write some form of examination which may be conducted by external bodies. It has, therefore, been suggested that a better measure of the output of educational systems is that one which takes academic achievement into account.

The "academic performance index" as a measure of educational output applies quality criteria to educational output measurement. When we assess the number of secondary school leavers by their level of academic achievements in WAEC/NECO O/Level examinations, quality is being introduced into the measure of SS 3 completers of secondary schools.

Measuring Educational Inputs

The inputs of education are the teaching and non-teaching staff, physical structures such as buildings and non physical ones like students and educational objectives as well as services like water, electricity supply and other educational consumables.

Measuring these, with the exception of students, does not pose serious problems as the amount spent on each can easily be known. However, the monetary value of students' time devoted to acquisition of knowledge is required. The only way this could be done is to obtain an estimate of income lost while the students are in school. This is the alternative forgone. When the annual value of income lost is known, then the next stage is to aggregate all outputs.

Economists who have studied this problem usually solve it by adding together each input cost and obtaining a social input index. For instance, if teachers' salaries and allowances for year X are ₦120 million, imputed rent on school buildings is ₦10 million, students' time spent in school instead of working for money is estimated at ₦420 million, and all other goods and services including furniture, equipment, stationery, postal services, transport, etc., are estimated to cost ₦78 million, then the total cost of educational production for year X is ₦528 million.

Summary

Economics of education as a specialized area of study is justified by the need for stakeholders in education to be adequately informed about how well educational resources can be utilized in order to meet the educational needs of individuals, communities and the country as a whole. It highlighted the inseparable relationship between the economy and education, because adequate provision of economic resources to fund and finance educational needs will have significant influence on the volume and value of economic outputs. A sustained investment in education can engender a massive returns to investment of time, money and personnel which could in turn benefit the country's economy.

Review Questions

1. What is economics of education? Why is it necessary to study economics of education?
2. Identify and describe basic economic problems that are central to economics of education?
3. Why are the concepts of National Income, Growth Rate and Gross Domestic Product important to management of education?
4. Is Education a consumption or an investment? Justify your position.
5. Describe Cost-Benefit Analysis. How is it measured in Education?
6. Define the terms 'private cost', 'social cost', 'direct cost' and 'indirect cost'. Identify various costs that can be incurred in education under each of the component.
7. The Table below shows National Income and Population of Countries B and D between 1979 and 1984

National Income	Country B	Country D
1979	₦30milionl	₦36million
1984	₦35million	₦42million
Population		
1979	100,000	104, 000
1984	112,000	118, 000

With the data provided above, calculate:

(a) the per capita income in countries B and D in 1979 and 1984.

(b) the growth rate of the national income of countries B and D

(c) the population growth rate of countries B and D

(d) the average income and population growth rates of countries B and D during the 1979 – 84 period.

8. With good examples, write short notes on the following education costs:
   i. Direct cost of education.
   ii. Indirect cost of education.
   iii. Private direct cost of education.
   iv. Social direct cost of education.
   v. Private indirect cost of education.
   vi. Social indirect cost of education.
9. Explain the term "Social demand" for education. What effect has the introduction of Universal Basic Education (UBE 2004) on the demand for education in Osun State?
10 You have noticed that the secondary school system in your state is becoming inefficient. Overtime, what actions would you recommend to Education Authorities in your state to improve secondary school efficiency level?

Sample Research Topics

1. The financial challenges facing educational institutions in a depressed economy
2. Funding and operational efficiency of public universities in Nigeria
3. Educational cost as a correlates of internal efficiency of public secondary schools in Nigeria.
4. Funding and academic performance of public secondary schools in Nigeria
5. Parental socio – economic background and academic performance of students in rural areas of Kwara State
6. Analysis of factors influencing the demand for education in different socio – economic settings in South-west Nigeria.

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Chapter 17

Accountability in Educational System

Prof. Afusat T. Alabi & Dr. Adebayo A. Sheu

Introduction

Societies establish schools with the main objective of providing functional education for developing individuals. All over the world, there appears to be an increasing concern for quality education through improved teaching and learning activities. Consequent upon this concern is the demand for accountability from schools and teachers, in particular, mainly through tests and interviews as well as teacher support programmes (Ijaiya, Fasasi and Alabi, 2015). Accountability connotes taking responsibility for individual behaviour, job or role. According to Lulsegged (1980), it means that any employee who is given an assignment or a task to perform should be capable of doing so as well as attaining set goals and objectives.

The demand for accountability in education comes in different dimensions and currently, it is the most important part of the Educational Policy being discussed by all tiers of government. As concluded by Ladd (2001), accountability in education is a concept which can be discussed in various dimensions through the pattern of a political system in order to guarantee democratic accountability, bring about market-based amendments and peer-based accountability systems. These dimensions increase accountability in both parents and their children, ensure the professional accountability of teachers as well as enable a higher student achievement.

Teachers are trained and employed to guide their students towards good behaviour and academic success by maximizing educational opportunities made available to them. No nation can grow outside her educational system. To develop human resources for every sector of an economy, the government has to establish educational institutions which are designed to work towards the development of an individual into a patriotic and morally sound citizen, and the appropriate skills and abilities he needs to survive in order to meaningfully impart his/her society (Federal Republic of Nigeria, 2004; p.14). For educational institutions to serve as the instrument to develop human resources there is the need for accountability. Therefore, the strategy of holding the school, the teachers and the students accountable for performance results has become important to the educational system. The concept of accountability in education is tied to result attainment of educational objectives.

This chapter will be discussed under the following subheadings:

(a) Meaning of accountability.
(b) Types of accountability system.
(c) Main components of accountability system.
(d) Implication of accountability for educational management practice.

Meaning of Accountability

Accountability originated from the word 'account' which literally means to give a reason or an answer for someone's behaviour or actions. It also implies the consent to admit responsibility for one's decision and action, and to provide an acceptable explanation to other people. Accountability considers the esteemed judgments of levels of effectiveness of how well the components of a school system have been united in order to achieve predetermined goals and objectives. Accountability is also concerned with the act of summative and formative evaluation and monitoring of how accurately and competently assigned tasks and roles are being implemented for the achievement of set objectives. Hence, accountability is within an individual rather than being externally imposed.

Accountability in education refers to the assignment of a responsibility for both the processes of education (teaching methods, assessment procedures, learning environment, teacher quantity and quality, etc.,) and the products (students' performance in terms of academic, physical, emotional, social and moral development). It also connotes an act by which someone is answerable to actions carried out to accomplish a purpose in the educational system. It is the condition of taking responsibility for the outcome of resources utilized in education. Adams, Hill, Lichtenberger, Perkins, and Shaw

(1967) opined that accountability in education is greatly interested in figuring out the type of records that need to be kept, and how the records would be preserved in relation to the methodologies, procedures and forms. It is also concerned with the acts of recording, classification and recapitulation of the salient facts of activities and analysing and interpreting the recorded information with the aim of preparing and issuing reports and statements which reflect conditions at a given period of time. Educational accountability is thus an umbrella phrase used to describe the various methods that can be used to evaluate academic performance by schools and students (Wilensky, Galvin and Pascoe, 2004). Accountability in education is associated with the circumspect and cautious utilization of available educational resources for the achievement of predetermined educational objectives. Education Week (2004) viewed accountability as a process of ensuring that schools, educators and students are answerable for the outcome of their actions.

In every state in Nigeria, policymakers are moving towards the idea of giving rewards for every achievement recorded by any staff and punishing misconduct and failure in schools in an attempt to ensure that learners receive sound education and also that available resources are not wasted. As reported by Ijaiya, Fasasi and Alabi (2015), accountability includes an explanation of how resources that are meant to serve education are spent, how much learning activity actually takes place and how the educational system makes it imperative for education practitioners to accept that the public and other stakeholders have the right to know what exactly goes on in the education sector. Wilensky, Galvin and Pascoe (2004) opined that the accountability system strives to positively improve school quality by protecting students from unqualified teachers. Thus, if our goal is to improve general school quality and only those strategies that affect a few teachers are used, then overall school improvement is likely to be a very slow process. Hence, there is the need for educational accountability system to focus on teachers and all other stakeholders in the entire educative process.

Educational accountability is a veritable tool that targets either the process or result of education. School accountability system has the efficacious benefits of adjusting efforts with stakeholders' goals and making possible vital information for improvement. However, the accountability systems are faced with the limitation of only measuring a very small number of the dimensions that the stakeholders actually regard as worthy. Rothstein, Jacobson and Wilder (2008) demonstrated that all education stakeholders consider important an extensive series of outcomes which include students' academic performance, educational achievement, work ethics, critical thinking and citizenship. Thurlow (2009) explained that to achieve an effective accountability system, the following actions are necessary:

1. **Identification of desired goals:** Such goals could be:
(i) The provision of qualified and competent teachers, and
(ii) Improved students' performance.

2. **Measures for determining whether the goal is met:** Such measures could be:
(i) Teachers' performance in knowledge and skill tests, and
(ii) Percentage of students' performance at grade level by the end of each school year and or transition from one educational level to the other.

In recent time, holding teachers responsible for students' success has become the attitude of some Nigerian state governments. For instance, in 2008 and 2012, Kwara and Kaduna State Governments, in furtherance of their education innovation, subjected teachers in their state primary schools to both written and oral tests, with the aim of identifying their needs for training and re-training activities. Considering the nature of education, Ijaiya, Alabi and Fasasi (2015) wondered why the teachers should be held exclusively responsible for students' performance without considering other parameters that are noted for optimising students' learning.

Wilensky, Galvin & Pascoe (2004) observed that schools have used tests to measure performance for a long time, but accountability systems may possess more serious consequences. Accountability has become more complex even as its global understanding has tremendously increased. In addition to the components of the interaction of goals, decision rules and consequences, accountability system, nowadays, is more focused on capacity building and provision of appropriate supports. This implies that in addition to identifying and punishing ineffective schools, accountability ensures that all schools perform effectively up to the level of satisfaction. In order to provide the needed support, information is very crucial. The information component of accountability system in education helps to overcome obstacles encountered by educational institutions.

Evaluating schools through standardized students' test scores can provide education policy makers and other stakeholders with adequate information that is related to how well schools and school systems perform in comparison to outside performance standards. Rothstein, Jacobson and Wilder (2008) posited that high quality standardized tests that are meant to evaluate learners could be used to provide needed information on students' academic performance. However, not every trait for which a school could be held accountable can be measured through pen and paper tests .An effective accountability system has to possess various ways of reviewing all students' work. This can be done by observation of students' display of their talents and the extent to which they employ good citizenship behavior (Rothstein, Jacobson and Wilder, 2008).

Types of Accountability System

System Accountability: One major type of accountability approach is system accountability in which a school, an individual teacher or a school head is held responsible for every relative position of the educational process. System accountability centres on duties and obligations of the school over students' achievement. Such obligations include the "No Child Left Behind" campaign in America in the 1990s and "Every Child Counts" awareness launched in 2008 by the Government of Kwara State through its Ministry of Education, Science and Technology. The desired goal is improved students' achievement which is measured in terms of improved academic performance pursued through improvement in basic education curriculum, teachers' work ethics and the reinforcement of the war against examination malpractice, among others.

Individual Accountability: This involves the personnel in the educational system. Teachers are held accountable for activities such as passing some prescribed tests for keeping the job, promotion, and awards or bonuses for improved students' performance. Student accountability is also ensured through promotions from one grade to a higher one, and graduation and transition from one educational level to a higher one.

In the educational system, accountability takes place in many ways and at many levels. According to Ordu and Ordu (2012), there are seven levels of accountability system and they have to do with, among others, the state, the school system, the school, the school head, the teachers, and the students.

State Level: Every state should have standard models, criteria and necessary requirements for measuring accountability so all stakeholders can understand how schools are monitored to determine improvement in students' performance. Here, the state should be the tier of government that must be held responsible for the extent to which goals and principles are set. The funding and curriculum that the state provides for facilities and the policy decisions allow other levels of the public educational system to maximize students' opportunities to learn.

School System Level: The school system at each of the levels (Basic, Secondary and Tertiary) needs a strategic plan that indicates its vision, mission, goals, objectives and core values - all of which show what the system holds itself accountable for- ensuring continuous school improvement. Schools are responsible for providing programmes that are designed to meet all the needs of learners/students who are assigned to their schools within the limited resources provided by the education authority.

School Level: Focus is on the measures of students' success and necessary actions to address any aspect of teaching and learning processes that could be an impediment. Therefore, the quality of work rendered by the teaching and non-teaching staff towards students' success is the focus of school accountability plan. The school is to be held responsible for its students' performance. The evaluation of progress that is recorded by a school allows policy makers to determine the extent of its goal achievement. Thus, accountability is regarded as the promotion of collaborative work among teachers (Ladd, 2001).

School Head: For proper accountability, each school is to be managed by an instructional and administrative leader, who is a change agent, and who is adequately knowledgeable and capable of holding staff accountable for their activities towards students' success.

The Teachers: The effectiveness of teaching activities is a basic requirement for students' performance. Thus, teaching proficiency resulting from adequate qualifications supported with relevant development programmes to update teachers' knowledge and skills in effective lesson planning and delivery is a necessity in being able to hold students accountable for their learning. Policy makers favour individual teacher's accountability through performance rewards.

The Students: The students are the receivers of the efforts and activities of the school and all education stake-holders. It is important therefore, that students be taught to accept responsibility and become accountable for their learning.

Each of these levels of accountability has responsibilities and should be accountable, both internally and externally, for decisions and actions attached to such responsibilities. Furthermore, Durosaro (1998) identified product, input, process, goal and accountability for an enabling environment for education.Product accountabilityinvolves the evaluation of teaching in order to determine its effectiveness and to check the extent to which the individual teacher achieves the predetermined objectives of teaching. Input accountabilityhas to do with assessment of the extent of the role of supervision, monitoring and evaluation of the system's operation. Goal accountability is concerned with the measurement of educational goals and objectives, while accountability for conducive environment has to do with the degree education stakeholders co-operate to provide educational resources and conducive atmosphere for educational activities.

Components of Accountability System

Result is the primary concern of any component of a workable accountability system, while at the same time; it tries to pay attention to professional norms and regulatory compliance requirements. This means that the system:

i. has set goals to be achieved;
ii. defines educators' responsibility for all students, irrespective of the inherent merits and demerits;
iii. is built upon aligned components, objectives, assessments, instructions, resources and rewards for success or sanctions for failure;
iv. meets high standards of technical aspects; and,
v. provides the vehicle for a positive change.

Line of Accountability in Education

Everybody in society is affected by educational activities in one way or the other. Durosaro (1998) enumerated the line of accountability to include the teacher, the school administrator, statutory educational agencies and political office holders. Statutory educational agencies include the Universal Basic Education Commission (UBEC), National Board for Technical Education (NBTE), National Commission for Colleges of Education (NCCE) and National Universities Commission (NUC).The political office holders include the president, governors, ministers and commissioners of education.

Implications of Accountability for School Management Policies and Practices

- Accountability system built into all levels of the educational system would ensure that all stakeholders are capable, willing and ready to carry out all necessary educational activities towards improving students' performance.
- Accountability system requires specific procedures for its establishment and measurement. These procedures need to be known and followed by all the stakeholders in an interactive and continuous manner, and must be linked with the goals and missions of educational institutions.

- Accountability implies rewards for an exceptional school performance. Such rewards could take different forms such as increased resources, autonomy, higher ranking among other schools as well as financial benefits to schools and concerned personnel. It also implies punishments or sanctions which could be as serious as an outright closure of the school.
- Stakeholders in education should be answerable for students' performance according to their level of authority over the determinants of student learning activities. For instance, it may not be fair to hold teachers accountable for the academic performance of poorly raised children, grossly inadequate facilities and poorly formulated educational policies.
- Consequently, not only the teachers and school administrators should be held responsible for students' results, other stakeholders like the government, the school, parents as well as the students themselves must also be held accountable.
- In order to ensure that the teachers and school administrators are accountable and ultimately productive, there is the need to adequately and continuously train them and provide adequate facilities for them to work with.
- Parents can use information from the educational accountability system to prompt the schools to improve their performance standards. This could be through complaints, threats to withdraw their children from such schools or actual relocation of their children to better schools.

Problems of Accountability in Education

Kaufman (1973) identified the problems faced by accountability in education. They include:

i. inability of the school administrators to influence their subordinates;
ii. inability of the school system to make necessary changes and innovations to meet the needs of dynamic society;
iii. non-specific educational goals hindering effective implementation for attainment; and,
iv. conflicting values, interests, desires, aspirations and cultures of sub-groups in every society, culminating in an ineffective accountability system.

Strategies for ImprovedAccountability in the School System

The following strategies are necessary for improved accountability in education:

i. **Educational Auditing**: -This is an analytical strategy which is designed to improve its decision making processes by enhancing a good understanding of the social nature of the school through records of the educational process.

ii. **Supervision**: -This is a supportive service which is designed to enhance the optimum usage of educational resources for goal attainment. This technique helps educational administrators to foster the professional growth of personnel in the educational system through continuous professional development to ensure improved teaching-learning activities.

iii. **Communication**: - Communication involves sending information, message, feeling and ideas for ensured adequate feedback, which elicits actions necessary for goal achievement. Every good administrator is expected to have effective communication skills to enhance effective decision making, interpersonal relations and informational roles. If communication is well managed, it can also enhance job satisfaction and create in staff (teaching and non-teaching) a high sense of belongingness to the school.

iv. **Leadership**: - Leadership is viewed as the process in which an administrator mobilizes, co-ordinates and utilizes all the available educational resources for the achievement of predetermined educational objectives. Under this strategy, educational administrators are expected to provide the following for improved accountability in education:

(i) educational goal identification;
(ii) determination of validity and relevance of such identified educational goals and objectives;
(iii) a periodic review of the extent of achievement;
(iv) an identification of which factors assisted or hampered goal achievement in the system; and
(v) a design of strategies for improved performance.

Summary

Educational accountability, which is about improvement in education, causes all stakeholders to accept responsibility for their roles in the education process. Accountability system has two basic elements which include academic standards and standardized tests for the progress of individuals and the system. The types of accountability system were discussed. A school accountability system that focuses on expected results and professional ethics must be explicit on the expected duties of all students and educators, irrespective of the inherent benefits and demerits.

Review Questions

i) What do you understand by the terms 'accountability' and 'accountability system'?
ii) Discuss three ways in which accountability can be measured in educational system
iii) Explain the types of accountability system in education
iv) As an educational planner, what are the components of a workable accountability system?
v) Enumerate four stake-holders in education that must play complementary roles in ensuring students' performance.
vi) Discuss three pre-requisites for holding teachers and school administrators accountable for students' success in schools.

Sample Research Topics

(i) Accountability in Education System and Teachers' Job Performance in Nigerian Universities
(ii) Accountability in Education System and Students' Academic Performance in North Central States' Secondary Schools, Nigeria
(iii) Accountability System, Quality Assurance and School Effectiveness in Nigerian Universities

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Chapter 18

Demography and Education in Nigeria

Dr. Mon. Imuetinyan Imakpokpomwan

Introduction

Basically, planning is a management function which is focused on a set of activities geared towards the attainment of certain goals in the future. It is a continuous process aimed at the satisfaction of the dynamic needs of society. The relevance of educational planning to a nation lies on its potential to facilitate development as it integrates one level as well as types of education with the others on the one hand, and links education to other sectors of the economy such as health, agriculture, aviation, science and technology on the other hand. Education influences the other sectors of the economy because of its contribution to the human capital development of virtually all facets of the economy as they too influence education for good. The inter-sectoral linkage and interdependency are fundamental to national productivity.

Education cannot influence other sectors if it is not properly planned nor will it achieve its goals if plans are misleading. Educational planning is imperative for the overall development of a nation because it assists in human resource assessment and development. It also accounts for the attendant physical and fiscal needs required to develop the human resources to the level of sophistication needed for the proper functioning of society. That is why data are needed for planning. Planning generally cannot achieve the objective of modernizing the society without adequate, accurate and reliable data. Without data, plans will be misleading. Educational planning is not an exception. According to Aghenta (1993), availability of accurate data is the hallmark for projection and once data are unreliable, the projections based on them are bound to be faulty. An indispensable planning resource for education is demographic data. Education, generally, is a social activity. It is people oriented hence demographic dynamics are indicators which if carefully monitored can lead to proper tracking of education from time to time. Clark and Ofoegbu (2014) argued that demographic statistics is the basis upon which educational managers hinge their plans for provision of resources. In like manner, Chau (1969) agreed that demographic data enables planners to measure the relative size of school age population. Invariably, demography forms the foundation upon which any educational system, policy, programme or plans are built. Demographic data are not only vital, they are actually indispensable to the management of education. Conversely, education and demography influence each other for the benefit of national development. In this chapter, the concept, importance, and types of population analysis as well as common terms used in demography shall be explained. It will also discuss methods of removing irregularities from demographic data before using them for planning.

The Concept of Demography

Both education and demography are about people. Therefore, they are both social. ‘Demo’ is a Latin word meaning people while ‘graphy’ is the study or science of. Demography takes into account the nature of the population of a geographical location. As a scientific study, it notes of the population of a place. According to Lutz and KC (2013), demography can be defined as the Mathematics of people. It dwells on data and its application as well as implications on human population of a place. In other words, demography takes the number or statistics or mathematics of people and their characteristics into consideration. The scope of coverage in a demographic study consists of population characteristics which include the age, sex and educational level being covered. Other aspects include the income level, marital status, occupation and religion of the subject. Computation involving demography covers rates, ratios and sizes such as birth rate, death rate, average class size, enrolment ratio, completion rate, retention rate, etc.. The main source of demographic data is the population census of the people. Mohanty (nd) added that ‘demographic analysis is confined to a study of the components of population variation and change’.

The Importance of Demography in Educational Planning

The development of education is cardinal to the human capital development of a nation which in turn determines the speed and spread of national development. Since education is for the people, their population patterns must be kept in focus when planning for the education that is aimed at meeting their needs and aspirations. Demography is very important to education. Some of the relevant functions are discussed below.

- **Population and School Age Enrolment:** The population of a settlement influences the size of a school because it is from the population that the children of school age are enrolled. Thus in a large settlement such as a city, many schools are established to cater for the school population. A small settlement attracts a small school. Everyone can therefore be educated irrespective of the size of the settlement. The Cuban experiment with multi-grade schools has demonstrated that no matter the population of a settlement, the people could be educated. As highlighted by Imakpokpomwan (2013), Cuba had about 2,000 schools with less than 10 students. Teachers were trained in multi-grade school operations. This meant that a teacher could competently handle many subjects in any of or all the classes. In achievement tests, multi-grade schools were not inferior to urban ones. There were also no drop outs. The results of the Cuba experiment challenged the notion that schools must be of certain size to be effective (Lakin and Gasperini 2003). The goal of inclusive education is to enroll all school age children. Hence the population census is indispensable. A school manager must be alert to the school age composition in the population. It is from that segment that school enrolment and attendance in the geographical location can be captured.

The Edo State population is shown in Table 1.

Table 1: The Population of Edo State

Age Groups	Both Sexes	Males	Females
Birth - 4	409,104	209,928	199,176
5 – 9	399,463	206,964	192,499
10 – 14	372,079	192,917	179,162
15 – 19	362,413	184,897	177,516
20 – 24	354,840	176,109	178,731
25 – 29	303,111	147,299	155,812
30 – 34	216,121	102,663	113,458
35 – 39	177,395	83,890	93,505
40 – 44	148,605	73,768	74,837
45 – 49	125,073	65,308	59,765
50 – 54	104,710	54,892	49,818
55 – 59	66,196	36,140	30,056
60 - 64	60,019	31,187	28,832
65 – 69	36,962	19,060	17,902
70 – 74	34,675	18,171	16,504
75 – 79	19,930	10,108	9,498
80 – 84	23,064	9,205	10,725
85 +	23,064	11,440	11,624
Total	3,233,366	1,633,946	1,599,420

Source: NPC (2009)

Table 1 is the population of Edo State as obtained from the 2006 national population census. In Table 1, we can derive the numerical value of children in age groups 0 – 4 (for pre-primary education), 5 – 9 (lower basic education) and 10 – 14 (upper basic education). The Census is ten years old (by 2016) and when extracting data for planning, we project the data from 2006 to the relevant programme year we are planning for. We can also obtain other age groups of interest such as those from 15 – 65 who also have their educational needs.

Demographic data could tell the story behind every school enrolment in a geographical boundary and through its careful analysis we can identify where gap exists. It is not enough for a school manager to open his school waiting for children to show up, especially in rural locations. In an unenlightened situation, some parents, especially of physically challenged children, may hide them from the public view and so may not enrol them in a school.

