

# COMPUTERISATION OF FILING SYSTEM

A CASE STUDY OF GURARA LOCAL  
GOVERNMENT EDUCATION AUTHORITY

GAWU - BABANGIDA

BY

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## APPROVAL PAGE

The project has been read and approved as meeting requirement of the Department of Mathematics and Computer Science, Federal University of Technology Minna.

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## DEDICATION

This research project is dedicated to my father Mallam Yakubu Tukura, Abubakar Tando and my Late Mother Nana Wusa Tukura for their moral support since birth.

My Late Child Young Ali Mohammed , Late Monday 25/3/96 for his Love during my studentship.

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## **ABSTRACT**

*It is obvious that the demand for reliable information on educational development with respect to the rapid trend of technological advancement is over-emphasised. The information bank of our educational system in the primary schools today need to be modernised to the trend of our modern technology. Therefore, this study was designed to find an easy way of assisting in the schools by developing a computerised system of filing for better management of the schools since the present system used is not reliable and exposed to insecurity.*

*This system is developed to utilise the opportunity in building up a databank for the school management which can be updated with time. The system will also provide an up-to-date and reliable information on the current changes and development of the primary education system in the country. The main computer language used in writing the program is Database III PLUS.*



## *CHAPTER ONE*

### *INTRODUCTION*

#### *1.1 BACKGROUND OF THE STUDY*

The dearth of reliable data on primary education provision in this country has been of concern to the nation. The country have been trailing behind in the development race perhaps because of lack of the mechanism to keep up to the trend of the development in the western world. The availability of information at the time most needed is an important tool towards decision making which in turn enhance the implementation of this country educationally.

Considering the filing system, it is a procedure or method of organising documents in a file to preserve them for future reference. A file is a folder mostly used today in our offices containing an organised records usually grouped together for purposes of access control, retrieval and modification. The object of the file is to bring together in one folder all documents data, minutes etc, referring to the given subject so that they may instantly be produced when needed.

Today, there are two file systems used in most of the govt. offices.

- i. Split file
- ii. The book file

The split file is a system of filing whereby all document, minutes are put on the left hand side of the files and the incoming or outgoing correspondence placed on the right hand side and numbered consecutively from the bottom to the top. While the

Book system is a method of filing where all letters and minutes interspersed are enclosed on the left hand of the file - face to cover in chronological order and numbered on the top right hand corner as the case may be.

The storage of these files is most important. most offices with a large volume of files prefer using wooden or metal file rack consisting of a number of shelves or pigeon holes in which files are stored in numerical order instead of going for expensive file cabinets. Though some organisations use the file cabinets for their secret files.

There are two methods of storage, i.e Horizontal and Vertical system.

Horizontal system is a system where files are stored one on top of the other with the lowest number on the top, and highest at the bottom.

Vertical system is practised in two ways:-

- (i) The file jacket should be capable of standing on the edges by themselves and arranged in form of bookshelves.
- (ii) The second system is whereby file cabinet consisting of four drawers and each drawer containing 50 file at most are used. Files are held up with the aid of folded suspended pockets. Each pocket has a comprehensive plate in which the title and number of the file can be written.

Filing system in our primary schools and the need for development of information system in educational administration has been felt and the need for the use of computer as the most reliable system of filing our records is greatly appreciated.

With computer approach, information is stored in file. Here the file is like a cassette tape with data recorded on it. Like the file in the office, the data is held together with those related on the same subjects. For example, a file called personnel record and other called video addresses.

Within a file, (or tape) the information is separated into records. You may put several hundred records in a file of your choice. The records are equivalent to the sheet of paper held in a file box, on the card in a card file. Each holds information of the same kind, depending on the purpose of the file. For example, in a file called personnel records, these will be a record for each employee. In a file called video tape, there will be a record for each tape in your collection. The information in each records is divided into number of field. The program allows you to have up to four or more field in each records. For example, in personnel file, the field in each records might be:-

- Employee's Name
- Employee's Address and Phone Number
- Coded Information about Department Salary Scale
- Tax Code etc.

A field may be up to 80 characters long. However, field that do not need many characters can be allocated as few as you wish, thus saving memory space and allowing more records to be held in the file.

As above, a field might be on an inventory of structure and equipment of school that facilitate learning.

The purpose of administration is to co-ordinate human material and resources towards the attainment of pre-determined objectives. All the administrative efforts in the context of formal school education are geared towards the enhancement of teaching and learning.

A close examination of the administrative functions, reveals that the main educational administration, has to do with more than just what goes in the classroom. The function and related component parts of educational administration could be seen as follows. Administrative process, decision making, Theory and concept of leadership and administrative structure in education. However, the above are not sufficient on the function of educational administration. The administration in our primary schools comprises of those administrative and supervisory functions and services other than classroom situation.

Since statistics is the backbone of any planning process, data collection and data-banking are vital aspect of the function of our Local Government Education Authority for the purpose of achieving effective planning and management of our primary schools and statistics unit who are the data banks of the LGEA should ensure that relevant information is collected and filed rightly. The following data to be generated by LGEA are worth nothing.