Imakpokpomwan (2014) advocated that rural school managers should source for pupils including the physically challenged and the extremely poor among the population in the school immediate environment. It is only then that we can reduce the out of school syndrome in Nigeria.

Tracking enrolment could reveal unexpected lower or greater than anticipated distribution. It means something unexpected is taking place as indicated by available demographic data. For instance, during a civil unrest, an insurgency or in a harsh economic environment, population movement negatively impacts on school enrolment whereas the contrary is the case in favourable environmental realities. The awareness of where problems exist could prompt education providers into finding solutions to them.

- **Demographic data as a basis for budgeting for pupils' enrolment:** Demographic data indicate the number of children in a particular class, school or even a state. The school-age composition determines the types of plans to be made to accommodate the anticipated enrolment and cost implications of resource inputs. For instance, the cost of additional classrooms, desk and benches for pupils, staff chairs and tables, teachers' employment etc and other resources needed in a school are influenced by the available demographic data in preparation for the in-coming admission session. Enrolment goes with so many obligations beside costs. Mohanty (nd) posited that the size, location and type of education determine the cost of education which in turn is a function of geographical characteristics. Even in a school section, demography should form the basis of school activities. For example, in the enrolment for the Basic Education Certificate Examination, managers must be armed with the demographic data to provide examination materials, supervisors, accommodation, remuneration etc. In the absence of these, one resorts to fire brigade approach in arranging for the shortfall which is detrimental to planning.

- **Demography aids co-ordination of education components:** The Universal Basic Education (UBE) Act enacted in 2004 raised mandatory education from primary to junior secondary. In other words, from 6 to 9 years of universal education. Through the UBE, Nigerian governments (federal, states and local governments) planned to provide a nine year uninterrupted basic education to Nigerians, aged 6 to 15.

The government agreed that the first six years of the UBE called the primary education could spell doom or success for the entire educational system since higher levels were built on it (FRN, 2015: 11). Without the junior secondary school component, the UBE is incomplete. A child who completes primary school now has additional 3 years in the Junior Secondary or else he would become a drop-out. It therefore, implies that the management aspect of the basic education should make sure that wherever there is a problem in the UBE, efforts would be made to ensure that the component is strengthened for better result. For instance, it is reported in Nigeria that over 10 million Nigerian children are not in school. Who are they? Where are they? What level of education should they be in? In an attempt to fully answer these questions we must know their ages and what fraction belongs to 6, 7, 8, 9 or any other years. The knowledge of the number for each age enables a provider to know the level they should be in and the resources to deploy to them.

It is possible that transition from middle to upper basic school is problematic as demographic data may reveal. Action should be directed at strengthening the educational provision at that level. The next line of reasoning could question the reason they are in or not in school? What sex is mostly affected? Which geographical area are they found in? What can be done to pull them into formal educational system? It is from demographical data that the answers can be obtained. Based on location, the proportion in rural or urban location is traced. Available facilities which influence transition or continuous attendance in school are also examined along that line. The provision of health facilities such as water and toilets are imperative for supporting female education for instance. A school without a toilet is likely to repel the girl-child at puberty more than a male child of the same age. It is therefore, not enough for us to believe that 10.5 million out-of-school Nigerians will be enrolled without resolving this basic hindrance. Demographic data is an indicator for co-ordinating school management.

- **Demography as trackers of emerging problems in Education**. In the National Policy of Education, government stipulated the teacher- student ratio at every level of our educational system. It stipulates a 1:25 teacher-pupil ratio at the early childhood, 1:35 at the primary level and 1:40 at the secondary level. The reason is that teachers' span of control over the children is limited and an attempt to increase beyond the threshold may result in ineffectiveness or inefficiency. Table 2 is the inequality of teacher distribution observed in some schools.

Table 2: Teacher-student ratio in selected schools in Edo State.

S/N	LGA	NAME OF SCHOOL	TEACHERS IN POST	STUDENTS ENROLLED	TEACHER -STUDENT RATIO
1	AKOKO-EDO	Uma JSS, Imoga	2	235	1:117
2	Esan West	Ujogba JSS, Ujogba	4	326	1: 81
3	Etsako West	Iyekhei Girls JSS, Annahi	3	531	1:177
4	Orhionmwon	Mixed JSS, Ugboko-Numagbae	1	139	1: 139
5	Egor	Adolor College, Benin City	24	254	1:10
6	Esan Central	Govt Sec and Technical	13	108	1:8
7	EtsakoWest	Akpekpe JSS, Auchi	13	376	1:29
8	Oredo	Edo College, Benin City	34	250	1:7

Source: Imakpokpomwan (2012) compiled from Universal Basic Education Commission (2007)

From Table 2, so much can be deduced about emerging problems that should be tackled for a successful UBE implementation. For instance, it reveals inadequate staffing in schools in rural locations (nos 1-4), while there is abundance in urban schools (nos 5-8). There would be the need to redistribute excess teachers from over-staffed urban schools to understaffed rural schools. Without a demographic analysis, staff inadequacy in some schools may never be known. Invariably, in either case, it signals danger for the educational system because staff under-utilization or over utilization is inimical to educational management.

- **Demography as an indicator of direction of investment**. Population dynamics determine the demand for and supply of educational provision. Thus a growing population demands for more provision for younger children in terms of school buildings, school transportation, books and other learning materials. Government invests much in education for growing population while much is needed in the health sector for the ageing population. Basic education consumes much of education expenditure.

- **Demography as an indicator of the level of educational attainment:** Demographic data points to the level of educational attainment in a system. From it, repeaters, drop-out and completers are known. It exposes the educational flow system. Most often, enrolment is encouraged but attendance is equally very important in influencing the quality of any level of education. Without attendance, enrolment cannot attain much hence demographic data are set to keep track of it.

Types of population Analysis

Population study can be analysed via two channels, namely; static and dynamic population analyses. The present population structure or composition, i.e. the population by age and sex composition constitute static population. While the study of population changes is referred to as dynamic population. The explanation of some of the common terms used in demography is discussed as follows:

A Static population analysis deals with population variables such as age and sex composition from which educational characteristics such as enrolment, teacher-pupil ratio, enrolment ratio, admission ratio, gross and net enrolment, class size, etc, are derived. Education planners are interested in studying the age structure and composition from which school age population is derived. This is what school managers are mostly concerned about. Much may not be known about the process of education if the usual statistical indicators such as school enrolment rates, teacher - student ratios, drop-out rates and repetition rates which are derivatives from demography are not known. Classification into different age groups enable us to work out varied educational needs of each group. The educational needs of the young are different from those of the adult. Knowing the population structure also enables us to determine the dependency ratio.

A Dependency ratio is the number of those who depend on the economically active population. The term **active population** means the age group composition that produces goods and services for the consumption of the entire population. They are the civil servants, other paid-employed and self-employed persons. Generally, they fall within the age group 15 – 65. The active population support those who are aged 0 – 14 and those above 65 years of age. Age groups 0 – 14 and 65 and above are tagged inactive population. Below is Nigeria's demographic dependency ratio profile.

Nigeria's Demographic Dependency ratio Profile
Total dependency ratio: 89.2%
Youth dependency ratio: 84.2%
Elderly dependency ratio: 5.2%
Potential support ratio: 19.3%
Source: Index Mundi (2015)

Youth dependency ratio is the number of age group 0 – 14 which depends on the total number of population aged 15 – 65. When dependency ratio is high as indicated in the profile above it shows that birth rate is very high. There would be the need for a huge investment in education to meet the education needs of the youths. Even though it is designed that compulsory education ends at age 14 and one joins the labour market at age 15 and then becomes a member of the active population, it is not always so. For instance, in developing countries like Nigeria, those in age group 15 – 20 are still in school and so they still depend on the resources of their parents. In an era of youth unemployment which Nigeria is presently passing through it is difficult to determine at what age group one becomes independent. Thus, the rate of dependency could be much higher.

The term **'inactive' population** is misleading though. It is not that the age groups classified as such are in real terms economically inactive. Let us take age group 0-5 as an example. Their parents, especially their mothers, are naturally to cater for them hence; they may not be engaged in economic production. Enrolment into Early Childhood Care Development and Education creates opportunities for their parents to be economically active. On the other hand, they form the basis on which teachers are employed. In a way, they are actively facilitating the 'active group'. They are also the basis for investment in compulsory education. Thus, their enrolment determines whatever number of teachers to employ, classrooms to build, books to write and publish and the benches and desks to procure. Of course, any type of investment on their behalf keeps other groups active because they actively participate by enrolling and attending school. If they refuse to attend school, all other persons and resources economically assembled for them would be inactive. So, in that sense, they are active. For demography, they are termed inactive because statutorily, they are not empowered to engage in economic production. The above 60years age group is also tagged inactive. Granted, some of them had engaged in paid employment and have retired. But many retired persons are not yet tired as they are active in economic production as directors of industries, entrepreneurs, advisers even though some rely on their children's financial support in less developed countries like Nigeria or on state social provision in advanced countries like United Kindgom.

Ageing population refers to a situation where the older age-groups are more than the young population. The situation can ordinarily be referred to as top heavy. Many reasons can account for such a scenario such as high mortality, infertility, war, migration, family planning, etc. MCnair (2009) reported that the ageing population of the UK is 'caused by the combination of extending lifespan and low birth rates'. In an advanced economy, a decline in birth rate and enhanced health care delivery which prolong life span account for more ageing population. Figure 1 is the UK population projected for 2050 as presented by (MCnair 2009:15)

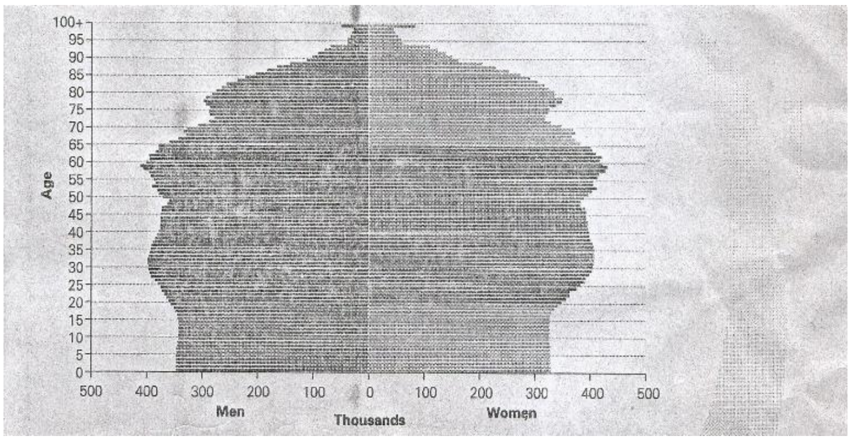

Figure 1: UK population structure. Source: MCnair (2009:15)

Figure 1 is the UK population structure as projected for 2050. The heavy top means that the population of the aged is more than that of the young. This is an example of an ageing population. The pyramid of a growing population is characteristically pointed at the peak. Figure 2 is an example of a young/growing population as demonstrated by Nigeria.

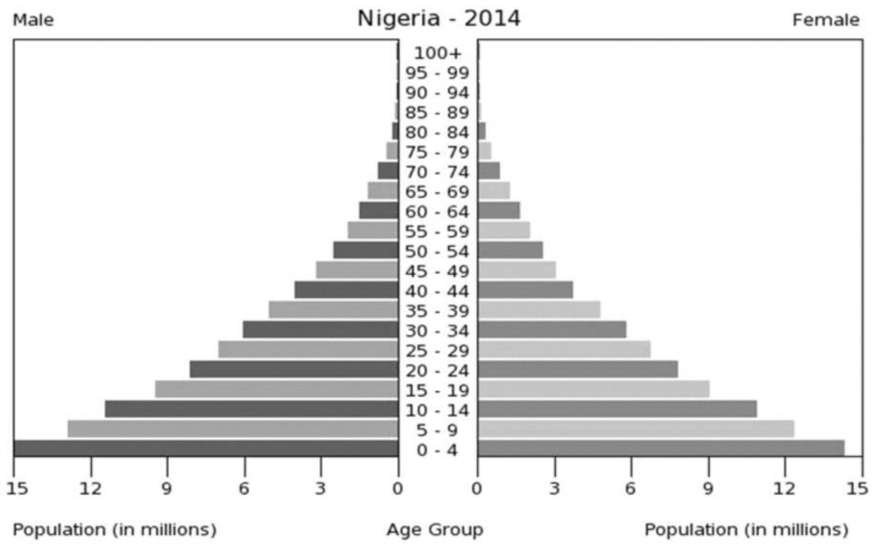

Figure 2: Nigerian age structure . **Source**: IndexMundi (2015)

Figure 2 is the Nigerian age structure which demonstrates a growing population. The structure is a pyramid showing a tiny peak and a broad base. The older the aged, the lower their numerical strength as seen in figure 2. The base which constitutes young people is as a result of very high birth rate, less birth control and improvement in health provisions such as immunization and inoculation services. Such a distribution calls for so much investment in educational provision and employment opportunities. Otherwise, the out-of-school children and youth unemployment would be very high.

Dynamic Population Analysis and Education

The population of a place is never constant but it keeps changing from time to time. This indicates the development strides that had occurred earlier. Knowing the population make-up at different points in time enables us to plan for school enrolment. Often time, an imbalance between pupils' enrolment and the provision of teaching/learning resources arises because enough provision was not made in advance. The situation leads to inadequacy in the provision of teachers, benches and desks, examination and other learning materials, etc. It portrays institutional inefficiency in programme delivery (Agboola and Imakpokpomwan 2011). Enrolment projection which is the basis for investment in education must reflect population dynamics in order to be useful to the system. Other variables are deployed depending on the prevailing enrolment statistics arising from the population changes.

Determinants of Population Change

Three main factors determine population changes. They are natality, mortality and migration. Let us pay some attention to their explanation.

(a) **Natality:** This refers to birth in a given place over a period of time. This is influenced by the crude birth and fertility rates.

- **Crude Birth Rate**: Birth rate is calculated by taking the number of live births divided by the average population of the place in a year. It is crude because the method accounts for all the people instead of the fraction of the female within the child bearing age bracket. It may not give precise data for comparison. Crude birth rate is calculated as follows.

  $CBt = \frac{Bt}{Pt} X\ 1000$

  CBt = Crude Birth Rate in year t.

  Bt = live birth in a specific year called here t

  Pt = Average population in a specific year called here year t.

  Average annual population is obtained on July 1, or at the beginning or end of a specific year.

  Any specific Year could be identified as t or any other alphabet e.g., 2016.

- **Fertility Rate**: Since only a fraction of the female is fertile among the population, we can get a more accurate data by looking at the fertility rate. Even though at about 15-49 years of age a female can be fertile, we must recognize that the constitutional provision for marriage is 18 years. Including females below 15 years and those above 50 years in calculating fertility rate may also create a problem. Fertility rate could be streamlined into (i) general fertility rate-GFR and (ii) fertility rate by age-FRA.

(i) **GFR**: Calculation of General Fertility Rate is per thousand also. It takes the total number of birth over the female population aged 15 to 49. The implication is that even those not married or ready for child bearing are included in the calculation. Again, it does not give a fair representation of fertility in the population. Hence a need to look into specific ages.

(ii) **Fertility Rate by Age (FRA):** Calculation of FRA takes into account the live births of mothers by specific age such as age groups 15 – 19, 20 – 24, 25 – 29, 30 – 34, 35 – 39, etc. Though this assessment also has its short-coming such as use of artificial birth control which restricts fertility, it is still preferred to crude birth and general fertility rates.

Interactions between Education and Fertility

A study of natality enables planners to project for future enrolment. The change in population such as an increase in birth rate leads to an anticipated increase in enrolment. Conversely, a decline in birth rate leads to an anticipated decline in enrolment. For instance, Kateb (2003) reported a rapid decline in birth and fertility rates in the 1970s and the early 2000s in Algeria leading to a reduction of school age children and a decline in primary school enrolments. Another angle to the study of natality is that education influences fertility just as fertility does on the other hand. A good number of females delay marriage and child birth because of their desire to acquire education. In contemporary Nigerian society, at age 30, many girls are still not married because they are pursuing education or awaiting future partners.

We must also recognize the effect of education on fertility because education enhances the level of information which brings changes in behavioral patterns as well as empowers people with choices (Lutz and KC, 2013). The higher the quality of education a people attained, the lower their fertility rate. Some married women employ birth control to regulate child birth thus limiting potential fertility. Restricted or controlled birth is also called **fecundity**.

Likewise, arising from their education, married couples limit the number of children they could have.

Education also comes with a good health habit that could reduce infertility among the populance. Ahmed (2000) agreed that educated parents, particularly mothers, regardless of their socio-economic status, are able to take better care of children, help them with home work and maintain decent living. Because of limitation of birth, children of educated women receive quality education. Thus, the better education women receive the lower the fertility rate and conversely the better the education of their children. Therefore, the lower the fertility rate, the higher the resources available for education. Almost universally, women with higher levels of education have fewer children (Lutz and KC 2013).

(b) **Mortality:** Mortality refers to death among the population. Death naturally ends life hence the dead are not counted among the population fold. Death could be caused by natural phenomena such as illnesses or diseases, deformities or old age. In short, it is a natural end to life. There are other non-natural causes of death such as accidents, and social strife which pre-maturely ends life. The interest of education managers in studying mortality is inherent in the fact that high mortality reduces younger population which implies lower school enrolment among that cohort. Conversely, low mortality results in the opposite for school enrolment. Children born within the same period, preferably a year, fall into an enrolment group which is called cohort. A cohort is expected to enrol in school at the same time. Mortality reduces cohort. For planning purposes, projection is made for a particular cohort. In calculating mortality rate, the death crude rate is used. Below is the formula for calculating death crude rate.

$$CDt = \frac{Dt}{Pt} \text{ X } 1000$$

CDt = Crude Death Rate in a specific year (t)

Pt = Average population in a specific year (t)

Dt = total deaths in a specific year (t)

Average annual population is calculated of the population on 1st July or beginning or end of a specific year (t).

Specific year (t) means any given year, e.g., 2016

(c) **Migration:** Migration is the movement of people from one place to another. As the population of the place from which one moved away is reduced, that of where one now resides increases. People move from rural to urban areas, or vice versa, from one state to another within a country or from one country to another. Movement within the same country is called internal migration. Factors responsible for internal migration include civil strifes, social-economic factors, political and religious issues, etc. On the other hand, movement across borders from one country to another, is referred to as international migration which could be immigration or emigration.

Immigration refers to movement from a country to another while emigration is the movement out of a country to another. There are also many reasons for such movements. For example, pursuit of education, in search of greener pasture, political issues such as demand for asylum, etc. Both immigration and emigration pose no real challenge to basic education but to higher education enrolment. For instance, reports hold that Nigerians spend billions of dollars in higher education and tourism elsewhere. Brain drain, which is the emigration of highly skilled professional, had affected Nigeria's capacity to produce higher level manpower. Mberu & Pongou (2010) reported that low morale, poor remuneration (a professor in Nigeria earned one percent of the salary of his South African counterpart in 1991) and low teaching and research output including series of industrial strikes led to the brain drain of that era. Apart from salary issues, job insecurity, quests for advanced technology, political intolerance of the military era and unemployment were major reasons for emigration from Nigeria in the 1990s. Today, however, youths migrate from Nigeria because of economic reasons, insurgencies and militancy. In summary, the relationship between education and population is presented in figure 3.

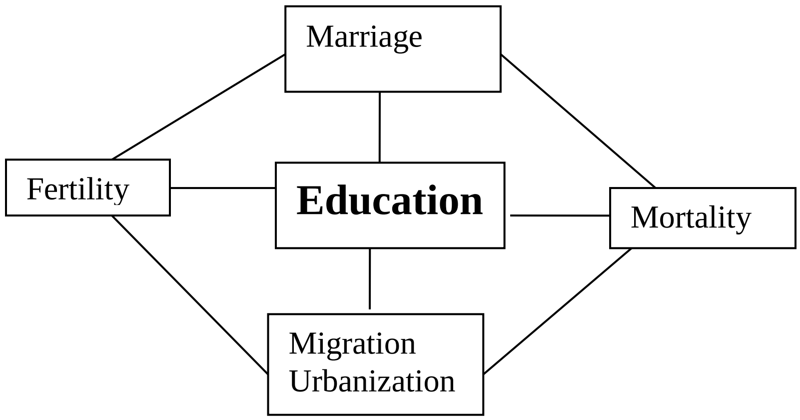

Figure 3: Education and population.
Source: Bella (2002)

Figure 3 is a diagram showing the relationship between education and population variables. It shows that education influences all the variables hence it is at the centre. The arrows indicate that they in turn influence education. This has already been discussed.

Natural Growth Rate of Population

Two events that significantly regulate population are birth and death. As people bid farewell to the dead so others welcome the new borns. You will be surprised at the number of death or birth recorded per hour throughout the country. Therefore, population growth is calculated by removing crude death rate from crude birth rate. Natural growth rate of population can be calculated as follows: CBR – CDR.

The result can be converted to percentage.

$$\frac{\text{CBR} - \text{CDR} \quad \text{X } 100}{1000}$$

Another concern is the geographical distribution of population. Since, school enrolment comes from the population, the size of the population influences school mapping, resource distribution, enrolment size and school type bearing in mind that education is both labour and cost intensive.

Determining School Age Population

Adeyemi and Igbineweka (2001) observed that without adequate planning, school enrolment may increase more than anticipated thus creating enormous financial strain on the system. Inadequacy or inaccuracy of data available for planning is also a bane in the management of education. Population census which is always crowded by irregularities in Nigeria is a major source of data for planning. Demographers, however, have devised means to reduce the effects of irregularities on effective planning. I shall discuss two of them: age smoothing and reducing ten year age group into 5 year age group in determining school age population.

(a) **Age structure Smoothing Methods**

Education planners rely on accurate data for projections. If planning must be an utmost tool for national development, the data must be accurate, adequate and reliable. A major data for planning is the population census. From the population figure, the age is obtained for projecting enrolment in educational systems.

However, in developing countries such as Nigeria, such figures are often not accurate and so, unreliable for planning especially as vested political interests manifest in their enumeration. The planner has to make it more reliable by smoothing the age structure as obtained from the census figures. Age structure smoothing is a method for removing or minimizing irregularities in population figures thereby enhancing the quantitative value for planning purposes. Chau (1969) identified some factors resulting in irregularities in population figures. They are;

(i) Falsification of age information: This is a problem in Nigeria education system especially as it affects teachers and other education workers. People continue to falsify their age in order to remain in service thereby rendering less value for money and denying youths employment opportunities.

(ii) Errors arising from lack of birth documentation. Because of illiteracy, some parents do not register the birth of their children. At a time when the data is needed, the actual age is difficult to tell.

Age structure smoothing is linked to two age groups prior to the age under consideration and 2 age groups post the age under consideration. The formula for smoothing age structure is:

$$\sum = 1/16\ (-S_{-2} + 4S_{-1} + 10S_o + 4S_{1}\ {}_{-}\ S_2)$$

i.e. $\sum$ = the figure of the smoothed age bracket or group
S_o = figure in the age group under consideration
S_1 & S_2 = figure in the 2 age bracket post the So
$S\text{-}_1$ & $S\text{-}_2$ = figure in the 2 age bracket preceding So.
($_{-1}$ or $_{-2}$ are no numerical values. The (–) sign does not indicate subtraction but mere identification tag).

Example 1:

Age group	Population figure
0 - 4	200,000
5 - 9	175,000
10 – 14	180,000
15 – 19	150,000
20 – 24	180,000
25 – 29	160,000
30 – 34	148,000

Supposing you are asked to plan for age group 10 – 14 in example 1.
(i) Identify So, $S\text{-}_1$, $S\text{-}_2$, S1 and S2.
(ii) Smooth out the age structure.

Answer: (i) So = age group 10 – 14. Its population is 180,000
$S\text{-}_1$ = age group 5 – 9, population is 175,000
S_{-2} = age group 0 – 4, population is 200,000
S1 = age group 15 – 19, population is 150,000
S2 = age group 20 – 24, population is 180,000
(iii) The age we are asked to smooth is (10 – 14) which is identified as So.

Therefore, $\sum = 1/16\ (S_{-2} + 4S_{-1} + 10S_o + 4S_1 + S_2)$
$\sum$ = 1/16(-(0-4) + 4(5-9) + 10 (10 - 14) + 4 (15 – 19) – (20 -24)).
Inner brackets are the age groups.
$\sum$ = 1/16(-200,000) +4(175,000) + 10(180,000) + 4(150,000) – (180,000).

The figures in brackets are the corresponding population for each age group.

$\sum$ = 1/16(-200,000 + 700,000 + 1,800,000 + 600,000 – 180,000).
$\sum$ = 1/16(3,080,000). Thus $\sum$ = 0.0625 +3,080,000
$\sum$ = 192,500

The most accurate figure to use in planning for age group 10 – 14 is 192,500, not 180,000 as indicated in the population. In developing countries like Nigeria, a primary class can be made up of many children not of the same age because some did not start school at the time they ought to and in recent times many parents fast forward their children to enrol in a class above their cohort. For instance, in primary two where only seven year old children ought to be, we can find children aged 5, 6, 7, 8, 9 or older. If we do not smooth out the structure before planning, there will be a shortage in resource provision for the system.

(a) **Age splitting method**

Smoothing age group structure removes some irregularities but does not break down the age group to smaller units such as five years or a single age. The next task before educational planners is to break the structure of the age group after smoothing. You will realize that sometimes, the structure is a 10 year age group structure instead of the five years grouping observed in the example and exercises in the preceding pages. In that case, a 10 year age group structure is broken into two halves to give a 5 year structure. The first half is identified as **fa** while the second half is identified as **fb**. For instance, age structure 0 – 9 has years 0 – 4(fa) and 5 – 9(fb). Furthermore, we can obtain a single year age from fa, i.e., ages 0, 1, 2, 3, 4. In fb, we can obtain 5, 6, 7, 8 & 9. (For space, I will not treat the split into single year in this work). Our concern as planners is to extract the school age from the population. The National Policy on Education stipulates six years as entry age into lower basic education. That is, formal education starts at age 6 (FRN 2015). However, the first step is to break a 10 year age group structure into two in a process called **age group splitting method**.

Thus, fa = 1/2 [fo + ⅛ (f$_{-1}$ –f$_{+1}$)]
To obtain fb, remove fa from fo. i.e. fb = fo – fa.
Legend/key Fo= the numerical strength of age group being considered.

Fa = the numerical strength of the first five years in the 10year age group.
Fb = the numerical strength of the last five years in the 10year age group.
F$_{-1}$ = the number of the preceding 10years age group.
F$_{+1}$= the number of the following 10years age group.

Let us assume that below is Bluesky State population distribution.

Age distribution	Population
0 – 9	45,000
10 – 19	42,000
20 – 29	40,500
30 – 39	37,600

Question: *Extract the relevant five year age structure for Upper Basic Education from the Bluesky State population*.
First, identify the age of concern which is the fo. The fo here refers to the age of those who should be in Upper Basic Education (Junior Secondary School). They are children of 12 to 14 years. This category of children is found in age group 10 – 19 in the example.
Next, identify **f $_{-1}$**, i.e., Age group 0 – 9, Next, identify **f$_{+1}$** i.e., Age group 20 – 29.

Next, identify their numerical strength.
Apply the formula.
Fa = ½ [fo + 1/8 (f$_{-1}$ –f $_{+1}$)]
Fa = ½ [fo (i.e, age group 10 - 19) + 1/8 (f$_{-1}$(i.e age group 0 - 9) – f $_{+1}$(i.e., age group 20 - 29)]
Therefore fa =½ [42,000 + 1/8 (45,000 – 40,500)].
Fa =½ [42,000 + 1/8 (4,500)].
Fa =½ [42,000 + 563].
Fa =½ [42,563]. Fa = 21,281.

Our concern (upper basic education) is the 12 -14 age group which is enclosed in the first half of the age group 10 =19 (i.e., 10 -14 age group). However, you could be asked to plan for the senior secondary school which is housed in the other half of the structure (i.e 15 – 19 year old). Since you have already obtained the first half of the age group, i.e., fa, to obtain fb, remove fa from fo.

Thus, fb = fo – fa.

In our instance, fb = (42,000 – 21,281)
Fb = 20,719.

Since the secondary school age is enveloped in the fb, we still need to break it down to single years to enable educational planners to plan with it. However, as I have stated elsewhere, for lack of space that will not be handled in this chapter.

Implications for Education Management

Since demographic data are indispensable to education planning, they must be carefully gathered, stored and retrieved when needed in order to present more reliable projections for enhanced national development. It implies also that, we cannot get it right if our education, health, social or population data are faulty because we choose to falsify or influence base data for public consumption because of our selfish interests. The foundation built on them will be faulty also and whatever interaction in the system will malfunction. Every unit in a social system works independently but in unison so much so that every other aspect influences the overall achievement of the objectives of the entire system. Faulty data base used for planning educational systems has multiple effects on every other component of the social system such as health, employment, agriculture etc. Hence, we get the society we build for ourselves. For instance, when employees due for retirement falsify age declaration to remain in service, apart from a decline in services rendered, the younger generation may not get hired.

Education managers should make more conscious efforts to draw out lessons on implication of population dynamics at all levels of our educational system for the benefit of our developmental strides. The higher the birth rate, the lower the quality or resources availability to the citizenry. Discussions on natality and fertility should create awareness of fecundity, implication of early marriage and health issues so that education policy formulation and implementation could be directed to both the young and old. Then, lessons learnt on population studies in their discussion in class, assemblies and other opportunities to build the population can be adequately managed.

Conclusion

In this chapter, deliberate efforts were made to draw out lessons on population studies; that there can never be education without the population. Events of the past influence whatever education we desire and events of today determine our welfare in the future. Therefore, planners can do little or nothing without basic reliable, adequate and current data for planning. Deliberate efforts should be made also to reduce impurities that may be contained in population documents so that planning may serve the system better.

Review Questions

Explain the concept of demography. (b) Why demography in educational management?

(1) Discuss the meaning of the following and their implications for education development. (i) Young population, (ii) Natality (iii) Mortality (iv) Immigration (v) Fecundity

(2) You cannot divorce education from demography. Amplify your position.

(3) What are the determinants of the population of your local government area? Comment on their implications for the Universal Basic Education.

(4) As the Technical Assistant on Educational Management to the Commissioner of Education in your state, you are expected to plan for the enrolment of students in the next academic session. Given the census data below:

Age	Population
0 – 9	115,000
10 – 19	92,000
20 – 29	84,500
30 – 39	78,600

You are required to extract the relevant five year age structure for planning for textbook supply to the Senior Secondary School in your state.

Sample Research Topics

- A study of the relationship between education and fertility of civil servants in Edo State
- An analysis of marriage types and children education among the Idoma speaking people of Nigeria
- Influence of mother education and children's academic achievement on the UBE level in Calabar.
- Relationship between family size and primary school drop-outs in the South Senatorial District of Bauchi State.
- A Co-relational analysis of parents education and out- of- school children in Osun State.

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Chapter 19

Educational Financing

Dr. Abdulyaqin T. Murtala & Prof. David O. Durosaro

Introduction

The issues of financing education in Nigeria are all inclusive, and coupled with the endemic nature of funding at different levels of Government, the educational sector is the worst hit. The usual lack of balance between financial bordering and financial resources availability at each level of government makes it important to understand the imbalance in equity across the sub-units in the three tiers of government.

It is thus the interest of this chapter to highlight those headings as they concern the concepts and process of financing education in Nigeria. Hence, the following sub-headings are considered:

- Concept of Education Financing
- Sources of Funding Education
- The Alternative Sources of Funding Education
- Privatization of Education
- Measuring Financial Resource Effectiveness in Education

Concept of Educational Financing

Finance is a part of general economics that focuses on the management of money and other monetary assets. It is the commercial activity of providing funds and capital for both public and private investments. The educational sector is a service sector and a capital-intensive one. Thus, the need for financing is sacrosanct to its goal achievement. Afolabi (2005) defined Educational Financing as the generation, distribution and utilization of funds within the educational system. These three words will form the basis for our discussion on educational financing.

The two important key words deducted from Afolabi’s definition are generation, and distribution.

Table 1

Generation	Sources of financing education in management
Distribution	Finance allocation to educational sectors and programmes

i. Financing an educational institution is a multi-dimensional issue which defines the responsibility or otherwise of the government to its citizens. Even though investment in education comes from both public and private bodies, but the role of the government in creating an enabling environment for private participation in the educational sector highlights its responsibility feature and thus its duty to the citizens. According to Nwadiani (2000), traditionally, education is public goods in most countries and it is seen not only as a social service but also as a productive investment. The status of education as both a service and a business has made the educational sector retain a place of priority in the budgetary allocation of any nation. However, despite the priority nature of education in government budgets, the seeming revenue monopoly by the government has led to serious underfunding of public educational institutions in Nigeria today. Investment in education should be shared by all concerned to ensure equal infrastructural provision for the schools and in the end, guarantee the effectiveness of the system. Many strategies, both traditional and contemporary, have been adopted in financing education in Nigeria. Generally, educational institutions are financed by the government (i.e., public), individual enterpreneur/ coporate enterprise (private) and international bodies (Contributions by National and International Donor Agencies, the World Bank, the United Nations Development Program (UNDP), UNESCO, UNICEF, etc).

Sources of Funding Education

Funding involves the practice of financial provision for projects, services and businesses. This could be in the form of;

i. Government grant

ii. Subsidy
iii. Donation
iv. Savings
v. Taxes
vi. Credit
vii. Levies
viii. Tuitions
ix. Sales of souvenir
x. Student loan in Higher Education

Government grant: This represents total government expenditure on education. It includes the total allocation to the educational sector from the National budget. On record, the Federal Government's spending on education has been below 10 percent of its overall spending since 1997 (World Bank, 2004).

Subsidy: This is a grant paid by government and its other agencies to educational enterprises and institution for providing public services. It is also a process whereby government and other donor agencies pay part of the cost of educational services in such a way that the students or service beneficiaries are relieved of having to pay so much money in fee for a given educational programme or service. However, if individuals were expected to contribute a greater share of the costs of education by means of fees and some other forms of payment, the gap between the social and the private rate of return would be reduced.

Donations: Donations are voluntary gifts (in forms of money, structures, stationery, etc) made to educational institutions to assist in the provision of the needed funds and facilities for educational institutions and programmes.

Savings: These are funds or money put in the form of deposit by schools and other educational institutions as a reserve to provide financial support for school programmes and services.

Tuition fees: Tuition fees according to Obayan (2006), are sometimes referred to as instructional fees. Tuition represents all money paid by the students for a school's instructional cost. The tuition is mostly paid in private schools and it represents more than 75% of the school revenue sources. It augments government provision for and spending on public schools.

Levies: Levies are a form of taxation in that specific rates are paid for education and other programmes (Obayan, 2006). Levies represent all other charges paid to the school by students, and they vary from school to school. Some of these include: The PTA levies, school bus levies, school uniforms, school developmental levies, Library development levies and mosque or church levies. In some instances, the school levies are situational and based on school needs which may thus prompt the school to charge some amount on all students to generate funds to cater for specific needs.

In Nigeria, the largest source of funding education comes from a government grant. This is in fulfilment of the constitutional mandate of Education as a social service. The World Bank (2004) stipulates that the largest percentage of government funds should come from federal taxes and duties. It is the proceeds from taxes and duties and the dwindling oil revenue that are brought together and put in the Federation Account and which are later divided among the three strata of government. However, the amount of money in the Federation Account depends largely on its crude oil production capacity and world oil price, and additionally, to some extent, on government's capacity to collect duties and taxes.

Student Loan in Higher Education: This is a grant given to students by a government to take care of all their educational expenses in higher institutions. The purpose of the grant system is to assist the less affluent parents to keep their children in full-time education after reaching adult age. The system also equalizes educational opportunities among students from different financial background. The student loan scheme exists mostly in developed countries where adequate data of both birth and school enrolment are available. The data provide the needed platform for the repayment of the loan by the student after graduation and securing employment.

Distribution (Allocation of funds to Education)

Financial allocation to education in Nigeria has continued to be a subject of debate, many believing that it is not enough to cater for the numerous systems and programmes within the educational sector. However, for the purpose of this text, it will be worthwhile to provide an outlook into the Federal Government's Budget to education as a percentage of the total annual budget from 2005-2012.

Table 2: Share of Education on the National budgets, from 2005 to 2012

YEAR	TOTAL NATIONAL BUDGET	ALLOCATION TO EDUCATION	%SHARE OF EDUCATION
2005	1,846,000,000,000	92,000,000,000	4.98
2006	1,900,000,000,000	92,000,000,000,000	4.84
2007	2,300,000,000,000	186,000,000,000	8.09
2008	2,870,000,000,000	33,600,000,000	9.64
2009	3,101,813,750,626	216,639,437,111	6.98
2010	4,608,616,750,213	249,080,000,000	5.40
2011	4,226,191,559,255	339,481,528,685	8.03
2012	4,749,100,821,171	400,148,037,983	8.43

Source: Budget Office, Federal Ministry of Finance, approved budget, 2005 to 2012.
Durosaro (2012).

From the budgetary allocation shown on table 2, it could be deduced that the Federal Government's allocation is not enough to provide the type of education that would take the nation to its next level of development considering the explosion in the demand for education, and higher education in particular. Hence, underfunding has remained and still is the bane of the Nigerian education system (Adesina, 2005).

However, this problem of underfunding, in the words of Adesina (2005), was a creation of the Federal Government as a result of its assumed full financial responsibilities for all the tertiary institutions, numbering over 37 Federal universities, 16 Federal polytechnics and 24 Federal colleges of education. Also, in the early 1970s, the Federal Government took over some missionary schools and incurred a huge financial burden in secondary education through the establishment of Federal Government Colleges across the states of the Federation. Additionally, with the formation of the National Primary Education Commission in 1988 and later the Universal Basic Education Commission in 1999, the Federal Government undertook to pay the bulk of primary and junior secondary school teachers from 2003, following the introduction of the nine (9) years Basic Education Programme.

Issues on Government Funds for Educational Programmes

The largest source of government finances come from crude oil proceeds, and collections of duties and taxes. Over the past 4 decades, the world's price of oil has continually changed. Lately, the price of oil has fallen to its lowest cost ever, of $32 per barrel (Jan, 2016). A US dollar change in the price of crude oil per barrel would result to a change in Nigeria`s foreign exchange earnings by $730 million and $300 million public revenue.

As obtained from the World Bank Report (2004) in 2000, revenue earning in the Federation Account provided 90% of the Federal Government `s annual income and 80-85 percent of State Government's earnings annually. The amount of investment/fund allocation to education therefore depends on the total earnings in the Federation Account. Additionally, the Government revenue sharing method is based on the dictates of the Federal Government Revenue Mobilization and Fiscal Allocation Commission.

The three tiers of government provide funds for education at different level. For instance, the Federal Government's attention is on tertiary education, specifically on it's around 40 universities, 24 colleges of education and 16 polytechnics. Also, the Federal Government funds its various unity secondary schools (Federal Government Colleges) across the country. It also provides support for primary school infrastructure and learning materials through the Universal Basic Education Commission (UBEC).

Before the formation of UBEC in 1989, the Federation Account allocation to the local governments was the main source of funding for primary education. The allocation is based on 20% of the overall (vertical) share for local government areas and on the (horizontal) principles of allocation among local governments. Money meant for recurrent expenditure (e.g. salaries) to primary and junior secondary school teachers in each local government area is first deducted from the allocation going to the local governments, while the remaining balance is distributed to local governments across the Nation. It is these funds that are shared into the accounts of each state's Universal Basic Education Board (SUBEB) through the Universal Basic Education Commission (UBEC). However, after the Supreme Court ruling in early 2002 on the Federal Government's right in the funding of primary schools in the states, the money meant for SUBEB no longer comes through UBEC. Today, only very few local governments provide additional allocation of funds for recurrent expenditure to primary schools in their council areas. In fact, towards the end of 2015 through to the first six months of 2016, local governments in Kwara State still owed primary and junior secondary school teachers' salaries.

The state governments also contribute a 10% equivalent of the total salary bill of teachers in primary and junior secondary schools in their states. This is done through a deduction from the state governments` allocation in the Federation Account. Like the local government's deductions, the fund is lodged in the SUBEB account for the state. This commitment is in addition to the state's 100% funding of all state senior secondary schools, universities, polytechnics, and colleges of education which management and financing rest on the state government at various level.

In all, estimating the Federal and Local Government's allocation in terms of educational expenditure is straight forward. This is so because the Federal Government always makes public its annual budgetary allocations to every sector. Also, information on total allocations to the educational sector and specifically, allocations for salaries of primary school teachers paid by the local governments through SUBEB are readily available. Additionally, all capital expenditure utilized for capital projects by the Federal Government through UBEC, Petroleum Trust Fund (PTF), Educational Trust Fund (ETF) and later, Tertiary Education Trust Fund (TETFUNDS) are also published. The major problems in collecting data about Government's estimated spending on education occur at the state government's level (World Bank, 2005)

The Alternative Sources of Funding Education

The excessive Federal Government's involvement in the funding of education programmes has been seen to have posed the problem of sustainability. According to Adesina (2005), this problem is evidenced by such factors as:

i. Aging facilities.
ii. Increase in personnel cost.
iii. Economic recession and the sharp fall in the value of the naira.
iv. Gaps between requested funds, approved funds and actual released funds.
v. Mismanagement by heads of institutions of the funds actually received by them.

It is therefore, obvious that the Federal Government alone and in fact, all the three tiers of government cannot be the major fund provider to schools. Also, there is the need to control the rate at which schools and institutions become major fund raisers by turning themselves to a quasi-commercial centre. The following alternative sources of funding education are identified in addition to allocations from the Federation Account:

i. Educational Tax Fund (ETF).
ii. Tertiary Education Trust Fund (TETFUND).
iii. Tertiary Education Graduates` Tax (TEGT).
iv. Endowment funds from companies and philanthropists.
v. Contributions from Old Students` Association.
vi. Contributions by national and international donor agencies, The World Bank, The United Nations Development Program (UNDP), UNESCO, UNICEF etc.

Education Tax Fund (ETF) The Education Tax Fund is a product of The Education Tax Act of 2003 as amended. The Fund was first formulated through the Education Tax Act No. 7 of 1993 and later amended by Act No. 40 of (22nd December) 1998. The Act as mandated provides a 2% tax on all visible profits of companies registered and operating in Nigeria. The Federal Inland Revenue Service (FRIS) is empowered by the Act to collect the education taxes that accrue to the companies. The actual collection started in 1994. The funds raised through the administration of the tax imposed by the Act are disbursed to educational institutions across the three strata of government (federal, state and local government). This is done according to the dictates of Section 5(1) (a) to (g) of the Act No. 7 1993 as amended. The goals of the Tax Fund are to: effectively increase Educational Tax Revenue by making sure that the Education Tax is collected and paid to ETF intervention programmes account; appropriate and adequately deliver the intervention programmes with due consideration to the need and sensitivity of beneficiary institutions and stakeholders; harness improved technologies, ideas and organisational skills in education, and ensure that projects are futuristic and respond to current situations in the institutions; to make sure that all projects sponsored from the Fund are successfully completed; provide good and endurable synergy between the ETF and stakeholders; manage the Tax Fund properly to benefit Nigerian citizens both home and abroad; ensure that additional relevant staff are recruited and trained (also to provide in-service training to staff so as to provide a highly motivated workforce); plan, carry out research and form a databank for enhancing educational programmes in Nigeria; and make sure that all money spent is accounted for, that the accounting process should be transparent.

Tertiary Education Trust Fund (TETfund): This is a Federal Ministry of Education parastatal extablished by theTETFund Act in 2011. It is set up to assist in the provision of all infrastructural needs of educational institutions. The needs include development and rehabilitation of infrastructure in public tertiary institutions in line with the original concept of TETFund Act. The roles of the Fund are; to collect funds from the FIRS, manage all funds collected; distributes the money so collected to beneficiary educational institutions; monitors the institution's usage of the money; and evaluates the projects for which the fund is utilized to ensure value for money. The sharing formula for the distribution of funds to beneficiary education institutions is on the basis of ratio 2.1.1 covering universities, polytechnics and colleges of education: 50% - universities, 25% - polytechnics and 25% colleges of education as provided by the TETFund Act as amended.

TETFund interventions

1. Normal intervention.
2. High impact intervention.
3. Special intervention.
4. Library Development.
5. Academic Staff Training and Development.
6. Conference Attendance.
7. Institutional Academic Journal Publication.
8. Book development.
9. Research grant (Institutional-based research and National research fund).

The Fund also provides special interventions in response to identified urgent needs of educational institutions in the country. Some of these interventions include: teaching practice supervision honoraria for lecturers in colleges of education; provision of multimedia micro-teaching laboratories for 58 Federal and State colleges of education; funding the take-off of the 12 new Federal universities; and the development and rehabilitation of laboratories in 51 Federal and State polytechnics.

Summary

Educational Financing is the process of generation, distribution and utilization of funds within the educational system. Today, the issue of financing educational institution is multi-dimensional, and this defines the responsibility or otherwise of the government to its citizens. However, investment in education comes from both public and private bodies, it is the duty of government to create enabling environment for private participation in education. There is therefore a dire need for educational managers like their counterparts in other professions, to be knowledgeable about the process of financing education to achieve educational goals.

Questions:

(1) Provide your understanding of the concept of Educational financing.
(2) Identify and explain five major sources of funding Education in Nigeria.
(3) Write short notes on the following

(a) Education Tax
(b) Tertiary Education Graduates' Tax
(c) Tertiary Education Trust Fund

Sample Research Topics

(1) Education Tax and Infrastructural Development in Nigerian Universities: An Evaluation of TETFund interventions between 2011 and 2015.
(2) Financial resources allocation utilization and University education goal achievement in Nigeria

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Chapter 20

Educational Management Information System (EMIS)

Dr. Anne L. Ogunsola

Introduction

EMIS stands for Educational Management Information System and it serves as an information base generally for managing the development of education. EMIS is a method for compiling, incorporating, giving out, upholding and spreading data and information to support decision making, analyse and formulate policies, plan, monitor and manage the education system at all levels. It is a system where people, equipment, models, methods, processes, measures, sets of laws and policies function together to provide an extensive, integrated set of pertinent and apt education data to planners, managers, leaders of education and makers of decision at all levels. Usually, EMIS as a centre for information domiciles in the education ministry, and it is accountable for information provision and data to plan and implement policies, make decisions, and monitor and assess the education system (Wako, 2003 and Salako, 2012).

As a database, the aim of EMIS is to ensure that accurate, appropriate and timely education data and information are available to make necessary educational decisions. EMIS is a worldwide concept to manage education and it encompasses the use of contemporary information and communication technology to collect, collate, store and analyse education data. To Stephen and Cummings (2009), Educational Management Information System involves the process of collecting data from educational institutions, stakeholders, replicas, schemes, events, policies and a set of laws. EMIS uses computer technology so that the stated functions cooperate with each other to ensure that complete, incorporated, pertinent, definite and apt data are available to education planners, managers, leaders and decision makers to enable them to perform their tasks proficiently so as to achieve set goals (Haiyan and Herstin, 2003).

For assessing the effectiveness and efficiency of the education system, and to examine closely whether educational resources are equitably distributed, EMIS provides a significant aid. Furthermore, EMIS provides necessary and adequate information on managerial activities such as teachers' employment, students' performance appraisal, distribution of teaching materials to schools, resource allocation and utilization, and internal efficiency of the education system. According to the policy on Nigerian EMIS (NEMIS policy), EMIS as a catalog is used to ensure that the educational system as a whole and of students in particular is effectively and efficiently managed. Therefore, EMIS is a procedure for providing the starting point to assess the effectiveness and proficiency of education system at all levels.

EMIS has statistics as its component. Consequently, information and data of early childhood, basic, secondary, tertiary, teacher training, technical and vocational institutions as well as non-formal subsector are all captured in EMIS. Therefore, the process of collecting, processing, analysing and reporting of data in the various subsectors earlier mentioned remain the responsibility of EMIS. In a situation where various units, sections and departments of the Ministry collect and analyse their data, EMIS is to collect and compile final products from the units, sections and departments for publication to be disseminated for use.

In this chapter, we shall discuss the following:

- Development of EMIS in Nigeria.
- EMIS Organization.
- Functions of EMIS
- Functional EMIS Structure.
- EMIS Data.
- EMIS Cycle.
- Ideal Requirements for an EMIS.
- EMIS Policy.
- Challenges facing EMIS.
- Summary and Recommendations.

Development of EMIS in Nigeria

In Nigeria, EMIS development which started in 1980 could be explained in three phases. The initial phase started with the reform of the Nigerian Civil Service which became necessary due to the need to utilize legitimate as well as concise data to make decisions. This was the phase that developed into the law which established the planning, research and statistics department in government ministries and agencies. The underlying principle was to build up structures to harmonize forecast, do research and collect, store, analyse and distribute data on education. The initial phase brought about the establishment of the Nigerian education data bank and the first EMIS funded by the United Nations Educational, Scientific, and Cultural Organization (FME, 2000; UNESCO, 2002 & 2004). The major aim was to reinforce the educational statistics to generate more related, consistent in addition to well-timed data for the educational system.

The next phase of developing EMIS in Nigeria is typified by concerned international donor and development partners. Three school censuses were conducted on a national scale and the collected data were stored in an uncomplicated database. Nevertheless, at the conclusion of the work done by UNESCO, getting a donor agency to fund and support the process of collecting and analysing data became a challenge. It was then the World Bank agreed to carry out more work on EMIS. To further develop EMIS in a recent phase, an attempt was made to correct mistakes made in the past using a series of interrelated activities which included stakeholders' meetings, reviews and analyses of policies, assessments of needs, investigations, sensitization, and individual as well as institutional capacity building/strengthening. All these efforts resulted in developing the Nigerian Educational Management Information System (NEMIS) Policy through the joint efforts of both federal and state education ministries and their parastatals, international development partners as well as civil society organizations (Shooebridge, 2006 and Tietjen, 2005).

EMIS Development at the State level

The development of EMIS in recent times, received a boost in 2004 by the decision of the Ministry of Education at the Federal level in collaboration with the board for universal basic education towards enhancing improvement in the states although there was continuity in sustainability at the centre (FME, 2005). The tactic of devolution which is called The National EMIS Framework has the following ideas:

- ❖ A decision was taken to build up a separate software for the entire country so as to store and manage education data;
- ❖ Progress made by States to possess data. This entails providing states with necessary expertise and materials to manage EMIS.
- ❖ Full participation of those that have a stake in education and international partners to produce instruments to collect necessary data.
- ❖ Creation of a central compilation venue for EMIS data and attempts made to incorporate earlier data from different censuses.
- ❖ Making efforts to collect data on private institutions that will be stored in the central compilation venue.
- ❖ Civil society and the media will be gradually involved in the review of EMIS reports and data.

Under this devolution approach, it is anticipated that EMIS would be driven by demand and become responsive to local needs as it assists with issues linked with good governance. Furthermore, the concentration on the institutional growth in the states will make census compulsory at the school level. This idea was originally pilot-tested in six states with the plan of extension to additional nineteen states in the year 2006. Using the model developed in Kano, training of management staff was planned for 2006 in sixteen states with the major aim of encouraging the use of EMIS reports. EMIS development in Kano State offered a model of excellent practices showing the significance of accomplishing instant support for EMIS in the local area as well as the encouraging effect it might possibly have on successive advancements. With this replica, EMIS was intentionally planned to shore up planning in the State and to create information on the basis of the number of students in schools, rate of retention, amenities, trained and competent teachers, as well as additional data from censuses. This ensured that what EMIS produced included a direct effect on planning, in addition to producing a report that drew attention to abnormalities in the education system, for instance, a decline in students' attendance, inflating the number of students in schools or sexual characteristic matters. It is worthy of note that using the reports generated from EMIS, the House of

Assembly (Kano State) defended their education plan for 2005 and got the annual budget for the State Ministry of Education.

EMIS Organization

EMIS advancement has had a meaningful effect on the process of managing data. Also, this has impacted on the kind and worth of data that are generated in Nigeria. The data collection process was organized in two main stages of before-2004 and after-2004. In the two stages, challenges came up in an attempt to collect and process data. Moreover, in spite of a variety of modifications, Nigeria needs to do more so that EMIS will be able to support the process of policy making at all levels of government.

Pre-2004 Data Collection Process

Before 2004, data were collected from several sources. A major proportion of data collection was carried out by ministries of education at the state level, the respective universal basic education boards and the education data board of the ministry of education at the federal level. However, limited harmonization occurred among the three bodies, and often this resulted in three different sets of education data being collected from the same state. The situation was compounded by the fact that numerous parastatals were involved in data collection. As a consequence, the type of schools covered by each of these surveys varied enormously. In some instances, private or Q'uranic schools were not included. There was also evidence to show that inflated enrolment figures were produced. This occurred because of the perception that education funding is heavily linked to enrolment levels. This resulted in a situation where certain data sets showed that fifteen states had a general enrolment ratio greater than 100%, and in other data sets the figure was less than 70%. Understandably, this lack of consistency created a situation where stakeholders began to lose confidence in the outputs from the country's EMIS.

The Process of Data Collection Post-2004

Until 2004, the collection of education data involved the implementation of a census form coordinated by the Federal Ministry of Education. This form was administered at the state level and the process often took several months due to the fact that many schools were in remote locations and therefore, inaccessible. The primary schools forwarded the completed census forms to the Local Government Education Authority (LGEA) who then submitted the same form to the State Universal Basic Education Board (SUBEB). At these levels, officials would review the completed form in order to ensure completeness and validity of data. However, in reality, this did not occur instead, the census forms were submitted to the Federal Ministry of Education and entered centrally. Moreover, no monitoring of schools occurred, and no evidence existed to verify the activities of state level organizations in checking data. This would suggest that states' involvement in the whole process was minimal.

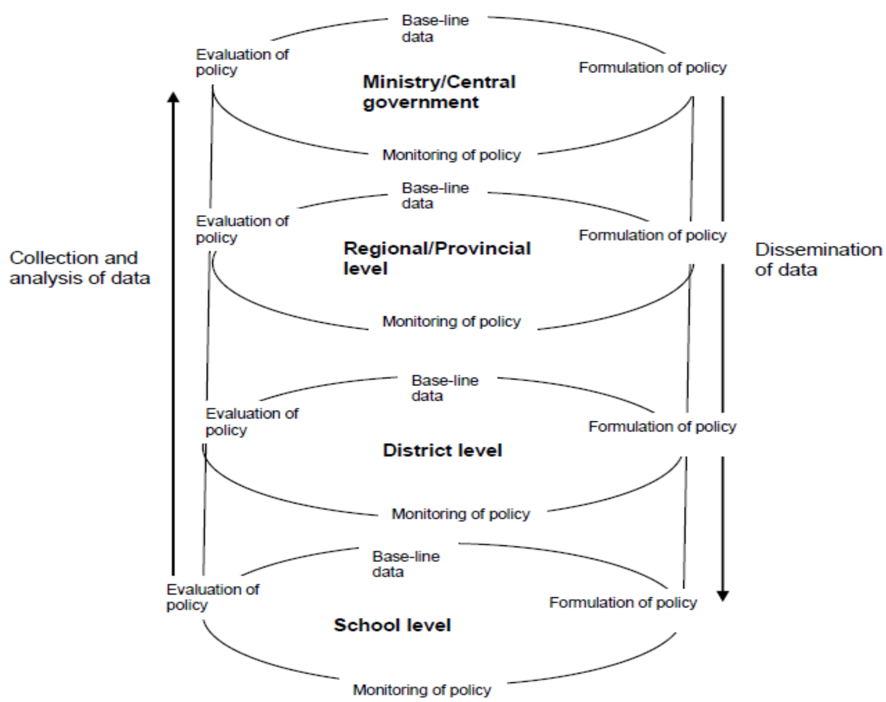

Fig. 1: Management and Operation of EMIS

Source: Powell, M. (2006). *Rethinking education management information systems: Lessons from and options for less developed countries*. InfoDev Cambridge Education

Objectives of EMIS

In Nigeria, the objectives of EMIS are to:

(i) support the attainment of goals of education encapsulated in the policy on education at the national level;

(ii) offer the starting point to assess how effective as well as how efficient the education system at various levels is;

(iii) build up and explain the key indicators to assess whether set standards of education and yearly goals are achieved;

(iv) offer a foundation for the education ministry at the federal level to give account of the state of education in the country by means of local and global scales and relative international analysis of reporting.

Why have EMIS?

- To facilitate monitoring and evaluation of education system through the provision of information which is used to improve efficiency and effectiveness, etc.
- To set new policies and revise old ones that are based on evidence and not on self-perceptions.
- In order to make decisions about choices and opportunities in education, stakeholders such as parents require information about education institutions and student outcomes.
- To reinforce capabilities in administration, forecast and spreading of information at different levels of education
- In order to develop capabilities to assemble, process, store and analyse along with publishing key messages to education leaders and decision-makers
- EMIS coordinates, disperses and makes efforts in acquiring, processing, analysing and disseminating education management information
- Needs to enable makers of decisions to recognize the means of transforming resources into outcomes of learning, especially the organization and success of existing processes.
- Helps to supply data to educational forecasters and makers of decisions towards understanding how inputs into education are translated into outputs of education.
- Availability of worthy and appropriate data helps develop the process of making decisions, and ensures that the available

limited assets are geared to aspects they are mostly needed, and where higher returns will be obtained.

Functional EMIS Structure

- ❑ A functional EMIS system is able to collect, analyse and disseminate educational data that is relevant, reliable, accurate, consistent, comprehensive and supportive within a stipulated time that can affect decision making in education.
- ❑ Ensuring that data collected is returned as information to the people who produce the data (Feedback)
- ❑ A good functional EMIS helps to manage large quantities of data, and turns data into information. Data + Meaning = Information

EMIS Data

For an EMIS to function optimally, data on the following are required:

- ❖ Schools/Institutions: Basic, Senior Secondary, Higher and Non-Formal.
- ❖ Students/Pupils.
- ❖ Teaching and Non-Teaching Staff.
- ❖ Levels/Classes/Grades.
- ❖ Enrolments and Graduates.
- ❖ Infrastructure and Other Facilities.
- ❖ Instructional Materials.
- ❖ Finance.

EMIS Cycle

Educational Management Information System's cycle consists of the following:

- ➢ Collecting Data.
- ➢ Processing Data.
- ➢ Analysing Data.
- ➢ Reporting of Findings.
- ➢ Publication of Findings.
- ➢ Dissemination of Findings.
- ➢ Feedback from stakeholders.

Ideal Requirements for an EMIS

- ***Hardware***
- Server.
- A Windows Operating System installed on a server with a 2GB RAM and 2.4 GHz processor.
- Clients.
- Four or five systems
- ***Software:***
- Antivirus.
- Microsoft Office.
- Functional Local Area Network (LAN).
- ***Human Resource Requirements for EMIS***

The quantity of work involved in EMIS determines the human resources required for it. Nevertheless, the following are required:

- A leader like in every unit of the Ministry of Education. To accomplish and produce the idea of informed decision making, EMIS needs professional headship that has the ability to organize all the EMIS divisions, in mind-set and in strength. In collaboration with management, the leadership should bring together the mind-set and conduct of the staff members to be in tune with the arrangement and procedure at the Ministry.
- Officers for data analysis and compilation of reports. This group of human resources is responsible for the dissemination of reports, that is, they correspond the outcomes to stakeholders in a planned and valuable mode. Statisticians are expected to have analytical power and the ability to use interrelated software packages.
- The information support system is another block of human resources required for EMIS. This group of people liaises with and makes information service available to the end-users. They are responsible for sharing feedback with other members of staff of EMIS. Moreover, the information support system is responsible for collecting, compiling and presenting feedback information.
- In conclusion, data entry clerks whose duty is to ensure that data are entered into the computer using the already prepared templates. They are in charge of inputting data into the computer as well as engaging in proof reading and cleaning of data.

The above is a typical example of the broad areas in terms of the human resource need in EMIS. In reality, the manpower requirement depends on the quantity of work to be done, therefore, the composition is different in various countries. In a number of nations, a little EMIS unit may be adequate to engage in EMIS functions. For instance, a statistician may be able to carry out both the functions of administration survey and analysis of data together. Conversely, in other nations, more human resources may be required depending on the quantity of work to be done.

EMIS Policy

During the 54th National Council on Education meeting that took place in Katsina in December, 2007, the Nigeria Educational Management Information System (NEMIS) Policy was approved. From 2009, the Policy decentralized EMIS and activities of data collection. States are therefore, required to set up personnel and provide Educational Management Information System (EMIS) for their own states. The EMIS Policy establishes some principles of coordination in terms of administration, operations and transition periods. This was further clarified in the NEMIS Policy Implementation Guidelines which were circulated in August, 2009 (FME, 2009).

EMIS Policy Objectives are to:

- streamline data flow processes from schools to Local Government Area (LGA) to states and to the federal level, particularly data relating to education inputs, activities, teachers and student-based outcomes;
- allow timely responses to the administrative, management and policy information needs;
- allow states develop and give account of key indicators for monitoring the accomplishment of national standards and yearly goals of:
    - ✓ LGAs at the school & school committee levels.
    - ✓ States at the LGA level.
    - ✓ National at the State level.

- ❑ provide the reason for the ministry of education at the federal level to give account of the state of education in the country using local and global principles;
- ❑ allow exchange of ideas and enhance capacities in the processing of data and its storage, and analysis and supply of information needed for educational management;
- ❑ enable and support various agencies and individuals at all levels, the use of relevant information; and
- ❑ simplify the availability of data for making decisions by reducing and eliminating repetitions in addition to fill up data gaps.

EMIS Policy Strategies

- ❑ There shall be established a National Committee on EMIS (NCoE) to supervise and regulate the relevant activities of agencies and institutions that produce educational data.
- ❑ There shall be Federal EMIS Committee, that supervises and co-ordinates all EMIS activities within and between the Federal Ministry of Education and all its data generating agencies.
- ❑ Each state government is required to set up its own EMIS Committee to promote EMIS activities.
- ❑ Agencies - UBEC, NUC, NBTE, WAEC and NECO are required to establish their educational data.

Role of National EMIS Committee

Based on the NEMIS Policy, the National EMIS Committee is responsible, among others, for:

- ❖ ensuring the operation and uniform understanding of EMIS around the country;
- ❖ easing the sharing of technical information and practices on a regular basis to every institution of learning that makes available primary data for educational management at any level;
- ❖ initiating and supervising conformity with policies on EMIS and keeping up-to-date practices;
- ❖ simplifying information needs at different education levels as well as supporting regular flow of data and capacity building of participants;
- ❖ appraising the performance of the educational system and making recommendations for necessary actions; and

- ❖ furthering process and collate states and parastatals data for national reporting to NBS, UNESCO, AU and other stakeholders (national and international).

Steering Committees on EMIS

- ❑ **The National Committee on EMIS (NCoE**)

  This body shall be accountable for the general regulation and implementation of the practice of EMIS in the country. It shall work in conjunction with other EMIS committees to ensure systematic reporting and wide dissemination of information.

Functions of the National Committee on EMIS

The National Committee on EMIS shall:

- ✓ ensure that NEMIS is independent, adequately funded and managed;
- ✓ make provision of policy guidance and strategic leadership for the various EMIS committees that carry out corresponding functions at other levels of the education sector;
- ✓ articulate the problems, needs and successes of EMIS in the sector, and report to the National Council on Education at each of its meetings;
- ✓ resolve issues consistent with the principles articulated in the National Policy on EMIS.
- ✓ make regulations which mandate reporting cycles and standardized reporting of core data for all educational institutions, agencies and entities in Nigeria; and
- ✓ make regulations which prescribe minimum data reporting formats and frequency of publication for all EMIS nodes**.**

- ❑ **State Committees on EMIS (SCoE)**

  The committees shall coordinate all EMIS related activities in their respective states. They shall ensure that reports and reporting schedules for the maintenance of the flow of data and information are regular and consistent with mandated reporting cycles.

Functions of **State Committees on EMIS**

The functions of SCoEs shall be to:

- work closely with the NODES where reports end and are processed to ensure timeliness and uninterrupted flow;
- publish and transmit information from their nodes to the NEMIS while at the same time ensuring that all sources of data are given feed-back as to the outcome of the process.

- **Parastatals' Committees on EMIS (PCoE)**
  These bodies shall coordinate all EMIS activities for the institutions for which they have the mandate of the government that sets them up, both at state and federal levels. They shall actively relate to the NODEs to which they are attached so as to ensure that received data is precise, and that reporting as demanded by regulation is done in a timely manner.

Functions

There are different types of parastatals whose functions are defined by the educational level at which they operate and the level of government that empowers them. Parastatals below the tertiary level of education are usually responsible to state governments. One conspicuous exception is UBEC which is directly responsible to the Federal Government for certain aspects of basic education. The functions of state parastatals that deal directly with educational institutions include the employment and transfer of teachers, and the management of the affairs of senior secondary schools outside the purview of the oversight functions of UBEC and SUBEB. Their functions therefore involve:

- The recording of educational events and the generation of educational data that encompasses the totality of the standard statistical requirements for management and planning.
- The overview functions of the tertiary level parastatals of the federal government subsume the existence of those at the state level. While the state agencies report to the states in respect of each individual institution, the federal agencies not only acquire the same set of data but also generate statistical information that depicts the overall state of tertiary education in the country.

- **Local Government Committees on EMIS (LCoE)**
  Local governments are the closest agencies of governance to the people. Being close to the day-to-day events in their jurisdiction, they have the potential to be visual witnesses to activities like building a new school or the gathering of children at any location for regular instructions, among other things.

Functions

- Assisting new and old educational institutions to conform to laid-down rules for the opening of new educational institutions and to register them on completion of the appropriate forms prescribed for the purpose.
- Send reports of new or closed schools regularly to the states in which they are located.
- Produce the directories of schools for the LGA. The new additional geographical information on location and school data further supports the need to use LGEA for this purpose.
- Serve as the sole link between EMIS and schools for the collection of mandated and special purpose data reporting.
- Depending upon the capacity at the LGEA, they forward raw or processed data to the State EMIS. Ultimately, the goal is to have all mandated data collected from schools processed at the LGEA level, and reported to the other EMIS nodes as appropriate and prescribed.

Challenges of EMIS

Due to the fact that EMIS is a relatively new idea, the following are some of the challenges confronting it in Nigeria:

- **Level of Awareness**
  Even though significant work has been accomplished, there is still much to be done in creating awareness on the use of education statistics. This is because using information to make decisions has not yet taken roots in Sub-Saharan Africa.

Budgetary Allocation

A major indicator of the awareness level of decision makers and planners is the willingness to make sure that necessary budget is allocated to develop EMIS. There is the need for adequate budget to purchase new technology, mail instruments to collect school data and undertake studies and reviews.

Incorporation of Data and data systems

Among the major challenges confronting EMIS in this nation is how to incorporate data and data systems. It has been observed that organizational constraints are mostly responsible for the incorporation challenge. Even though there is availability of reliable and useful data, it is hardly incorporated in forms that could make monitoring, assessment and analysis of policy easy even in countries leading in EMIS development such as Chile, Mexico, Argentina, and Brazil.

Shortage of Professionals

Trained personnel, both in number and value, are not readily available.

The need for continuous capacity building

The need for training and re-training of EMIS staff is often overlooked by decision makers. There is scarcity of continuous training for professionals and budget for on-the-job training of personnel.

Overrating EMIS capacity

Efforts should be made to create a unit for the coordination of education information systems as well as the emergence of technology that is fast growing. There is the need for both short and long term capacity building. Furthermore, EMIS professionals need to be taught. This requires time and the deployment of sufficient personnel to this unit. Conversely, end-users are making demand for what EMIS has to offer.

Non-capturing of expenditure and budget data in EMIS

Another area of challenge is the non-availability of integrated data on expenses on education or education financial plan. Also, lack of transparency of budget is a critical constraint.

Summary

The paper commenced with an overview of the development of EMIS in Nigeria from the initial stage of reform of the Nigerian Civil Service to the period of donor and development partners. The data collection process was discussed under two main stages of before 2004 and after 2004 and their attendant challenges. The objectives, need and functions of EMIS were discussed. The data required for EMIS to function properly were identified (data on schools/institutions, students/pupil, teaching and non-teaching staff, levels/classes/grade, enrolments and graduates, infrastructure and other facilities, instructional materials and finance). The EMIS cycle, hardware and soft ware and human resources required for EMIS exercise were spelt out. The EMIS policy objectives, strategies, role and functions of national, state, local governments EMIS committees and their parastatals were outlined. The challenges of EMIS were pointed out and recommendations proffered to develop a sustainable EMIS in Nigeria.

Recommendations

The following concrete steps are recommended to develop a sustainable EMIS particularly in areas that have not been given adequate consideration in the past:

- Identify the country's development characteristics.
- Determine most appropriate, implementable and realistic EMIS strategies.
- Carefully identify data needs of officials and stakeholders.
- Engage appropriate stakeholders in data collection.
- Complement quantitative data with qualitative data.
- Choose appropriate software and networking systems.
- Ensure production of timely and valid data.
- Develop the skills of parents and stakeholders to utilize data.
- Improve accountability and transparency through access to appropriate data.
- Improve the capacity of EMIS and related units through institutional building.
- Embark on needs analysis of EMIS and related units.

Review Questions

1. What do you understand by EMIS?

2. Discuss in detail the history of EMIS development in Nigeria.
3. Enumerate four usefulness of Educational Management Information System in managing education.
4. To have a functional EMIS, what are the things that must be in place?
5. Discuss the functions of NCoE and SCoEs in EMIS policy.
6. Mention four major challenges of EMIS and explain any two of them.
7. Explain three concrete steps to make EMIS responsive and sustainable in your country.

Sample Research Topics

1. An investigation of the roles of EMIS to overcome the challenges of educational quality in secondary schools in Edo State.
2. An assessment of emerging issues, challenges and constraints in Educational Management Information System development in Kaduna State.
3. Analysis of the use and challenges of Educational Management Information System in tertiary institutions in Ondo State.
4. An assessment of the attainment of Universal Basic Education goals in Adamawa State through Educational Management Information System.
5. Educational Management Information System and Educational Quality in Nigerian Universities.

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Chapter 21

Education and Manpower Planning

Prof. Roseline O. Osagie

Introduction

This chapter discusses manpower planning, its history and its applications. Case studies and relevant literature will be analysed in order to comprehend this subject. Its practitioners' practical skills offer considerable acumen from which we can glean some knowledge. Also, the advantages that efficient manpower has brought to organizations and the challenges that practitioners cope with will be dealt with. In the field of planning for economic development, no topic is more economically vital or more politically explosive than the planning of future manpower requirements and the steps needed to meet them. Therefore, the rationale for setting up manpower and educational planning in the general framework for economic prosperity will be the concern of this chapter.

The chapter is divided into nine sections, namely:

1. Concepts of planning.
2. Conceptualization of manpower planning.
3. Relevance of manpower planning.
4. Education, manpower planning and economic development.
5. Techniques of manpower planning.
6. Implications for educational management.
7. Summary.
8. Sample research topics
9. Tutorial Questions
10. References.

Concepts of Planning.

Conceptually, Vogel (1992) opined that Planning involves systematic goal setting strategies, development and the manner of goal accomplishment. Thus, planning is a continuous process which is concerned with where and how to accomplish set goals and by what route to get there. Planning, according to Koontz (1980), was conceived to mean a process of making advanced decisions on the how and when of doing something and whose responsibility it is to do it. It is an arduous exercise to predict the future because of extraneous influences beyond human sway, irrespective of the best laid out plans. Planning is a formidable process which requires deliberate acts of determination, purpose, knowledge and intelligent estimates. Plans should not be static but dynamic so that they can be changed and adopted as circumstances dictate. Planning, therefore, is not just an isolated once and for all act but a continuous process. As existing plans are being executed, planning for the next events must be underway, nourished by feedback from the previous events.

Conceptualization of Manpower Planning.

Manpower planning is a human activity.It is nearly a quarter of a century since the term, manpower planning came into use. It is synonymous with the concept of human capital, and both terms can be used interchangeably. Human capital is used to describe a labour force that has acquired skills by going through educational training. There are many definitions of manpower planning. The most frequently used one that is in tandem with Rado's(2008) view is that "manpower planning is a process of obtaining adequate amount of persons who have the desirable skills relative to the associated job portfolio within a stipulated period." An extensive explanation which gives impetus to the operational concerns can be drawn from Reilly (1996) that planning is a development where an establishment proceeds to project what will be required for manpower input and assesses the size component, the patterns and inflow of the inputs that will accommodate the demand expectation. Another description of human capital gleaned from Garba (2000) is that human assets are the abilities, knowledge, innovative business ideas, aptitudes and talents that are vital (needed) to the production, supply and utilization of brain power, as well as goods and services for the purpose of engendering advancement and improvement. Manpower planning is a system for matching skill requirements (labour demand) to development plan targets. Manpower planning has two objectives. The first is to estimate the skilled human resources required for economic development within a period of time. This is with a view to determining to what extent the production of skills will meet the expected demand and to suggest possible schemes for reducing the supply and demand imbalance. The second objective is to advance an analytical framework with regard to human resource planning that guides educational planning and funding for education, training and manpower development. It is imperative that all available human resources be well synchronized and utilized for proper development of the economy. Yesufu (2000) conceived manpower planning as the procedure of striking an equilibrium amongst innate human assets or human capital stock available to a nation in tandem with its nature and usefulness. Similarly, Chalosfsky and Reinhard (1988) and Drucker (1999) saw manpower planning as the process of churning out important human assets necessary for the development of a state. The 6-3-3-4 educational system in Nigeria is very compatible with the concept of manpower planning because the process involves the production of the manpower who will serve as inputs to the industries, commerce, government and other professions.

The foregoing, strives to concatenate educational planning and economic development. Reilly (1996) explained that manpower planning aids an organization in the placement of the right personnel within a timeline in the appropriate function where they will be most effective and efficient. Fadipe (2011), on the other hand, asserted that manpower planning is a deliberate effort by a state to create a nexus between the educational structure and the manpower requirement of a society. Effective manpower planning indicates that sufficient manpower with the right talent is available in the appropriate fields, doing their jobs as needed. Manpower planning, thus, gives direction, reduces ambiguity, minimizes waste and regulates standards. According to Yesufu (2000), no activity can be done without planning, just as nothing can be done in any organization without first determining the organization's manpower needs. Hence, manpower planning is the core of any business organization. It helps to shape and lead present and future needs of any organization through its human resources. Consequently, successful manpower planning would result in high productivity and long term future growth for business organizations.

Relevance of Manpower Planning.

Manpower planning is relevant in Nigeria because of its aspiration for economic development. Since manpower planning is people oriented, it involves the planning of the human resource capacity for development. This notion is vividly conceptualized by Harbison (1973) who opined that, "human resources form the most critical aspect of the wealth of nations." Thus, manpower planning is relevant to the economic development and social and political stability of Nigeria. In the political arena, uneducated youths have been used as thugs by opposing parties to disrupt the democratic process. If these youths were educated, they would have been less susceptible to political manipulations by politicians. Thus, manpower planning can assist the youths in self-development and improve the quality of their political activities. Hence, manpower planning is crucial for effective poverty alleviation. The need for manpower planning is clearly expressed by Psacharopoulos and Woodhall (1982) when they viewed trained manpower as an important variable necessary for the advancement of contemporary economies. Planners in the field of education have the responsibility of aligning an educational system with the manpower requirement of that society. In this regard, the educational component should be relevant to the aspiration of that society such that particular manpower deficit or short fall is addressed using appropriate manpower mop up obtained from the educational field. In this regard, the onus is placed on a society to fund the manpower development process since it is true that the more manpower available to a given society the easier it will be for her to grow economically. In broader terms, manpower planning is mainly a dual operation. First, it analyses current manpower requirements and second, it engages in manpower prediction for the future, thereby drawing up employment programmes. Among the several advantages of manpower planning to companies are, that shortages and surpluses of human resources can be identified so that swift actions could be immediately taken to remedy the situation. Another is that it facilitates the recruitment and selection programmes of employees in the companies.

Manpower planning can also prevent overstaffing by identifying redundant staff. This process helps to reduce labour costs in the organization. It also stimulates the progress development as well as the expansion of the business base of any given establishment. An understanding of the importance of human resource management in an organization is made possible by manpower planning. Such endeavours ultimately create stability in the organization.

Manpower planning is important to an organization as it is crucial to the functions of management. The four functions of management, namely; planning, organization, directing and controlling are based on manpower planning. Staffing is a key aspect of the function of management. To set up a large scale enterprise requires planning for large scale manpower. This can be achieved when they are adequate staffs which are then put on the right jobs'. It also includes inspirational programmes. Productivity grows when resources are used in the best way. Minimum wastage results in higher productivity, brings in more money and reduces effort, time and energy. This could be attained through manpower planning requirement and its associated functions (performance appraisal, training and development and remuneration).

Administrators and managers of organizations have long recognized that manpower is the heart of the production process in corporate entities. It is a continuous process which involves an integrated approach, not a once and for all activity. The process combines interrelated activities and the plan must continually be amended in order to meet the prevailing circumstances. Implementation programmes are installed in the plan and they are designed to ensure the availability of adequate qualified human resources. Such implementation programmes incorporate recruitment and preferred (employment) skilled human resources to execute the work that will enable the organization to achieve both corporate and individual goals. The programmes also involve training, development of human resources, performance evaluation and other personnel administrative functions.

The main objectives of manpower planning in an organization are;

- To curb labour costs and improve efficiency by ensuring that only the most essential and required personnel are hired and retained.
- To match people with existing jobs that are adequate for them in order to increase productivity.
- To recruit and train workers ahead of need, thereby providing the required skills in advance.

- To make plans for facilities, desks, office accommodation and provide a basis for other requirements.
- To predict and control redundancies. The information given about future surpluses and redundancies in a particular sector could be used by the management to plan for a retraining programme for employees who would otherwise be rendered redundant by changes in technology and reorganization of the company. Such employees could then be available for jobs in which they are needed.
- To make plans for promotion, retirements, succession and development of the management.
- To strategize about the appropriateness of available human assets within an organization for the purpose of meeting organizational goals.
- To make provisions for the eventualities that are capable of preventing organizational goals.
- To produce an organization’s framework in order to attain orderly growth and progress.
- To ensure that there are strategic plans for making business decisions.
- To be able to anticipate human resource needs.
- To be able to integrate the organizational tasks and financial requirements, that will aid organizational effectiveness.

Manpower planning, therefore, can be viewed as a process of ensuring an effective, productive and less wasteful use of human resources. It can strengthen market forces when it is integrated with national economic agenda, social and national politics.

Education, Manpower Planning and Economic Development

The acquisition of knowledge through education is an important element in the preparation and training of human resources for employment in the labour market. Education is key element in this regard as it equips the human resources with aptitude to advance the pursuit of knowledge. It is a sine qua non for human resource development. Manpower planning cannot be comprehended without a discourse on the institutions that train these human resources for industry, commerce, government, administration and other establishments. Higher education, in particular, is the source of high level manpower. There was a shortage of manpower before 1970 and after in Nigeria. For example, there was an acute shortage of skilled manpower such as medical doctors, engineers, lawyers, economists, accountants, lecturers, professors and other professionals. Hence, expatriates were employed to fill many technical and professional positions. The reason for the shortage was that there was only one institution of higher learning in Nigeria, that is, the University of Ibadan which was established in 1948. Later, four other universities were established in the 1960s, namely; Ahmadu Bello University Zaria, University of Lagos, Obafemi Awolowo University and University of Nigeria, Nsukka. However, the number of institutions of higher learning has greatly increased since then because of the setting up of private and public institutions to satisfy the yearnings and thirst for higher education by Nigerians. Thus, presently, there are 129 federal, state and private universities and 81 polytechnics. Consequently, the educational development since the 1960s has increased the economy's advancement in skill acquisition, thereby opening up new options for investment and production. An astronomic rise in the employee level in the educational and training fields resulted in a decrease in skill shortage which previously had constituted bottle necks and obstacles to new projects and development in government controlled as well as private enterprises in Nigeria.

Worthy of note also is the issue of population explosion in Nigeria, especially the school age children which resulted in tremendous expansion in the education system. This was as a result of the Universal Primary Education (UPE) programme which kicked off in 1976. The junior and senior secondary school systems were also introduced in 1982. These institutions contributed immensely to the production of the manpower that was needed for the economic development of Nigeria.

One aspect of manpower planning is to forecast the future skill requirements of the labour force and initiate the process of seeking for qualified candidates. There appears to be a general shortage of craftsmen and well-trained artisans in Nigeria. Many people in this category learn their trade on the job. However, some of the craftsmen are products of vocational and technical institutions. To address this problem, the government, through its manpower planning policy, diversified secondary school curriculum to include vocational and technical courses under the 6-3-3-4 education system. In the secondary school system, emphasis has been placed on learning through effective teaching and practical work. This will enable students to acquire basic scientific knowledge, practical and applied skills.

Education is meant to develop people and to maximize their capacity to achieve improved living conditions. Thus, education is the most important channel to improve the human intellect and skills for productive employment. The knowledge acquired in understanding the basic facts of life can be ascribed to education. The knowledge, skills and experiences acquired through formal or informal educational training makes the individual to be productive. The special skills acquired through education enables the manpower to perform their jobs effectively and efficiently in any given situation, hence the linkage between educational and manpower planning.

Educational planning is the process of mapping out suitable education for national development with regard to policies, programmes, enrolment, skill acquisition and manpower planning. It has been observed over the past decade from studies in developmental economics and planning that the source of economic growth is not solely due to capital investment. Rather, economic growth has been found to be intimately connected to the quality of the manpower. Hence, education forms the basis and influences the quality of the labour force. In this regard Rado (2008) concurred that the planning of manpower and education is an important component of planning at the micro level.

The first manpower planning exercise in Nigeria took place in 1959 with the appointment of the Sir Ashby Commission. The government examined the manpower document based on the report of the commission. The report was what led to the operationalization of the first national development plan. Manpower planning is interconnected with educational planning which in itself is the access point of Nigeria's economic development. Nigerian tertiary institutions such as the universities and polytechnics have been mandated to produce the manpower that will manage the economy and politics of the country. The ultimate objective is the production of appropriate human resources for the economic development of

Nigeria. Therefore, it cannot be over emphasized that educational planning is of vital importance to manpower planning. To underscore this fact, Adiele (2006) saw the planning of manpower in the field of education as a deliberate and systematic process of making decisions that have far consequences on the educational system. In this regard, the main goal of planning within the educational system is to guarantee sufficient availability of manpower as at when due in all sectors within the economy.

Techniques of Manpower Planning

Manpower planning comprises the following; forecasting the requirements of human resource in an economy, setting up objectives to attain the needs and designing strategies to achieve the set objectives. It identifies the human resource needs, designs and modalities to implement such plans. Manpower planning uses forecasting techniques to predict future manpower requirements. A very important method in manpower assessment within the field of education is the Manpower Forecasting Approach (MFA). This is the oldest of all the methods that have been applied in predicting the human resource need for economic development. In this technique, manpower planners attempt to (1) compute the manpower requirement based on occupation; (2) adapt this occupational classification to an educational attainment based demand; and (3) Formulate policies that bring demand and supply into equilibrium. Manpower forecasting approach, as a method, is linked to mop up of human resources from the highest level of education in tandem with the labour market requirement.

Methods Applied in MFA

This section will focus on:

i) The procedure utilized in the analysis and projection of manpower demand and supply.
ii) The procedure utilized in planning employment (recruitment planning).

The Employers' Opinion Method (EOM), Increment Labour Output Ratios (ILOR), Density Ratio Method (DRM), International Comparisons Method (ICM) and the Mediterranean Regional Project

Method (MRPM) were cited by Parnes (1962) and Agabi & Ogah (2010) as the forecasting techniques that are mostly applied in MFA.

The EOM is easily the method of choice in developed and emerging nations. This technique allows information on future employees' demands by organizations to be known in respect to employee type and required quantity. Though the method is unpopular, it is however, suitable for short term employee planning which may span three years. The drawback of this method is that it entails more projections and assumptions. The ILOR is applied where the attention is on sectoral occupational or industrial employment specification. For example, in the pedagogical profession, the method can be applied when additional demands for teachers are made by extrapolation using time series regressed data to show the variation of output in respect of manpower. This method can be used over a long period of time, say twenty years and beyond, to show the effect of further demand of an occupational based manpower on national income. Blaug (1970) saw planning method as unsuitable when it is employed in the short time devoid of time series extrapolation. The Density Ratio Method (DRM) is applied when the focus is on the estimation of a small part of manpower within the productive population in a given economy. This fraction of the productive work force is now used to demographically predict the sum of the labour force within the economic sector. In this system, work forces that are different but have a complimentary function such as pharmacists and medical doctors, scientists and engineers can be forecast together using time series extrapolation on a long time planning basis.

The ICM entails the utilization of a human resource process used by the planning authorities in a particular country as a template in the forecast of the required human resource of another country where the human resource needs are similar. Blaug (1970) was opposed to the use of this method since it is practically impossible to have two countries with exact educational challenges and human resource requirements.

The MRPM, according to Blaug (1970) is by far the method that has a general acceptability in terms of its usage in the determination of the demand for trained manpower on the basis of bench mark performance index based on a country's aggregate national output set targets. The MRPM was developed due to the need to create a synergistic education plans for new emerging economies in Europe.

Ahmed and Blaug (1973), Psacharopoulos (1984) and Psacharopoulos and Woodhall (1985) avowed that while it may be desirable to predict a nation's future manpower requirements, it is out of sort to use such a forecast as the basis of a national education plan as the forecast may be unreliable since labour market dynamics may render such workforce requirements impracticable. As an alternative, they recommended a workforce approach that guarantees an effective flow and regular information monitoring obtained from the rate of returns, the estimation of data on wages and salaries as well as keeping up to date information on the labour market dynamics.

Implications for Educational Management

Recently, the Federal Government inquired from a major construction company, Julius Berger, why there were so many expatriates in the construction industry in Nigeria. Julius Berger replied that there were no qualified Nigerians for the industry. The Federal Government then issued a directive to the Ministry of Education to look into the activities of vocational and technical institutions with a view to addressing the problem of the shortage of Nigerian manpower in the construction industry. The existing nexus between education on the one hand and training and development for employment purposes in construction industries on the other hand is as obvious as it is in other fields of human endeavour.

In every respect, the dynamism in the educational system implies that educational provision, delivery and curriculum which constitute the managerial tasks of education managers must be upgraded to meet the educational needs of the manpower. In this regard, the role of education with respect to manpower assessment and planning is very critical. While the industry is looking for qualified graduates and apprentices who have undertaken a linchpin of curriculum and training, education managers seek to certify that the manpower they have produced are appropriate and relevant to the industry.

The process of deciding on the aims of an organization is at the heart of educational management. A major aim of education managers is to determine the skill gaps which need to be filled in order to improve the efficiency of the national economy. It is incumbent on education managers who teach the manpower to ensure that provision is made to match the needs of the country. In any society, the high level of education provides the critical manpower needed for social-political and economic advancement. Currently greater pressure is being placed on pedagogical institutions in Nigeria and in other parts of the world occasioned by technological revolution, the dynamics in the teaching and learning process and the paucity of funds available for learning institutions. For tertiary institutions to play a meaningful role in manpower planning, education managers must be ready to address the issue of managing funds allocated to the institutions because the available resources are grossly inadequate. Under these circumstances, education managers should determine which area of expenditure should come before the other.

The successes of educational management can be seen in the developmental stride among the Asia Tigers and emerging economies in the East Asia. A World Bank (1993) commissioned study on East Asia development revealed that human capital investment was a variable enabler in the spontaneous development that led to a periodic upgrade of their skilled labour force as well as the apparent improvement of these economies. Improved human capital through educational management was essential for them to produce such feats. Education managers can replicate such accomplishments by improving the capacities of the nation’s human resources in various fields in Nigeria through a robust manpower planning.

Summary

This chapter has provided some reflections on how manpower planning is an inevitable phenomenon that has some impact on organizations. The benefits of manpower planning are multifarious. It primarily enables organizations to get the requisite human resources in appropriate jobs at the required time. It enables organizations to make use of their workers effectively and efficiently. The tasks of restructuring, reducing or expanding the workforce in an organization fall within the activities of manpower planning as it enables them to plan ahead and to keep afloat in the face of unfavorable business situations and competitive market conditions.

Manpower assessment and planning are not restricted to private investments alone as public enterprises are faced with similar problems. Private economic institutions also have the added pressure which is the demand to modernize its operations. The federal government's initiatives in Nigeria have required local government authorities to demonstrate manpower planning capability and implementation. Educational and manpower planning were shown to be functionally interlocked. They are used to guarantee that adequate supplies of qualified manpower are produced by the institutions of higher learning for a country's social, political and economic development. This explains the fact that education is a catalyst for sustainable economic, social and political development of any nation. A number of models and techniques that organizations employed to conduct manpower planning were discussed. Most of the models are generally similar. However, manpower planning is a long term strategic activity which is influenced by many other internal and external factors.

Tutorial Questions

1 Explain what planning and educational planning mean?
2 Briefly explain the concept of manpower planning and identify its objectives?
3 List and discuss the factors to be considered in manpower planning?
4 What are the benefits of manpower planning in an organization?
5 What is the role of education in manpower planning and development?

Sample Research Topics

1. Manpower planning and employee productivity in the public service of Edo State.
2. The role of Technical and Vocational Education Training (TVET) institutions in Nigeria's manpower development.
3. Resources allocation and manpower planning for undergraduate laboratory facilities in a Nigerian university.

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Chapter 22

Politics of Educational Policies in Nigeria

Prof. M.Olalekan Arikewuyo & Oghomwen Edeki

Introduction

Practically, every country recognises the role of education in the growth of any nation. Apart from its importance to the individual, education is seen to be a veritable tool in all aspects of development of any nation. Education is therefore, regarded as the bedrock of all facets of development. It is the view of United Nations Educational Scientific and Cultural Organisation (2012) that education does not only make room for development of individuals and communities, it is also through it that the cherished culture, knowledge, skills and attitude of a people are developed. In corroboration of education being a process, UNESCO (2005) maintained that education assists in preparing the young people for future development. Consequently, its major aim is to prepare human beings so that they could be valuable members of society. In Nigeria, education is aimed at attaining the following goals;

a. developing national identity and harmony;
b. developing morals and belief for individual and national survival;
c. developing the individual for the understanding of his world; and
d. Possession all round development for the growth of society.

Consequently, in Nigeria, education is seen as a tool for development and as well as an agent of ensuring social learning. This chapter will discuss the political development of Nigeria as it affects educational development under the following headings:

A. Politics and educational development
B. Pre-independence era (1950-1959)
C. First Republic (1960-1966)
D. Military Regime (1966-1979)
E. Democratic Era (1979-1983)
F. The Military Intervention (1984-1999)
G. Current Dispensation (1999-date).

A**. Politics and Educational Development.**

Right from 1960 when she got her independence, Nigeria has undergone many phases of political development which have affected educational development in the country. Indeed, the socio-economic development of a country cannot be separated from political development. UNESCO (2005) observed that politics and political instability have affected the tune of educational development in Nigeria. This is seen in, the frequent changes of government from democratic to military rule and back to democratic set up which have affected the psyche of the government and the people. Each government comes with its own policy, plans and ideologies and these tell on continuity in government. Undoubtedly, this has affected the various developmental plans of successive governments.

Political ideology affects educational policies and programmes in four major ways:

i. The ideology of the ruling political party influences the approach and plan of educational services provided.
ii. Funding of education is determined by the ideology of the ruling political party. For instance, capitalist states are characterized by state and private ventures involvements, while public funding is the mainstay of a socialist government.
iii. The control of education is determined by political ideologies. For instance, while public and private schools coexist in capitalist economies, only state controlled schools exist in a socialist dispensation.
iv. Capitalist states emphasize profit and competition in educational services while socialism emphasizes otherwise.

Perhaps it is in this respect that Arikewuyo (2011) observed that the growth of universities in Nigeria has been affected by the political dimension of the Country. According to him, a critical observation of the various political structures and phases undergone by the Country since Independence reveals the fact that these phases have had a lot of impact of government policy on university education.

B. **Pre-Independence Era (1950-1959).**

The pre-Independence period in Nigeria was between 1950 and 1959. During this period, the colonial government divided Nigeria into three regions, namely – the Northern, Western and Eastern regions, with Lagos as the political headquarters of the Country. The regions were given self independence by the colonial government as a result of the Lyttelton Constitution. Earlier observed by Fabunmi (2005), the ideology of the political party in power dictated the education policy of the different regions. Late Chief Obafemi Awolowo was the head of the Action Group (AG) which was the political party in control of the Western Region of Nigeria. The Universal Primary Education (UPE) was launched in 1955. It made primary education free, compulsory and universal. Ajayi (1989) reported that under the UPE scheme, primary education was reorganised into a six year programme; primary school syllabus was officially published by the government agency, teacher training colleges were expanded and upgraded and a few modern schools were established after the English model to absorb primary school leavers who could not gain admission into secondary schools. He concluded that though the Scheme was hurriedly launched, many achievements were recorded.

The National Council of Nigeria and Cameroon (NCNC) was the political party in power in the Eastern Region of Nigeria. The government created UPE in 1957. Though the Scheme achieved some successes, Ajayi (1989) however, reported that intra-party squabble, inadequate finance to fund the scheme, poor management and the strong opposition of the Catholic Mission, which owned more than sixty percent of the schools in the Eastern region, were obstacles that crippled in 1958. It must be noted that the UPE programme recorded success in the Western and Eastern regions as against the poor performance in the North, principally due to rising student population which affected the financial requirement. Other reasons were the general distrust of western education by the predominantly Muslim population. In addition, the long term effect of indirect rule in the North gave the impression that some Northern Region leaders thought that political power was more important than academic qualifications. Consequently, the political ideologies of the various political parties in the regions determined the pattern of educational policies during the pre-Independence era.

C. **The First Republic 1960-1966.**

In 1959, the Ashley Commission was set up with the aim of determining the manpower need of Nigeria with a special reference to secondary and higher education. The Commission was composed of nine members of three Americans, Brit and Nigerian each. Though the Commission was set up to make recommendation on higher education in Nigeria, it realized that this could not be done in isolation of the other levels of education. That is, higher education could not develop without a solid and co-ordinated primary and secondary school system. The Commission then recommended the establishment of the Universities of Lagos in 1962 and others like Ife, Zaria, Nigeria (Nsukka). In addition, the 1954 Constitution influenced the establishment of regional and state universities in Nigeria.

D. **The Military Regime (1966-1979).**

The political phase of Nigeria changed significantly when the military took over power in January, 1966. The various counter coups of the thirteen years of military regime in Nigeria, no doubt, changed the face of educational development in the Country. Unlike the previous civilian regime which allowed for democratic governance of the nation, the military centralized its administration with most of the power vested in the federal government. This is to be expected in a military situation where command is the basis of authority. For instance, all the universities established by the regions were taken over by the federal government. The Universities at Ile-Ife, Zaria and Nsukka were included. According to Ogundimu (1980), the reasons adduced for the federalization of the universities were that:

1. If the multiplication of universities was not checked, controlled and planned by a central authority, Nigerian universities could devalue academic excellence to an intolerable level as states without adequate financial ability would exercise their legislative power to establish glorified secondary schools which would go by the name of universities.

2. It was necessary to use university education as a weapon in the struggle to forge national unity. This was done by citing universities in a way that would ensure an equitable spread throughout the country. Also it was opined that students population in each university reflected the diversity of its admissions to applicants who were indigenes of the state in question (Ogundimu, 1980). Concerned about the unity of the country, especially immediately after a civil war, the Federal Military Government launched the UPE in September, 1976. This Scheme was described by the military as the utmost social scheme ever embarked upon by any African government.The government took over the full financial responsibility for the implementation of the UPE scheme. Ajayi (1987) observed that the UPE Scheme brought about some changes in financing the nation's education. The federal government took over the financial responsibility (both capital and recurrent) for primary and teacher education while the states acting as agents of the federal government, were in charge of the day-to-day administration of these schools. Indeed, the military period changed the pattern of education policy and planning in the country. University education was transferred from concurrent to the exclusive legislative list. Acting on this, the federal government established, in 1975, additional seven universities in the country. Arikewuyo (2011) observed that this was done by the military in order to enhance political cohesion, as well as improve educational opportunities in the educationally disadvantaged states. According to Arikewuyo (2011), there were thirteen universities in the country, all owned by the federal government when democratic governance commenced in Nigeria. The 1969 Curriculum Conference gave rise to the National Policy on Education in 1977 with these goals:
   (a). a free and democratic society;
   (b). a fair and democratic society;
   (c). a united, strong and self reliant nation;
   (d). a great and dynamic economy; and
   (e). a land full of bright opportunities for all citizens.

E. **Democratic Era (1979-1983).**

The political phase of the country also changed with the Second Republic, which was installed on 1st October, 1979. As earlier observed by Fabunmi (2005), the educational policy of the country is usually dictated by the manifesto of the political party in power. Thus, while the capitalist economy favours both the private and public (State) sectors' involvement in education investment, the Socialist economy favours only the state (public sector funding of education). This was the situation of educational policy and implementation during the Second Republic (1979-1983). Clearly, the ideology of the various political parties dictated the policy of education during the period. According to Adesola (2002), it must be noted that the inclusion of education in the concurrent list provided a basis for the formulation of party manifestoes. The Unity Party of Nigeria (UPN) emphasized free education at various levels but the National Party of Nigeria (NPN) was interested in qualitative functional education. According to Ajayi (1987), the policy led to population explosion at the secondary and primary levels in the states. He stated that while payment of fees was abolished in all educational institutions, the policy led to a situation whereby churches, mosques and other community buildings were converted to schools in order to contain the population explosion. Perhaps, the noticeable implication of political ideology during this period was in the establishment of additional universities. Both the federal and State governments took advantage of Item what of the 1979 Constitution to the fullest. The Section indicated that it would be the responsibility of the National Assembly to make laws for the nation, especially with regard to primary, secondary, technical and higher education. Following the implementation of (UPE), it was observed that there would be need for additional universities. Consequently, by the end of the Second Republic in December, 1983, there were seven federal and one private university (Arikewuyo, 2011).

F. **The Military Intervention (1984-1999)**

The political phase of the country again changed with the intervention of the military in the political arena. Through coups and counter coups, the military ruled the country between 1984 and 1999. As expected, the education policy and its implementation were affected. During this fifteen year period, the education agenda of the country was battered. For instance, between January, 1984 and August, 1985, the universities of technology established by the civilian regime were either reduced or merged with older universities. However, when another military regime came into power, the universities were demerged and re-established as autonomous universities. In addition, the military government, which in 1984 banned the establishment of private universities, later legalized the establishment of private tertiary institutions. Indeed, Arikewuyo (2004) reported that on May 10, 1999, the military government under the leadership of General Abdulsalam Abubakar granted licenses for three private universities, namely: Babcock, Igbinedion and Madonna universities.

G. **The Current Dispensation (May, 1999 till date).**

At the commencement of civilian government in 1999, as usual, different political parties were in control at federal and state levels. At the federal level, the government under President Olusegun Obasanjo flagged off the Universal Basic Education (UBE) on September 31, 1999.

This programme was aimed at achieving the following:

a. developing awareness for education among citizens.
b. establishing free, UBE for all citizens;
c. decreasing dropout rate from the system;
d. providing learning opportunities for persons, who had interruption in their earlier education.
e. Confirming the attainment of basic knowledge as basics for lifetime learning (UBE Act, 2004).

Thus, under the UBE scheme, the primary school duration of six years and junior secondary school is three years are compulsory, free and universal. It encompasses non-formal and adult education programmes and other initiatives for out-of-school youths. The UBE is different from the previous UPE programmes because while the UBE covers nine years of education, the former UPE only took care of primary education. Whether for political or other reasons, the

Fourth Republic witnessed an upsurge in the number of universities in Nigeria. The NUC reported the increase. Very worrisome is the fact that three months to the end of his tenure as the President of Nigeria, Dr. Goodluck Jonathan upgraded five federal colleges of education to universities of education and appointed Vice Chancellors for all of them. However, those institutions were reversed to their previous status of federal colleges of education by the new government of Muhammadu Buhari.

The Fourth Republic witnessed an increase in the number of institution. This development affected the fiscal allocation to education which reduced from 8.59% to 7.42% in 2006 and 2010 respectively. As a matter of fact, the 1999 Constitution of the Federal Republic of Nigeria, which ushered in the Fourth Republic, and appears to be very political in its educational objectives did not state in section 18 sub-sections 3 of the Constitution that as much as possible government will eradicate illiteracy through a free secondary and primary education. This implies that the Constitution does not guarantee free education at primary and secondary levels. Rather, by inserting the phrase “as and when practicable”, the government makes no commitment to the principle of free education. Rather, the government could be encouraged to hide under that phrase to take its decision. The question is: When will it be practicable to implement free education in the country? This has made politicians to use this constitutional provision to their political advantage. Indeed, political instability has had a lot of effect on educational development in the country. From the period of civil rule in 1960 to the time of various military regimes which were brought about by coups and counter coups, each regime comes with its own special policy agenda. The implication is that there is no continuity in educational policy and its implementation in Nigeria. Consequently, the policy continues to wobble and fumble to the detriment of the citizens of the country.

Summary

This chapter has focused on the impact of politics on educational policy, planning and implementation in Nigeria. It discussed the meaning of education and the relevance of politics to educational development. The chapter also discussed the various political phases of the country as well as educational policies of governments during each political phase in Nigeria. The chapter concluded that political instability had adversely affected educational planning and policy implementation in the country. Politics and educational policy formulation and implementation seem inseparable.

Review Questions

1. In what ways does UPE differ from UBE?
2. What are the impacts of political parties manifestoes on educational policy formulation and implementation in Nigeria?
3. What is the influence of constitutional provision on educational policy formulation and implementation in Nigeria?
4. What are the impacts of political climate on educational policy formulation and implementation in Nigeria?
5. What are the impact of international organisations on educational policy formulation and implementation in Nigeria?

Sample Research Topics

1. Implementation of the goals of national policy on education and national development in Nigeria
2. Compliance to the policy of teacher pupil ratio in Edo State primary schools
3. Access and equality to educational opportunities for pupils with disabilities
4. An assessment of the Implementation of Vocational education policy and its implementation in secondary schools in Edo State
5. Implementation of the policy on teachers' development and pupils' academic performance in Edo State.

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Chapter 23

Approaches to the Planning of Education

Dr. Patricia A. Etejere

Introduction

The planning of education is a continuous activity through which educational planners analyse the prevailing situation in the educational system in order to achieve predetermined goals. Madumere (1997) explained that educational planning is a conscious attempt by governments to develop skills needed by the economy through formal schooling. Planning the education of a country has become a serious subject of concern not only to governments but also to scholars such as educationists and economists. It is a process which involves a lot of decisions which planners have to make on the course of education in a country. Such decisions are the type and quality of education to be provided, the various levels of schooling at which such education is to be provided and the amount of resources needed for its provision at the different levels.

According to Longe (2003), educational planning entails the making of decisions in order to accomplish educational objectives with the efficient use of limited resources. In education, planning could last for a short, medium or long period of time depending on the numbers of years planned for. The process of educational planning does not only concern itself with what direction to go, but also with how to get there and by what best course. It is therefore, a continuous process through which managers analyse the present situation in education in order to achieve set goals. Educational planning approaches stem from a combination of reasons. The obvious relationship between education and the development of the economy is a strong factor in the discussion of educational planning approaches of a country. The three main approaches are the social demand, the manpower requirements and the cost-benefit analysis which is also known as the economic rate of return approach.

The Social Demand Approach

This approach requires that the government of a country provide education for all those who want to go to school and who are qualified to do so. As the least complicated technique of the approaches, the social demand approach is the most popular in the developing countries. This approach has however, been premised under certain assumptions such as:

i. the provision of education for the citizens of a country will bring about social and economic benefits;
ii. at every point in time, more people will demand for education than can be supplied;
iii. government should make education available to those who demand and are qualified for it at all levels;
iv. the school-aged population will demand for the education that has been designed for them (Olagboye, 2004).

Viewing education as a part of consumption goods is the basis for the social demand approach whereby people see education as something that should be made available to the populace in order to improve their level of literacy. Thus, if the opinion of a government is that people who desire to be educated should be allowed to do so, then that government should do everything possible to provide that education. It therefore implies that planning should be embarked upon to ascertain not only the facilities and resources on ground but also the quality and quantity that are needed to satisfy the demand for education.

On the part of the populace, education could be demanded by individuals just for the sake of acquiring knowledge – in other words, the quest for education could be intrinsic. In this way and from the point of view of the proponents of the social demand approach, education is conceived as a social need, especially in instances where highly placed individuals in society acquire higher degrees in order to enhance their prestige or social status.

One common technique which the social demand approach employs is the projection of enrolment trends at different levels in the educational system. This technique also takes into account the trends of enrolment in the previous school years. This entails the use of time series analysis where future projections are worked out with demographic data of school-age populations.

The social demand approach has been linked with the provision of education in the Universal Primary Education Policy which was created in 1976 and later, the Universal Basic Education Programme which came into existence in 1999. In both schemes, political considerations of governments' decision about education have been the basis for planning education at the lower levels along the lines of social demand. Expectedly, there was an increase in enrolments without a corresponding increase in the supply of facilities and teachers on the part of the governments. The resultant consequences were the recruitment of less qualified teachers and the merging of classes to accommodate more pupils while managing the available number of staff.

Merits/Strengths of the social demand approach

The social demand approach has gained a lot of acceptance in many countries as a result of its strengths. As a very popular approach for planning the education of a country, it readily appeals to politicians who use it as a strong basis for providing education for their citizens. Closely connected to this is the democratic nature of the approach – in other words, it democratises education by making it accessible to every child. Its implementation increases the literacy level of the populace while at the same time, equality of educational opportunities is attained by individuals. Thus, regardless of ethnic, religious or cultural affiliations, all children have access to education. This implies that its aim of making basic education universal goes a long way in enhancing national unity. In societies where education is regarded as a social status, the social demand approach to educational planning could help to lower social upheavals and the gaps among different income earning groups. Lastly, this approach attracts the community to support education since its members are likely to see education as a service for the common good of the populace.

Demerits/Weakness of the Social Demand Approach

Several weaknesses have been observed concerning the social demand approach. One of such is that the approach does not take into consideration the changes in the price of education; it believes that the cost of education is constant – which is hardly the case. This perception arises from the fact that the social demand approach always sees education as a social service.

Secondly, this approach cannot be used in countries that lack accurate, timely and adequate demographic and educational data to make projections of demand for educational places and facilities. For instance, in most developing countries, this is often the case – a situation which may lead to false results or underestimation of the actual number of resources and facilities needed for planning.

Thirdly, most of the projections are based on progression and transition rates that are not constant; thus the variability of these rates may affect the outcome of the projection exercise. Another weakness of the social demand approach is that a lot of wastage of resources is bound to occur if education is planned for those who are not interested in it. In the social demand approach, there is too much emphasis on the 'demand' aspect, and this leads to an over-estimation of popular demand and under-estimation of costs which in turn undermine the quality of effectiveness.

Another crucial weakness in this approach is the assumption that planning the education of a country through the social demand is the best way of using educational resources to develop the economy. Also, the approach does not take into account the categories of workforce required by the economy.

The Manpower Requirements Approach

As the most appropriate approach in the planning of higher education and other skill-specific educational training programmes, the manpower requirements approach is premised on the human capital theory which states that there is a significant positive relationship between the growths of a country's human resources and of the national output. Thus, it is assumed that a nation must increase its human resources if it wants to attain a certain level of socio-economic growth. The main purpose of the manpower requirements approach is to plan the manpower needs of the country through projections. This is to say that it is used to determine the number, types and categories of educated manpower needed for the development of the country over a period of time. These highly educated manpower include doctors, engineers, scientists, teachers, artists, musicians, architects, administrators, et cetera. After projections have been made, the educational system is then planned in such a way that these personnel will be trained or educated in quantity and quality, depending on the number of prescribed years of training. In other words, the Manpower Requirements Approach projects the future requirements of educated skilled labour that would be needed by a country at a future time. It engages in full manpower planning of a nation by getting rid of labour shortage and/or excess through the use of specific educational programmes geared towards the projected educated labour force. Manpower requirements planning is thus an attempt to integrate education with national planning so that specific programmes can be mounted for the acquisition of the skills that are needed to drive the economy.

There are five assumptions guiding the use of the manpower requirements approach. These are:

i. relationships between increases in productivity and educated manpower. The implication of this is that the more educated the manpower, the higher the productivity;
ii. that education can be used to transform the potential and skills of the citizens;
iii. that the economy of a country depends on the level of education of its citizens and vice-versa. In other words, the educational system uses the resources provided by the economy to train students who will later be engaged or employed to work in various capacities to boost the economy;
iv. that an increase in the national output will lead to an increase in the demand for different types of skilled manpower;
v. correlations between the educational status of employees and their occupation. This implies that the more educated one is, the higher the status in his occupation.

Basic Steps Involved in Manpower Requirements Approach

As earlier mentioned, manpower requirements approach emphasizes the forecasting of future demands and the training of the relevant skills needed to man the economy of a country. In doing this, the following basic steps need to be followed:

a. Estimate the initial stock in the labour force and national income using a base year;

b. Make an estimate of the rate of growth in the country's expected income at the time of planning;
c. Calculate the increase in the demand for skilled labour at the time of planning, making provision for manpower attrition, where necessary;
d. Calculate the additional skilled labour in terms of the number of educated people needed in various educational programmes;
e. Project the future enrolment in different courses and programmes in higher institutions;
f. Make a forecast of the resources needed to execute the above steps.

Methods of Estimating or Forecasting the Number of Workers Needed Within the National Economy of a Country

The following methods are used to estimate or project the number and type of workers that would be needed in the economy of a country during specific periods:

(i) **Employers' Opinion Method**

In this method, educational planners use questionnaires to find out the categories and quantity of educational manpower needed for employment in organizations within a certain number of years. Adjustments would be made for the retired, the dead and the transferred employees during those periods. What is left would be regarded as the projection for the target years. Even though this method is less sophisticated than other methods and therefore popular in both developing and developed countries, it is only suitable for short-term forecasts. This method may however, be unreliable if employers do not provide accurate information.

(ii) **Incremental Labour-Output Ratio Method**

Data, by years for a period of time, are required for this method. Such data are known as time series data which require that workers' output be categorized on the basis of educational qualifications, sector and occupation for the target years. This method is hardly used in most developing countries where appropriate data is lacking. Many advanced countries, which usually have time series data, use this method for effective manpower planning.

(iii) **Density Ratio Method**

Educational planners in Russia are favourably disposed towards this method. It usually involves two stages. In the first stage, a certain number of qualified workers in any sector of the economy are projected. For instance, in the agricultural sector, one would like to know the number of workers that are graduate agricultural experts. The answer would give us a fraction for that sector and the same thing would be done for all the various categories of graduates engaged in the agricultural sector. The second stage will then be the application of that stable fraction to the total manpower forecast for the different sectors of the economy.

(iv) **International Comparison Method**

The International Comparison Method is applied in such a way that the data collected from an advanced economy are used to form the basis of the manpower planning for a less developed country. This method is used together with other methods but in terms of statistical and data requirements, it is a less sophisticated method. An example of the application of this method is the Puerto Rico 1957 forecast of the distribution of labour force by occupation and education up to 1975. This application was based on the educational attainments in the American occupational categories for 1950. However, the socio-cultural, political and economic differences among countries are potential hindrances to the application of this method in most developing countries.

(v) Parnes' Mediterranean Regional Project Method

This method was named after Professor H. Parnes who was commissioned to produce educational plans for five countries in the Mediterranean Region. Manpower requirements for all occupations will be forecast at the same time. These forecasts will then be matched with the appropriate and relevant educational requirements. Its main weakness is that it does not take into consideration those who have left employment through resignation, retirement, death or transfer.

Merits/Strengths of the Manpower Requirements Approach

a. It is a rational approach which allows for practical quantitative forecasts, thereby making planning more focused.
b. It ensures that the available limited resources are judiciously utilized for the training of only the required manpower.
c. It helps to create a balance in manpower planning, thereby reducing the number of educated people who cannot be employed.
d. To some extent, set objectives could be achieved through the use of the manpower requirements approach.

Demerits/Limitations of the Manpower Requirements Approach

a. It lacks experts.
b. Some of the methods used in this approach are complex and they require up-to-date educational and population data which are hardly obtained in developing countries.
c. There is no consideration for the non-formal sector in education (or training). This implies that the levels or types of education which are not involved in the training of job-specific skills are totally ignored.

Cost-Benefit Analysis Approach

The cost-benefit analysis approach to educational planning is also known as the economic rate of return approach. This is an approach which a rational person or government uses to plan how to spend money judiciously. It considers education as something that is invested on unlike the social demand approach which considers education as a service that should be provided for society. Thus, any expenditure incurred in education is seen as investment expenditure. In other words, cost-benefit analysis approach to educational planning is used to rationalise government and individual expenditure on education, while at the same time expecting the benefits accruing from such an investment. The two main considerations of this approach are the costs and the benefits. Basically, the analysis consists of the computation of the amount spent on education, estimating benefits that may accrue and then making a comparative analysis of such benefits (or returns). All things being equal, the justification for making decisions on heavy investment expenditure should be such that hopes for higher investment benefits/returns when compared with the cost of the project/programme embarked upon. In fact, cost-benefit analysis could be regarded as a decision-making tool for investment criteria in education (Madumere, 1997).

In Nigeria, for instance, between 1975 and 1980, the Federal Government budgeted N300million as capital expenditure for the Universal Primary Education (UPE) Programme. This was in anticipation of the huge benefits that would accrue to the nation and individual households in view of the laudable objectives outlined for the UPE Scheme at that time (Madumere, 1997)

The main steps involved in the adoption of the cost-benefit analysis approach to educational planning are:

(a) calculating the total cost of an educational programme to be undertaken;
(b) estimating the anticipated benefits of the educational programme;
(c) comparing the total cost of the programme with the expected gains to get the rate of returns from the educational programme embarked upon ;
(d) Comparing the rate of returns obtained in (c) with those from other similar investment opportunities(Olagboye,2004)

Some of the terms associated with the cost-benefit analysis approach to educational planning are: private rate of returns and social rate of returns; private cost and social cost; direct and indirect costs; public cost, direct and indirect benefits and earnings foregone.

There are private and social rates of returns in the application of the cost-benefit analysis approach. The private rate of returns refers to the rate of benefits which an individual or household obtains as a result of an educational investment while the rate at which the government or society bears the cost of education refers to the rate of benefits accruing to a society for educating her citizens. This latter rate is known as social rate of returns. These benefits are rated in terms of the overall national output. The calculation of the private rate of returns takes into consideration the implementation of government policies such as the granting of bursaries and scholarships to students.

In calculating the social rate of returns, the maximum number of years spent at work and the monetary value of the retirement benefits of the educated persons are also considered. The actual value of money obtained from using a particular type or level of education to engage in work is the direct benefit accruing to the individual while the indirect benefits could include the value of the intangible benefits obtained from the educational investment. Examples of such benefits are power, prestige, satisfaction, et cetera. Spill-over benefits are those which accrue to a household or society as a result of the education which an individual member of the society receives. It is believed that generally, an educated person's knowledge will impact positively on his family, other individuals, his neighbours, his community and society in general, thereby bringing about some improvement in his personal organisational life.

In educational planning, costs could be private or public. The cost of the resources used in an educational investment by the individual or his household is known as the private cost while the public cost is the one borne by society or the government in the education of individuals in that society. Some scholars also refer to the latter as social or public costs. Public costs in education, can further be broken into institutional and recurrent costs. Recurrent cost refers to the cost of items that are recurrent in the educational system. Examples of such items are salaries and allowances of teaching and non-teaching staff, consumables and stationery. On the other hand, expenditure on educational items which have a long life-span is known as institutional cost. Buildings, equipment, vehicles and heavy-duty machines are examples of items under institutional cost.

In an educational investment, the cost of educational materials, tuition, transportation, examinations, registration fees, uniforms and other items incurred by the individual (i.e., the student) or the household (i.e., the parents/family) are termed private cost.

Merits/Strengths of the Cost-Benefit Analysis Approach

The cost-benefit analysis approach allows for the optimization of resources allocated to education in such a way that there is no wastage. It is an empirical and logical approach which a layman can make use of for his investment decisions.

Demerits/Limitations of the Cost-Benefit Analysis Approach

One of the limitations of this approach is that most of the costs and benefits of educational investments are difficult to quantify and calculate in real figures. The approach does not take into consideration the spill-over benefits which arise from an investment in a particular type or level of education. There is also too much emphasis on the economic reasons for the pursuit of education. The approach ignores the fact that intrinsic reasons could also make people acquire education.

Conclusion

All things being equal, the adoption of a particular approach to educational planning by any country depends on the type of problem(s) that educational planners set out to solve. This has enabled some scholars to come out with the synthetic approach to educational planning which makes use of a combination of two or three approaches to plan the educational system of a country at different levels or for different types of education. The logic behind the synthetic approach is to pull together the merits of all approaches for the planning of different aspects of the educational system. By and large, some of the basic problems in the use of the approaches are the lack of accurate and required data, lack of experts and the fact that benefits of education are difficult to quantify. Some costs are also difficult to compute.

CHECK LANDSCAPE

Summary of the major highlights of the approaches to educational planning are as follows:

Social demand approach	Manpower Requirements approach	Cost-benefit analysis approach
Government should provide education for all those who wish to attend school and those who are qualified to do so.	The approach is based on the human capital theory.	This approach can be used by a government or an individual to plan how to spend money judiciously.
Education is viewed as one of the consumption goods.	The purpose of the approach is to plan manpower needs of a country through projections of educated skilled labour.	Education is viewed as an investment expenditure.
Education should be made available to the people to improve their literacy level.	Specific educational programmes are then geared towards the projected educated labour force.	Government and individuals rationalize their expenditure on education and expect benefits to accrue from such an investment.
Education is also conceived as a social need		
The technique for this approach uses projection of enrolment trends at different levels of the educational system	Five assumptions guide the use of the manpower requirements approach.	Costs involved in educational expenditure are computed and benefits or returns are calculated or estimated.
It also uses enrolment trends in previous school years	The methods of forecasting the number of workers needed within the national economy of a country are: (a) Employers' Opinion Method (b) Incremental Labour-output Ratio Method. © Density Ratio Method (d)International Comparison Method (e) Parnes' Mediterranean Regional Project	Higher investment benefits or returns in comparison with cost involved justify investment expenditure.
Linked with the provision of education in both the universal Primary Education Policy and the Universal Basic Education Programme.		Benefits or returns from investment opportunities are also considered and compared
		The rate of benefits which an individual or a household obtains as a result of an educational investment is referred to as the private rate of returns. -The social rate of returns is the rate at which the government or society bears the cost of education. -The social rate of returns takes into account the maximum number of years spent at work and the monetary value of the retirement benefits of the educated persons.

Merits	Demerits	Merits	Demerits	Merits	Demerits
-Politicians use it as a basis for providing education for the citizens. -It is a very popular approach.	-It does not consider the changes in the price of education. -It cannot be used in countries which lack accurate, timely and adequate demographic and educational data.	- A rational approach, making planning more focused.	-Expertise is lacking.	-Most costs and benefits of educational investments are difficult to quantity and compute.	- It allows for the maximum use of resources.
-It can be used to enhance the accessibility of education to the people.	-Projections are based on progression and transition rates that are not constant.	-Available limited resources are judiciously utilized for training required manpower.	-Methods used in this approach are complex.	-It does not consider spill-over benefits.	-To a large extent, there is no wastage of resources.
-Its implementation is expected to increase literacy level.	-Wastage would occur if education is given to those who are not interested.	-It helps to create a balance in manpower planning.		-Too much emphasis on economic reasons for pursuing education.	-An empirical and logical approach.
-Individuals are expected to have equal educational opportunities.	-Costs to be incurred in using this approach are underestimated. -Over-estimation of popular demand.	-Objectives set are achieved through the use of this approach.		-It does not consider intrinsic reasons for the acquisition of education.	
-It could help to lower social upheavals and reduce income gaps.			-Lack of up-to-date educational and demographic data.		
-Communities are encouraged to support education			- No consideration for non-formal sector in education.		

Summary

Educational planning is an ongoing process which educational planners use to steer the direction of education in a country. Planning itself is an activity that is future-oriented. Many scholars and educational planners have come up with three main approaches or techniques which educational planners could use to plan the education of a country. These approaches are the social demand, manpower requirements and cost-benefit analysis. The latter approach is also known as the economic rate of returns. While the social demand approach focuses on the provision of education for all those who request for such and are eligible to do so, the manpower requirements approach enables the planner to project future requirements of educated skilled labour that would be needed by a nation. The manpower requirements approach also has five forecasting methods which could be used to estimate the number of workers needed within the national economy of a country. The main thrust of the cost-benefit analysis approach is the fact that it views education as an investment which should yield benefit or returns in due course. The calculation of the benefit or returns takes into account the cost of the educational venture, the expected cost of the benefits (returns) as well as the expected returns on similar investments. All these approaches have their strengths and weaknesses. Since there is no perfect approach or technique, the synthetic approach- which is a combination of the strengths of two or three approaches- has been proposed by scholars as one that can be used to plan the educational system of a country. In the synthetic technique, different approaches could be used for different levels or different types of education depending on the particular problem the nation expects to tackle in the educational system.

Implications for Practice

The social demand approach can be applied to planning of primary and junior secondary education, that is, the basic education level of the educational system. This is because of the Nigerian government's commitment to provide universal and compulsory basic education for school-age children at that level. The full adoption of this approach would require the establishment of more schools, recruitment of more teachers as well as the provision of more resources and facilities. Government also needs to improve the level of funding of education; there should be adequate planning and implementation should be carefully monitored.

The use of the social demand approach for planning basic education would require the projection of pupils in order to know the actual number of resources to be provided. It would also involve the use of the time series analysis whereby projected places would be based on past enrolments. To do all these effectively, educational managers need accurate, up to date and adequate demographic data. This would enable educational planners to get the actual number of children who have attained school-age and thus the number of places to be provided for.

The main activity in the adoption of the manpower requirements approach for educational planning is the projection of educational skilled labour which would be needed by the country's economy in future. Thus, in the presence of the availability of data on different categories of educated manpower for a number of years, educational managers could use this approach in a number of ways. In an attempt to obtain an estimated number of workers that will be needed over a period of time, educational managers could request employers to provide data on the categories and quantity of educational manpower which are required for employment in organizations within a certain number of years. Information on the output of workers could also be collected on the basis of their sector, occupation and educational qualifications. Managers could then use this information or data for projections to obtain future requirements of the work force. The training of students in selected programmes in the required quantity and quality would then be based on these projections. Although costs and benefits of educational investments are difficult to quantify and compute, to some extent, estimations, equivalents and approximations could be used for analysis by educational managers. For example, in the calculation of private cost in education, items such as tuition fees, examinations fees, stationery and other household items can easily be computed. Also, educational managers could embark on a cost-benefit analysis of programmes in order to determine their viability or relevance to the economy.

In conclusion, it is pertinent to reiterate the use of the synthetic approach (that is, a synthesis of all the three approaches) which educational managers can apply to the educational system, bearing in mind the particular approach that will fit a particular level depending on the merits of each approach and the educational problem that approach is meant to tackle.

Review Questions

(1) Compare and contrast the strengths and weaknesses of two of the three basic approaches to educational planning.

(2) Attempt a critical discussion of the assumptions of the social demand approach.

(3) (a) Explain manpower requirements approach.
(b) List the methods used in estimating the number of workers in a country's workforce. Discuss briefly two of these methods.
(c) Describe the basic steps involved in the manpower requirements approach.

(4) Identify the purpose of the social demand approach.

(5) (a) Mention the two main considerations in the cost-benefit analysis approach.
(b) Explain the stages involved in the adoption of the cost-benefit analysis approach.

Sample Research Topics

1. An assessment of the use of the social demand approach for planning basic education in Kwara State.
2. A comparative study of B.Ed Business Education degree programme and B.A. English degree programme at the University of Ilorin using the cost- benefit analysis approach.
3. An integration of the synthetic approach in the planning of education in 21st Century Nigeria.
4. An analysis of the private case of Teacher Education Programmes in a Nigerian university.

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Chapter 24

School Mapping

Prof. Roseline O. Olubor

Introduction

Education is a fundamental human right. This assertion is contained in treaties and laws worldwide because of the following reasons:

a. education builds knowledge and skills into its beneficiaries which leads to realization of their full potential, thus creating a pool of human capital;
b. education reduces poverty by ensuring job opportunities and assuring economic prosperity which ultimately could lead to national development and
c. education empowers people to live a healthy life, participate in governance and promote positive attitude to safe environment.

The educational sector is more related to the values of society than other sectors of the economy. This is so because society and the educational sector serve each other.While society, through its values, determines or shapes the school curriculum, the educational sector, through its products (the educated citizens) who hold positions of authority, influence the values and culture of the society by the policies they formulate and the decisions they take.

The pursuant and the expectations of the Sustainable Development Goals (SDGs) have made educational planning and management in developing countries like Nigeria inevitable. Educational planning is, therefore, a necessity for the following reasons: (a) the hopes and aspirations placed on the development of education have not been achieved to a reasonable standard. This could be attributed to poor planning and insincerity of personnel in authority; (b) growth in school enrolment which has compounded educational inequalities in terms of provision of facilities and infrastructures. Due to lack of population data, it has become difficult to project school enrolment and plan for procurement of needed resources (human and non-human); (c) educational objectives have not been effectively implemented in many cases; (d) the few available resources have not been used in the most efficient way as funds are either inadequate or misappropriated; (e) education is often seen as irrelevant to the needs of local communities as evidenced in the array of unemployed youths and in the spate of vices such as kidnapping, armed robbery, etc, in the society; and (f) globalization and dynamic emerging issues in contemporary society require that the educational system be planned to meet societal expectations and needs.

The non-availability of data has continued to be a problem in educational planning in Nigeria. One of the ways to ensure that data are made available, especially at the lower levels of pre-primary, primary and secondary education is to periodically carry out a diagnosis of the educational system. School mapping, therefore, becomes a veritable tool in that direction.

Public outcries over the continuous poor performance of students in national examinations have been attributed, among other reasons, to lack of adequate resources such as teachers and facilities. To have a better understanding of the situation on ground, school mapping becomes inevitable because of its inherent procedures of locating resources, assessing their distribution and making recommendations to ameliorate the inadequacies and ensure equity.

School mapping has the capacity for revealing inequalities in educational provisions among different pupil groups, types of schools and geographic sub regions. This could lead to a deeper understanding of the characteristics of the situation. It also enables the planner to identify existing problems and imbalances with respect to pupil participation, schooling conditions and the degree of utilization of the available resources. The inequalities, most often, are products of policies of governments.

This topic will, therefore, be discussed under the following subheads:

(a) Definition, concepts and origin of school mapping.
(b) Purpose of school mapping.
(c) The steps in school mapping.
(d) Characteristics of school mapping
(e) Factors that influence school mapping.
(f) Recommendations for a successful school mapping.

(a) Definition, Concepts and Origin of School Mapping

Definition and concepts

School mapping can be viewed from the concept of location and stock taking. Authors such as Govinda (1999), Mandelsohn (2006) and Sabir (2013) defined school mapping along the concept of location. For example, Sabir (2013) saw it as the systematic and logical process of identifying unserved communities in terms of educational facilities and where they are to be located. Sabir's definition is based on the fact that the location of schools is a paramount issue in school mapping. This is so because it is the basis for rationalizing existing facilities or the provision of new or additional facilities. Govinda (1999) saw school mapping as an activity or a planning exercise that plans the requests for school places at the local level and decides on the location of future schools and what should be allocated at the institutional level, using a set of procedures and techniques. Mandelsohn (2006) saw school mapping as a tool most often used to access schooling by ensuring equity in its geographical distribution. This is meant to enhance the expansion and development of schooling on a local basis.

Others such as Caillods (1983) and Oluchukwu (1998) perceived school mapping as a concept of stock taking. For instance, according to Caillods (1983), it meant to assess the present status of educational resources at the local level so as to identify future needs. Oluchukwu (1998) referred to school mapping as a diagnostic stock-taking of the educational system with the intention of determining the types and stock of resources and facilities that are needed in the future and how best the existing facilities can be put into optimal use in view of the competing needs for available resources by all sectors of the economy. This stock taking concept is more comprehensive and embracing because it assesses equitable location of schools and provision of resources.

Common to all the definitions are that: (a) school mapping is a planning process; (b) It is concerned with location, allocation and distribution of resources; and (c) it strives to ensure equity in the allocation or distribution of resources for the school system.

School mapping ought to be an ongoing and not a once and for all activity. Investments in education should be based on facts and facilities on ground, otherwise, political loyalty and subsequent compensation may become the bases of allocating resources. If this happens, the inequality that school mapping is meant to remove may become the order of the day.

Location of alternatives to formal schools such as non-formal schools or establishments can be carried out as non formal school mapping. Also of interest to the planner is the participation of the private sector in the establishment of educational institutions. Because of the public outcry over the seemingly falling standard of education in public institutions, private individuals, organizations and religious bodies have become very active in the establishment of institutions of learning. In some cases, they have surpassed government efforts. In such a situation, it will be inadequate to carry out a school mapping of only government formal schools. Such an exercise should incorporate private schools since they also render the same services as public schools. Public investment in education has been extended to non-formal subsectors. The implication of this phenomenon is that school mapping is not limited to locating only formal schools. It is on this note that Mandelsohn (1996) asserted that koranic schools, vocational, and any other non – formal educational institutions should not be added to school mapping of the formal school system. To him, these kinds of organizations would confuse the planning functions of school mapping which are to improve access to formal education.

There is a misinterpretation of the term "school mapping" to imply putting symbols on a large scale map. This exercise, while very useful is only the first stage in preparing a school map. This opinion, therefore, agrees with Sabir's (2013) argument that the location of institutions is the paramount planning issue in a school sector. This is due to the fact that it is the basis of rationalizing existing facilities or the provision of new or additional facilities. Location of schools is, therefore, the first stage in preparing a school map. This is better done with the Global Position Services (GPS) which collects the coordinates of the schools and shows the exact position of the schools. A school map ought to be futuristic and with a dynamic vision of what the educational services such as premises, teachers and equipment ought to be in the future so as to ensure educational policy implementation. School mapping ought to commence at the local level. Those who will implement the proposals at the local level should be involved during the school mapping exercise.

School mapping has the double function of optimizing existing resources and at the same time ensuring provision of resources in order to ensure equality in educational provision and opportunities.

School mapping therefore performs the following functions:

i. it creates a foundation for a successful basic education such as the Universal Basic Education (UBE) that is presently being operated in Nigeria;
ii. it increases opportunities for females, males and other vulnerable and underrepresented socio-economic groups to acquire education;
iii. it promotes fairness in distribution of educational resources to localities;
iv. it improves the quality of educational efforts by employing quality teachers and improving on the provision of necessary facilities;
v. it optimizes the services of personnel and disbursement of funds;
vi. it organizes, coordinates and rationalizes attempts at basic, vocational/ technical, and post-secondary education (Caillods, 1983).

School mapping starts with a very detailed analysis of the coverage of the educational system and of the teaching/learning conditions in each region or sub-region before making any suggestions or proposals for the future. The growing interest in planning at local levels may be due to the fact that policies laid down at the central level which are referred to as macroplanning are not always implemented at the regional or local level because they are unsuitable. Secondly, it has been noted that despite priorities fixed by national plans, inequalities have persisted among regions, urban and rural areas and social groups because their needs are not the same. Thirdly, the planners work with national averages since they cannot make in-depth diagnoses of the characteristics of the population groups to be served or of the teaching conditions in different types of schools. Such averages are often a long way from the reality on ground at the local level. The objectives set become unrealistic and the content or methods of education are ill- adapted to the needs of certain regions or rural areas. This was the case with the 6-3-3-4 educational system in Nigeria. Boxes of Introductory Technology textbooks and equipment are still unopened in many schools after many years of their importation from outside the country.

After the publication of the national plan at the national level, the implementation of policies is left to the discretion of the regional or local administrators. So, in the absence of adequate information, local administrators do not know what to do. Some do not use their initiative but leave things to run their course according to previous trends. Others, on the contrary, take inappropriate actions. The persons responsible for implementing the national plan at the local and regional levels do not show much interest or motivation because the plan has been conceived entirely without their inputs. And often, the measures proposed are ill- adapted to the regions' situations.

Origin of School Mapping

School mapping starts from a very detailed analysis of educational systems and teaching/learning conditions in each region or sub region to making suggestions or proposals for the future. It has helped many nations to plan their educational systems and has been carried out in many countries such as India, France, Pakistan Ireland, Germany, Uganda, Napel, Iran, Maroc, Costa Rica, Cote d'Ivore, Sri Lanka and some parts of Nigeria. The essence of the exercise is usually to ensure improved pupils/students access to school.

School mapping is usually introduced when education on a large scale was to take place or when a decision is taken to rapidly expand the educational system. This was the case in France when the government decided to extend and expand compulsory schooling to the age of 16 in 1963. This led to the establishment of a large number of new schools. An assemblage of regulations, circulars, standards and procedures were prepared and named "the school map". Since then, school mapping has been used in Sudan, Somalia, Peru, Ireland, Germany, Uganda, Nepal, Iran, Maroc, Costa Rica, Cote d'Ivore, Sri Lanka, and in some parts of Nigeria.

(b) **Purposes of School Mapping**

Previously, school mapping had a narrow objective which was to identify the location for the construction of schools, classrooms and laboratories. However, the concept has expanded to incorporate diagnoses, redistribution of facilities and ensuring equity in the provision of school resources. The purposes of school mapping are:

i. to ensure equity in the provision and distribution of educational facilities - some of the inequalities are the products of investment policies of the government;
ii. to maximise the use of resources;
iii. to rationalize the available resources and ensure their optimal use;
iv. to bring educational planning to local levels;
v. to generate reliable and useful data in planning activities such as universalizing educational facilities, health provision and facilities;
vi. to provide reliable data for national and international bodies such as the Ministry of Education at local and national levels, UNICEF, UNDP, WHO, etc;
vii. to bring about a working document on the needs of the entire educational system;
viii. to ensure that new educational facilities are provided where they will be maximally utilized.

(c) **The Steps in School Mapping**

The methodology of school mapping can be visualized as follows:

(i) Choosing a locality for the exercise, e.g, a local government area.
(ii) Assessing the educational resource situation in the selected area.
(iii) Assessment of the number of children to be enrolled.
(iv) Specification of norms, standards and catchment areas.
(v) Assessment of the facilities in schools.
(vi) Making cost estimates.
(vii) Preparing the operational plan

Step I: Choosing a locality for the exercise

Since a school mapping exercise helps to identify the most ideal locations to open schools, it is advisable that a cluster of villages, or in the case of Nigeria for example, a local government area that is made up of clusters of villages, be selected. This then becomes the territorial unit for which the school map will be prepared. This may be regarded as ideal for Nigeria because of the following characteristics: (i) there is local government education authority in the local government headquarters. It will then be easier to obtain school statistics since this division will normally be under a Ministry of Education official; and (ii), the local government areas are usually of reasonable sizes.

It is not advisable to centralize a school mapping exercise at state or national level because this may become unwieldy. The state or national office can coordinate the school mapping exercise. The advice is that the officer and personnel at the local government level should be trained and involved in the exercise since they understand the terrain better than the state or national officials. Despite the fact that a local government area is the unit of activities, it is necessary to take note of the villages/towns in such an area as they are the focus of discussion.

Step II: Assessing the resource situation

The aim is to find out the level of availability and adequacy of educational resources in order to reveal the geographical distribution and adequacy level of the educational facilities in the selected locality.

According to Caillods (1983), a physician does not prescribe medicine without having made a thorough (diagnosis) study of his patient's state. The educational sector can, therefore, be likened to a patient. A better recommendation can only be made if the inadequacies and insufficiency in the system in terms of facilities are identified after a thorough investigation which can be termed as the diagnosis. However, in doing this, the location of the institutions is paramount. This is quite understandable because it is the basis for rationalizing existing facilities or the provision of new or additional facilities. To achieve this, the Global Positioning System (GPS) and the Geographic Information System (GIS) have been identified to be useful. The Global Positioning System helps to collect co-ordinates of schools by describing their location. One such equipment for use is the GARMIN e Trex 10 which is a GPR S hand Receiver.

A Geographic Information System (GIS) is simply a tool for compiling, analysing and displaying spatial data, that is, location of schools. The two basic types of GIS data models are spatial and attribute data models.

Spatial data contains the coordinates that can be used to define the location of the map features. The data answers where? (that is, defines the location of the features). The three methods of representing features on the map are points, lines and polygons. The spatial data of schools can be generated using Global Positioning System (GPS) and Image Processing, that is, deriving GIS data from digital image (satellite imagery).

Attribute data is a property that describes an entity. It contains information about what, where and why. Attribute data also provides characteristics of spatial data and can be linked to spatial data in a tabular form. It is the attribute data (such as age of school, number of students, teachers, and non teaching staff etc) that is tied to the spatial location of the schools,

The use of the GPS (Handset), necessitates visiting schools so the GPS can pick the points (i.e, the coordinates). In such a situation, one is sure of capturing all the primary schools in that locality. GIS can, therefore, improve school mapping in the following ways:

(i) GIS helps make data presentation more attractive.
(ii) Unexpected situations become recognized with projected tabular data on the map.
(iii) Analysis becomes finer and more precise through considering spatial factors. This will make devised strategies to be more relevant.
(iv) GIS can help to locate the school appropriately in their various local government areas. Some communities may claim that a particular school belongs to their local government but through the help of GIS, it becomes clear where the school actually belongs to.

Various software are available for carrying out analyses in GIS. A very popular one that can be used in the field of education is the ArcGIS. A situation where the GPS and GIS facilities are not available, the political ward analysis can be employed to reveal the educational resource situation in the wards.

In order to diagnose the resource situation, data on population, literacy enrolment, teachers, buildings, flow rates of students and infrastructure on the selected items for the past 4 to 5 years or a decade are advisable.

- i. Data on total population by gender, place of origin, age group for basic education (i.e, pre-primary, primary and junior secondary education data) etc., are needed. The following places can help to get information on the population, e.g., the Census Office, the offices of the United Nations Development Programme (UNDP), The United Nations Children's Fund (UNICEF), The United Nations Educational, Scientific and Cultural Organization (UNESCO), World Health Organization (WHO), Food and Agriculture Organization (FAO) and The United Nations Human Settlements Programme (UNHabitat). These groups may have been involved in some mapping of catchment areas for different purposes such as health, food, water, education, housing, etc., It is therefore, important that statistics on the population should be sought from these or other related international and national offices.
- ii. Data on literacy can also be obtained from these bodies. Data on enrolment that are required to diagnose the educational situation include literacy rate, enrolment ratios such as enrolment trend index, annual growth rate, absolute growth during the period and then relative growth. Apart from literacy rate, the other rates and ratios (enrolment, retention and drop-out) can be calculated from the data from schools or from the Local Education Authorities and Ministry of Education at the state and national levels.
- iii. Data on teachers include data on the number of teachers by training, gender, qualification and experience. Teacher-pupil ratio is important to assess the present situation of the teachers' workload. All this information can be obtained from the Ministry of Education and the schools. Data from the schools most often are more recent, up to date and comprehensive.

- iv. Information on the school physical resources includes data on the condition of and types of buildings, number of white board, availability and conditions of utilities (water, toilet, electricity) playground, teaching and learning materials. Such information is sought directly from the schools.

Step III: Assessment of the number of children to be enrolled

Due to the paucity, poor management and custody of required data, growth rates and ratio methods are employed in the projection of school enrolment. These data can be obtained from the National Population Commission /Census, UNICEF and UNDP offices. It may be necessary to find out the need for enrolment projections which include:

(i) Provision of additional schools.
(ii) Upgrading of available schools.
(iii) Estimation of the required number of teachers.
(iv) Estimation of additional school buildings, equipment and learning materials.

If enrolment projections are available, then issues of inadequate facilities, teachers, classrooms, etc, will not be a recurrent feature. The facilities ought to be procured periodically by government in the case of public schools and proprietors in the case of private schools.

Step IV: Specify norms, standards and catchment area

Norms and standards are set for use by teachers and for buildings. They entail fixing the optimum size of schools, class size and teacher provision at each level of the educational system. This will likely ensure efficient and effective management and administrative control. Establishing new schools or even providing alternatives depends on the school age population of the affected locality. e.g.

The Federal Government of Nigeria (2004) in the National Policy on Education has specified the number of children to be in the class at the different levels of the Nigerian educational system. For the kindergarten classes, it is 25 pupils per teacher. For the primary level, it is 35 pupils to a teacher and for the junior and senior secondary levels, it is one teacher to 40 students (FGN, 2004, p. 16).

For new schools, the rule in Nigeria is to open a primary school in areas which hitherto have none within a trekable range. In the country, in implementing the compulsory basic education programme, it is expected that schools should be located at a trekable range of one kilometre from the pupils' homes (Duze, 2010). In school mapping, the maximum acceptable distance recommended for pupils/ students to travel from home to school constitutes the catchment area. A journey of more than 60 minutes can be considered to be detrimental to school work.

Other norms are minimum and maximum numbers of periods a teacher should teach in the secondary school. Norms in respect of teachers' services vary according to the level of education. The average number of hours a teacher should work is specified, but maximum and minimum numbers are given as well. In primary schools, a teacher is responsible for teaching a single class. In this case, the hours worked are the same for all teachers.

Step V: Assessment of the facilities in schools

If population and potential growth in enrolment is established, then additional infrastructural facilities such as renovation of dilapidated and abandoned buildings and building of new schools, classrooms, laboratories, workshops, etc., may be required in the existing schools. This is where the actual diagnosis of school buildings and equipment and staffing conditions takes place. Within the purview of school mapping, the diagnosis of school buildings and equipment should make it possible to:

(i) assess the general availability and quality of school buildings;
(ii) identify priority areas for action in respect of renovating or extending buildings;
(iii) identify the areas most disadvantaged in respect of available equipment;
(iv) assess true school capacity; and
(v) show which schools are under-utilized or conversely, overloaded.

In order to get information in respect of the above, a special survey becomes an option because this information is not usually available in the Ministry of Education's annual statistics but it can be captured from the schools with the aid of checklists.

Teaching staff and the construction and maintenance of buildings cost a lot of money and the resources available for education are limited, and so, they must be put to the best use possible, hence, the need to assess the utilization rate of the facilities.

For a new school, assessment of the facilities can be easily done whereas for an existing school, it will be more tasking because the resource situation has to be ascertained before consideration for additional ones can be made. Teaching and non-teaching staff are a part of the facilities required in any school and so, the assessment of their utilization is very important. Using norms and standards, it is possible to investigate the workload of the teachers. It is only when this has been done that one can demand for more teachers where the workload is much or redistribute the teachers where the workload is below the norm.

Achievements in the educational system are dependent on the personnel, especially the teachers. The following information on the teaching staff will help in the diagnosis:

a. The quality of the teaching staff such as years of teaching experience, possession of professional qualifications and, attendance at training/ refresher courses.
(b) The number of pupils per class.
(c) The pupil/teacher ratio.
(d) Teachers' working hours which are also referred to as teachers' average teaching load.

In assessing the above mentioned elements, the norm and standard of the state or the national norm will be the yardstick.

In assessing the teaching equipment, there is the need to assess:

(a) Percentage of schools with writing boards.
(b) Percentage of schools with well furnished science laboratories.
(c) Percentage of schools with adequate classrooms.
(d) Percentage of schools with pupils/ students' tables and chairs.
(e) Percentage of schools with libraries.
(f) Percentage of schools with staff rooms, teachers' tables and chairs.
(g) Percentage of classes where:
(i) Pupils have enough textbooks, exercise books, writing materials such as biros, pencils, mathematical sets, etc.,

(ii) Percentages of schools which arrange school lunches.

Checklists can be designed to collect information on the teaching equipment. It is pertinent to note that checklists which are designed to collect data for school mapping should have both content and face validity. The input of experts in educational planning is very crucial. A pilot use of the checklist in an area that is not to be in the main exercise will reveal aspects that should be modified. The end result of this diagnosis will give a deeper understanding of the characteristics of the resource situation.

Step VI: Making Cost Estimates

Based on the identified requirements, cost estimates can be made.

To have a functional plan, it is necessary to have a seventh step which is to prepare a proposal for funding or have local operational plans.

Step VII: Preparing the operational plan (proposal)

Once the cost estimates are made, the proposal can be prepared for funding. For instance, the proposal is in terms of provision of primary/secondary schools where they do not exist, classrooms to be built or renovated, and furniture to be procured. All these are done in relation to the norm guiding the number of pupils per class and teachers' requirement.

(d) **Characteristics of School Mapping**

From the steps involved in carrying out a school mapping exercise, one can deduce the following characteristics.

(i) School mapping helps to generate data on the educational needs of localities and therefore, ensures equity in the distribution of education resources at the local level.
(ii) It is a strategic tool which reveals cases of inequalities through its diagnosis strategy.
(iii) It ensures equity in the distribution of educational resources such as teachers, materials, equipment etc
(iv) It is a powerful planning instrument which ensures equalization of educational openings because it reveals the instances and levels of educational facilities.

(v) It assists in channelling educational investment to hitherto neglected areas.

(e) **Factors that Influence School Mapping**

The preparation of a school map requires the following considerations:

(i). Demographic factors: Availability of reliable data is one of the greatest difficulties in school mapping. Data from the census office readily make available information on the growth rate of the population (Caillods, 1983). Data can also be accessed from organizations such as UNDP, UNICEF, etc.

(ii). Educational factors: A number of parameters are considered. They include normal periods of utilization of school site, a weekly timetable showing breakdown by subjects, teachers' level of specialization and workload, possibility of double shifts for pupils, etc (Oluchukwu, 2000). Norms and standards of the locality will guide decisions in these parameters. Standard sizes must be fixed so that institutions can be run with full utilization of teachers and premises. Minimum and maximum school and class sizes and teacher - pupil ratio need to be fixed. The national standard should guide the states in this direction.

(iii). Geographic factors require the study of the road network to the school. The nature of the roads and means of transport have implication for the time it takes the children to get to school. Hallak (1977) prescribed that the maximum acceptable time taken in getting to schools should be in the neighbourhood of 45 minutes for primary school children in any country. Caillods (1983) however, warned that what is easy in a non - hilly region may be burdensome in a mountainous one. This situation must be kept in mind when establishing the table of distances.

(iv). Economic factors require that low-cost solutions be sought such as a double shift. The economic situation of the place determines the standard and the minimum and maximum sizes for educational institutions. Where the people are poor and government has not built schools, town halls, church or mosque premises can be used for schooling. Under no circumstance must children be denied formal education, especially at the basic education level.

(v). Political factors are evident in the social demand for schools in many localities. Every community sees the school as a benefit and lobbies for it. The political class is bound to decide on the creation or expansion of educational institutions to meet the yearning of the people. Yielding to the people's demand may be seen as a way of ensuring equity and putting all children on an equal education pedestal.

(vi). The collaboration factor involves reaching out to other national and international organizations such as the census office, UNDP, UNICEF, Ministry of Education and UBE office for statistics on population.

(f) **Recommendations for a School Mapping**

(i) The flow of and sharing of data should be made more accessible, and this can be made feasible by the provision of internet linkage. This will help to link all the local government areas in a state and states to the Federal Ministry of Education.

(ii) To ensure a holistic and comprehensive assessment of the educational system, private schools should be included in a school mapping of the formal educational system. Using only public schools may give a false impression of the situation on ground. In Nigeria today, private schools are quite prominent and have gained much ground. They are even more in number in some localities. For instance, in Edo State, there are 302 public and 606 private secondary schools (Ministry of Education, 2016).

Summary

This section on school mapping attempted to explain the concept, meaning and origin of the term school mapping. Its functions and objectives were outlined. The seven steps involved in school mapping were clearly identified and given detailed analyses. The steps are: (i) choosing a locality for the exercise; (ii) assessing the resource situation in the selected area; (iii) assessment of the number of children to be enrolled; (iv) Specifying norms, standards and catchment area; (v) assessment of the facilities in schools. The roles of Global Positioning System (GPS) and Geographic Information System (GIS) were highlighted; (iv) based on the identified requirements, cost estimates can be made; and (Vii) preparing a proposal for funding or having a local operational plan.

The factors to be considered in a school mapping exercise were identified as demographic, educational, geographic, economic, and political.

In order to improve on school mapping activities, it was recommended that there be internet linkage of all the local government areas and states to the Federal Ministry of Education. Also recommended was that private schools should be incorporated to make school mapping of formal schools a holistic one.

Implication for Educational Management

Ensuring equity and equality in the provision of educational resources is a task for educational managers. This is better achieved by diagnosing the school system to find out areas that are deprived of resources, especially schools. Human and material resources are allocated to schools and so if a community does not have a school ab initio it has been deprived. It therefore follows that regular stock taking of educational resources must be carried out.

Sample research topics

1. Assessment of distance travelled to public schools by pupils and students and its effects on school attendance in Nigeria.
2. An investigation into the utilization rate of resources in selected secondary schools in Oredo Local Government Area of Edo State.
3. Comparative analysis of the social cost of public and private secondary schools in Oredo Local Government Area of Edo State.
4. Analysis of enrolment trend of pre-primary pupils in Edo State.
5. Accessibility to basic education in Orhiomnwon Local Government Area of Edo State.

Review Questions

1a. Define the concept “school mapping.”

1b. What is its relevance to accessibility to educational facilities?

2. Briefly discuss the steps involved in a school mapping exercise.

3a. Enumerate the sources of data for a school mapping exercise.

3b. A school mapping exercise is inevitable no matter the level of development of a nation. Do you agree with this assertion? Give reasons for your stance.

4. Briefly explain why a school mapping exercise is better carried out at the local government level in Nigeria
5. Briefly explain the factors that can influence a school mapping exercise.

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Chapter 25

Performance Management in Schools

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Introduction

Schools are established to achieve some specific objectives. These are not attainable without the employment of personnel required to carry out some activities to help schools to achieve the aims. The school heads that are regarded as managers of the schools have to objectively evaluate the performance of these personnel for the survival of the schools and the achievement of the set goals. The quality of education produced in most schools nowadays, is a function of the rate and quality of Performance Management (PM) practices adopted to evaluate the human resources in the school. Hence, PM in schools has become an important tool employed by school management teams to raise the standard of education system, improve quality and enhance the levels at which educational goals are attained. It is also meant to improve the accountability of the operators of the school system.PM is a tool used to encourage educators with respect to their experience on the job so as to improve the progress of teachers. In addition, good school performance is enhanced. Indicators such as students' academic performances are used in PM in order to make teachers and schools generate performance indicators to manage performance in schools. Therefore, in this chapter, effort is made to discuss the meaning of PM, concepts in PM, PM in schools, purposes of PM in schools, principles of PM, the process of PM, steps involved in PM, strategies of PM and challenges facing PM in schools. The summary of the chapter is provided, and review or tutorial questions are presented to evaluate students' understanding of the issued raised. Relevant sample research topics are also highlighted to conclude the chapter.

Meaning of Performance Management

The concept of PM is applicable to all fields of human endeavour such as health, education, business and so on. Scholars have defined PM in various ways. It is the process by which the school aligns its activities with its objective for the purpose of determining the degree to which the objectives are being achieved. It is a goal setting process which frequently examines the extent to which these goals are achieved for the development of the school. It involves programmes that are geared towards ensuring that school goals are tirelessly, effectively and efficiently achieved. The general goal of PM is to ensure that the school and its subunit (processes, units, teams, etc.) work together in order to realise the goals anticipated by the school. PM can be applied in various sectors such as performance of teachers, performance of business, health care, health outcome and education performance measures. It attempts to bring into limelight all the school subsystems in order to accomplish its aims. The emphasis of PM is to influence the general performance of the school management (HRSA, 2011). Mwita (2000) saw PM as any organised strategy to enhance school performance. PM is also seen as the procedure of bringing continued accomplishment to school administrations by developing competences of stakeholders in the school system(Armstrong& Baron, 1998). It is a practise whereby the school mixes its performance with its official and purposeful policies and objectives (Cheng, Dainty, & Moore 2007). It can also be defined as the utilisation of PM data to bring about constructive transformation in administrative philosophy, schemes and procedures by setting common performance goals, assigning and ordering resources and updating school principals to either authorise or modify an existing strategy or programme (Amaratunga, & Baldry, 2003). According to Srinivas (2007), PM can be defined as a procedure of planning and implementing motivational strategies and drives with the aim of transforming the fresh potential of human resource into performance. According to Armstrong (2006), it is a logical process for enlightening school performance by evolving the output of teachers and teams. From the above definitions, it may be deduced that

PM is concerned with improving not only the performance of the individual teacher, but also that of the team and the school for the achievement of the stated objectives.

As teachers' expertise depends on improving valuable and significant knowledge about what it takes to be an educator in their actual setting. The terms PM and job knowledge play an important function in assisting the philosophical practice of teachers and the school head in the work settings. In such a situation, PM structure is required to assess teachers' performance in order to provide a justification for a realistic context to advance the worth of teaching and learning (Kagioglou, Cooper, & Aouad, 2001; Randall, 2009). Furthermore, PM acknowledges the significance of instruction for the excellence of Educational Management at all stages. This means that teachers enhance the teaching career through a close supervision of their performance (Down, Chadbourne, & Hogan, 1999).

PM is a challenging activity for the development of capital specialists, and it is especially significant to the teachers and schools in their bid to reconsider and restructure PM systems so as to ensure excellence in teaching and learning (Buchner, 2007; Down, Chadbourne, &Hogan, 1999; Rhodes, & Beneicke, 2002). PM is a practice for creating common knowledge about future accomplishment and strategies to accomplish it and human resource management practices to improve achievement (Kagioglou, Cooper, &Aouad, 2001; Pretorius, & Ngwenya, 2008; Storey 2002).

Concepts in Performance Management

Performance Planning: This is a process that encompasses an exchange of ideas between an administrator and the teacher to establish strong and definite performance opportunities at the commencement of the performance period. It is an interaction between a school principal and the teachers in order to establish and reach an agreement on performance prospects, make clear what the teacher will be appraised on, and fix the phase for continuing feedback and preparation throughout the school year.

Performance Measurement: Performance measurement is a system by which a school screens vital phases of its curricula, structures, and practices. In this situation, it comprises the functioning practices used to gather facts essential to the performance measures. At the end of the performance measurement process, the school determines the extent to which educational goals and objective have been achieved.

Performance Evaluation: Performance evaluation means the dispassionate and idiosyncratic consideration of how to quantify and estimate teacher performance outcomes. Impartial measures of performance are indicators such as students' level of discipline and students' academic performance. Independent indicators characteristically encompass gathering evidence about teachers' undertakings and measuring the influence of these contributions. Performance evaluation data is useful for managerial purposes in relation to teacher performance. In order to evaluate teachers' performance, questions such as: is performance improvement essential? Is teacher performance agreeable? Is the teacher equipped for elevation to an innovative role? Appraising performance consists of thoughtfulness of the dynamics involving teacher performance achievement. These elements take account of the awareness, capacities, abilities and individual personalities possessed by the teacher as they are related to the practical, social and headship requirements of the role of his job (ANSI, 2012).

Performance Improvement: This is a positive change in the performance of a teacher and that of the school as a whole. When performance improves, the school should be able to maintain and operate at this level for it to achieve the desired goals and objectives. It provides a vehicle for open dialogues and consistent feedback which can allow the teacher (who has not met the set standard) the prospect to do well or the supervisor to organize for open-minded corrective actions. A performance improvement plan includes both the feedback conversation and documentation.

Performance Review: This is an exceptionally significant element of the whole performance management process. It is the concluding talk between the principal and the teacher concerning when performance surpass, meet or fall below anticipation. The knowledge and progress desired and established, purposes that were set and attained by the teacher, and the response from people which was affected by the teacher's performance are also looked into (HRSA, 2014)**.** The performance review process varies according to the school's current policy programmes, plans, goals and structural philosophy. The fundamentals of the analysis procedure are germane to the education system. This process is differentiated from the configuration and tools used by each specific organization; rather, it emphasizes on how the performance review process is applied (ANSI, 2012).

Performance Management in Schools

Education is a lifetime activity that is nourished by the accomplishments of teachers, students and school heads so as to improve its excellence. Considering PM in schools is a strong indication to coordinate successes and maintain excellence in teaching and learning purposes (Barber, 2000; Fitzgerald, 2000). In this context, coordinating performance brings about stability and unity in the activity of the schools (Silcock, 2002).

PM is acknowledged as the practice of achieving a persistent improvement of schools by increasing competencies of individual teachers and as a team (Armstrong& Baron, 1998; Waal, Hafizi, Rahbar, & Rowshan, 2010). PM in schools entails the forecasting of teachers' performance goals, the thinking on supervision reports, performance quantification, the motivation-discipline system, and the connection between teacher performance and the values of the school and work know-how which offer optimistic outcomes in modifying structures and procedures by assigning and ordering inputs within common objectives of the school.

This in addition is premised on the PM scope which are the arrangements of teacher performance objectives, consideration of observation reports, performance measurement, reward - punishment and the connection between teacher performance and the culture of the school.

Education and manpower Bureau (2003) highlighted the under listed as the goals of putting in place teachers'PM.

Accountability in Schools

a. to fix approved performance goals and monitor the progress by evaluating real performance in contrast to the targets.

b. to support the school administration in measuring teachers' performance, making sure that teachers are committed to their responsibilities and also developing their teaching success in order to deliver quality education.
c. to assist in detecting and managing instances of low performance.
d. to make accurate records, which serve as vital evidence in elevating and assisting teachers who do not perform to expectation available to the school management.

Teacher Motivation in Schools

a. to identify the accomplishments of teachers, review real teaching practice and inspire the improvement of excellent teaching.
b. to offer positive responses to individual teachers.

Professional Development of Teachers

a. to help teachers in detecting their capabilities, extents and techniques for improvement in order to raise their professional competence and develop team spirit for the general development of the school.
b. to provide assistance to teachers who have problems in their performance.
c. to provide appropriate data on teachers' work so that schools can evolve suitable strategies for teachers' development practices.

Principles of Performance Management in Schools

A result-oriented PM system assists schools, the school heads and the teachers to achieve the aims and objectives of the school. Therefore, performance management is an instrument for determining the rate of success in schools. The following principles should be considered:

i. PM is a joint obligation of an extraordinary performance in the school organisation.
ii. PM stabilizes independence and responsibility of teachers and the school.
iii. Positive performance and constant learning should be stimulated and reinforced in the school.

iv. PM must be incorporated into ethics and policies within the school setting.

iv. PM must serve as indicators of main proficiencies for non-teaching staff, heads of departments and school heads.

Process of Performance Management

The PM process is divided in to two main stages. According to University of the Missouri Division of Finance & Administration (2008), these phases are information and data collection and instructing and getting teachers ready

Information and Data Collection Phase

The PM practice of the school is duty-bound to align teachers' performance prospects to the achievement of the unit, division or school. The nature of facts and records that is useful in associating teachers' performance with school goals and objectives consists of the following:

a. the long term plan of the school.
b. the long term plans of the department or unit (note that plans should be in alignment with each other and supportive of the school's strategic plan)
c. a year plan of the department or unit.
d. job outline of each teacher
e. assessment of the performance of each teacher for the preceding session

Instructing and Getting Teacher Ready Phase

Teachers need to comprehend the rationale for PM, its operation, what to anticipate, and their expected roles. Some of the critical issues that teachers should be acquainted with are highlighted below:

a. the purpose of PM in school
b. how it will benefit the teacher, the school head, and the school.
c. the administrator's overall lthinking or style.

Teachers equally need to be familiar with expectations during the preparation and assessment meetings:

• What will take place during the performance planning meeting?
• What types of effort are teachers expected to put in?
• What types of questions are teachers going to be asked?

- What decisions are to be made during the meeting?
- How elastic will the targets and work responsibilities be?
- What categories of groundwork do teachers need to put in place?
- What will be the duration of the meeting?
- What will take place at the annual evaluation?
- How will discrepancies be integrated?
- How will assessment influence salaries?

Steps in PM Process

The accomplishment of the PM procedure is greatly reliant on the function and experience of the school principals, and their capability and impact in bringing about transformation. Performance management includes a sequence of stages with some entrenched choices (HRSA, 2011)

Step 1: Appraisal of School Priorities

The first step guarantees that the resources set aside to control and quantity performance are in accordance with the school long-term goals and operation. The main purpose of assessing and controlling performance is to guarantee improvement in quality. The discussion about a school's main concern ought to include the public assessment, the school's long-term plan, quality management plan, and equally important official papers. Frequently, a school by itself determines its emphasis. In certain instances, enhancements of main concerns are determined by financial resource expectations, external assistance, or authorizing agencies. One main factor of the first step is that the conversation should center on what form of quality does the school want to deliver? What community desires need to be a priority to the school? How can the school competently use resources to meet its needs?

Step 2: Select Performance Indicators

After the discussion of vital things to be measured by the school, the following stage is to select explicit performance indicators. Appreciating that the delivery of instruction involves many arrangements and practises, performance indicators serve as pointers to the effective functioning of those systems and processes. The school needs therefore, to reflect on the following in choosing performance indicators:

a. Measure what is paramount premised on the appraisal of a school's community, population, and priorities as determined in Step 1.
b. Measure what it takes to assess financial or contractual expectations

Step 3: Define a Reference point

Once performance measures are determined, the school needs to gather the standard data for every measure. Reference point data is a portrait of the performance of a procedure or consequence that is considered regular, average, or typical over a period of time and reflects existing instructional systems. Estimating the reference point data encompasses computing performance measures. As the performance measures evaluate performance before the beginning of a programme, it frequently shows that the data reveals a less-desired performance. This situation must not bother the school management, nonetheless, this should bring about a situation to emphasise quality improvement efforts to increase performance. Documented performance indicators comprise facts about the numerator and denominator to calculate the measure.

Step 4: Evaluate Performance

When the calculation of baseline is complete, the school determines if performance is acceptable or performance progress is required. To offer a framework for assessing baseline data, the school may decide to equate and standardise its data against other schools. Benchmarking is a process of comparing the school performance level with other school system best practices which may include information from local, regional or national sources. Benchmarking ensures impartiality in the analysis of performance and recognises the strong and weak points of an institution.

Step 5: Develop a Plan and Make Changes to Improve Performance

A school needs to put in place a strategy that will enhance its performance. This means that the school should pre-determine to improve the quality of education provided conventional strategies are put in place. This will help the school to make some amendments to enhance performance improvements. A quality improvement plan is a strategy for recognising and executing detailed changes in procedures that may bring about increased performance.

Step 6: Monitor Performance over Time

A strategic part of quality improvement is to determine when changes occur. In a similar manner data for the reference point measurement is determined, and the determination of performance indicators should be carried out intermittently. A school should aggressively undertake improvement work, usually on a monthly basis. As performance is determined over a period of time, a trend develops. It is essential to use similar practice to gather and compute the data each time.

Changes that increase the fundamental critical pathway often reflect enhanced performance on the measure. A school may choose to carry on its development undertakings as it moves toward its objective for the performance measure. A school that does not improve may reflect on the trend data and use the situation to re-evaluate its method. All changes do not result in development and thinking about other change prospects may be necessary to bring back improvement. Most schools always examine changes and make progress until their goals have been achieved.

Strategies for Performance Management in Schools

A strategy may be viewed as a way or method adopted to achieve a particular goal. In the context of the school, a strategy may be defined as a method adopted by the school management for the achievement of the school's objectives. Srinivas (2007) identified seven strategies for PM which may be adopted in the school. They are:

Reward-Based Performance Management: This involves rewarding workers for the work done, while expecting that the motivation of a reward will inspire other staff to struggle to put more efforts into their work in the future. Incentives must ensure that all workers are treated equitably for a fulfillment of their financial and non-financial (granting work freedom, participating in decision making processes, interpersonal relationship among members of staff, security of job, encouragement of informal setting at the place of work, conducive working environment, etc) obligations and recognition urge for their input to accomplish theirschool goals and objectives.

Career-Based Performance Management: A career is described as a series of jobs engaged in by an individual in his/her professional life in the same organizations or similar ones. In the context of schools, career-based PM is defined as a combined effort of an individual teacher and a school to foster and develop the aptitude and attitude of that teacher in order to provide results for both the teacher and the school as a whole. A well planned, developed and implemented career system can:

(a) Enhance a school's performance.
(b) Soar the pace of innovation.
(c) Reduce employees' attrition rate.
(d) Enhance employees' commitment and loyalty.
(e) Optimize staffing (Srinivas, 2007).

Team-Based Performance Management: Teamwork is an activity in which tasks are mutually dependent and carried out by different teachers in a cooperative style with distinct skills so as to have collective goals with increased performance excellence. In this context, a team is a group of teachers who work collaboratively with their distinctive skills to accomplish a common goal in well-organized manner. Cohesive nature of team members, working to achieve a common goal, performing on a job with a good purpose, leveraging on strengths of fellow teachers, assisting and supporting each other, working in partnership on multi-disciplinary issues and commitment to teamwork are prime characteristics of a team-based PM.

Culture-Based PM: Srinivas (2007) believed that culture is the most dominant and imperceptible component of PM. To a great level, it is answerable to the school's good or poor performance. Culture is definite, crystallized, operationalized, forced and established by the members of the school community to make improvement and achieve the set goals in the school in a definite direction. This is attained by creating values, morals, customs, assumptions, traditions, ideologies, languages, norms, legends, stories and anecdotes. This therefore, indicates that culture is the most important determinant of schools' performance. Schools in their quest to attain excellence must manage their culture professionally and in a systematic way.

Measurement-Based PM: Measurement-based PM demonstrates that human element of the school system can be measured with accuracy and objectivity. There is a great myth surrounding human resource management that its roles in enhancing school effectiveness cannot be measured. This inappropriate conception is squarely responsible for the low significance of human resource management in schools. Performance cannot be managed unless it is measurable. Measurement in the context of performance management has a very broad meaning. It is defined as a set of instruments used to establish the efficacy, usefulness and impact of PM in the improvement of schools' and teachers' performance and also an instrument through which performance benchmarks are set.

Competency-Based Performance Management: This facilitates the involvement of teachers for the accomplishment of school goals and objectives. This is carried out by combining the role of every teacher and the operation of every section with those of the school's goals in terms of competencies. Implementation of a competency strategy not only guarantees availability of necessary human competences to perform various activities associated with the said goal achievement in not just short and medium terms but also in long term. Teachers independently and jointly have the opportunities to see a direct and clear connection between capabilities they hold and the necessity of such capabilities to attain the school's goals.

Leadership-Based Performance Management: In this context, leadership is seen as a state of affairs and situations by sharply connecting the goals of PM strategies with school strategies. The essence of leadership in schools is attaining performance quality in all facets of the school's activities. Leadership is the basis of PM. In fact, leadership is the core of performance management because leaders have to lead the other six PM strategies. Salient reasons for its supremacy include the following: defining content, mobilizing resources, positioning of leadership as a key factor, leading change, motivating people and delivering results.

Challenges of PM in Schools

PM in schools is an important procedure that helps in achieving the objectives for which schools are set up. As important as this process is, it is not without some challenges. Some of these challenges are discussed below:

(1) Lack of Knowledge and Skills: - This is regarded as a challenge to PM in Nigerian schools. The heads of schools who measure the performance of the teachers also lack the technical know-how. Ogunjide (2007) recommended that seminars and conferences should be organized for school heads so as to equip them with the knowledge and skill of PM.

(2) Shortage of Resources in Schools: - Managing teachers' performance in schools requires a lot of resources such as money, materials and time. These are not adequately provided in Nigerian schools, particularly in this period of economic hardship.

(3) Lack of Motivation for Teachers Who Performed Well: - The main motive of PM in the school system is to get the best teachers' performance which translates into the achievement of the school's goals. Teachers who perform extremely well are usually motivated. This encourages others to emulate them.

(4) Equity Issue:-Many school heads who evaluate the performance of the teachers in their schools always engage in nepotism and favoritism. This is because their result is subjective rather than being objective.

Summary

PM is an instrument for enhancing the school's instructional process and it guarantees teachers' expertise in terms of competence and conscientiousness which are very important to the production of quality education in schools. In a well-articulated staff PM system, the tools and processes constitute a cherished capacity building for teachers and enable the school administration to measure teachers' performance. PM system assists in identifying and inspiring good performance, recognizing areas for improvement, and improving overall performance of teachers and the school system as a whole.

Review Questions

1. Examine the concept of Performance Management, stating its basic components.
2. Discuss any five concepts in performance management and how they can improve teachers' performance.
3. Highlight the objectives of performance management in schools and examine the strategies for effective performance management in the Nigerian school system.
4. Discuss the process of performance management in schools.

Sample Research Topics

1. Measuring and Managing Performance in Nigerian Secondary Schools.
2. Performance Management and Teachers' Effectiveness in Secondary Schools.
3. Performance Measurement and Evaluation for Teachers' Effectiveness in Schools.
4. Quality assurance strategies and Academic Staff performance in Universities.

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About the Book

The book, Educational Management: New Perspectives, exposes the salient and critical issues in the management of all levels of the educational sector. It will acquaint the readership with the concepts, principles and functions of educational management. Other issues relating to discipline, record keeping, mentoring, decision making, conflict management, school climate, facilities maintenance, school supervision, unionism, management theories, personnel management, research methods, time management and ethical issues are discussed.

Also included in this text are topics on economics of education, accountability, demography, educational financing, educational management information system, manpower planning, politics of education, school mapping, approaches to educational planning and performance management in schools. The book has twenty five chapters contributed by scholars drawn from tertiary institutions in Nigeria.

Students and lecturers of tertiary institutions at both undergraduate and postgraduate levels including colleges of education and polytechnics will find the book useful. It will also be a guide for policy makers, educational planners and administrators and classroom teachers. Members of the public in any discipline who may occupy a position of authority, management of human and non – human resources, will also find this book a valuable companion.