(A) Pupils Enrolment

- No of Male and Female
- No of Pupils in Class
- No of Streams
- No of Classes

The above records form an enrolment file.

(B) Information about an individual pupil, including the academic performance of the pupil.

- Name of the Pupil
- Date of Birth
- Home Address
- Class
- Date of Admission of the Number
- Percentage Score
- Position in Class.

The file number differentiate the file from another.

(C) Information on teachers, featuring number of:

- Teachers (Male & Female)
- Teachers by Qualification
- Teacher attendance and turn over rates.

Keeping an individual Teachers record (personnel data) on school basis to feature the following:

1. Date of 1st Appointment
2. Date of Present Appointment
3. Salary Grade Level and Step
4. Date of Birth
5. Rank
6. Designation
7. Years of Experience
8. Qualification(s)
9. Religion
10. State of Origin and Nationality

(D) Information on physical facility

- i. Number of Classroom
- ii. Availability of Library, Laboratory, Staff-room and General Equipment Inventory to be kept by the LGEA for each school.

For effective management of schools and the achievement of stated objectives in our school, the following files must be kept and maintained well and check constantly by the supervisors. The aim of well filing system, is to present information. The file that are properly kept serve as a data-bank from which the Headmaster and his staff recall stored information when the needs arises. A good filing system which guarantees that no pages are gutted out assist the management in acquiring the right information.

The following are the different type of files needed in our schools.

- i) Admission Files
- ii) Graduation Files
- iii) Corporal Punishment File
- iv) A File Containing Records of Equipment
- v) A File Containing Personnel Records
- vi) Examination File
- vii) Renovation File and Among Others

### 1.2 THE STATEMENT OF PROBLEM

The local method of filing system in our LGEA's today needs more effective, reliable and sufficient hands to handle. For example, a clerical officer receives and file information after

vigorous searching for a file in the file cabinet. This information are filed added to the previous records before forwarding it to the officer for the necessary action.

This method is not economically and technically feasible. The information is easily exposed to insecurity. Frustration sometimes occur when a misplaced file can not be found. The Headmaster may be able to get information needed at a particular time when the clerical officer who knows the filing process is not available. This action may delay in decision.

The problem therefore, is to develop a computerised information system that is capable of assembling data that are processed (e.g summarised, categorised) in such a way that the management can be use to make decision, and the organisation (school) can use to attain its goals.

### 1.3 SIGNIFICANT OF STUDY

For Nigerian to develop economically, she must be able to train large number of her people technologically, if a sound basic for a modern technological society must be created, then there should be a widespread understanding of science and technology. To develop a sound management information system for personnel management in our schools, computer abilities which facilitate the information system must be developed. realising that the application of computerised information system to personnel management is so essential that computer appears to be one of the must developed mental tool available for filing processes. Though, the Government encourages the use of computer and purchased quite a number of micro-computer and distributed

then to some of our State Primary Education Board (SPEBS) and Local Government Education Authority (LGEAs), but not succeeded in achieving its aim because of large number of computer illiteracy in our LGEAS. Most of the Headmasters do not know computer physically take less of making use of it. Those who have the opportunity to attend workshop on computer literacy could not make use of the microcomputer system at their disposal to lack of software package to be used for their school personnel management.

Prompt development of software package which is the computerised data-bank (information) system is needed so that effective measures is taken to tackle the problem of hard task of filing processes in the primary management. Therefore, developed software package in this study would help in overcoming such problem, taking into consideration the accurate and rapid processing of data, vast storage and prompt retrievability of information, and performance of computerisation and logical operations with very high reliability.

#### 1.4 SCOPE AND LIMITATION OF THE STUDY

This study is focused mainly on the computer approach to the filing system of the Local Government Education Authorities. The study covered Gurara Local Government Area of Niger State with special emphasis on the management Primary Education System in terms of personnel infirmations about pupils and Teachers records of the LGEA.

Because of the time factor, and funds available for the study were highly limited, the researcher restricted his research



to Gurara Local Government Area with special attention to Lawan Gwadebe Primary School of the L.G.E.A.

### 1.5 DEFINITION OF TERMS

- (1) Computer:- This is an electronic device that is capable of accepting data (input), processing both mathematical and logical operation within a short period of time in accordance with a predefined program and finally producing the result through the output devices.
- (2) System:- An organised way of accomplishing a stated goal or objective.
- (3) Computer System:- The hardware, software and people that must function together so that a computer can actually process data and generate information.
- (4) Data:- These are raw fact that are fed unto the computer for processing, and information is data that have been processed into a form that is useful to the user. Data can be in the form of number, letters of the alphabet, and any other type of symbol.
- (5) Software:- The instructions, or set of written programs that direct the computer hardware to perform a specific task or set of task so as to achieve a specified result.
- (6) File:- A file is a collection of meaningful information to which the user can attach a name. It is a collection of related data records, usually grouped together for purposes of access control, retrieval and modification.

- (7) Database Management System (DBMS):- The set of operational programs that facilitate the use of a computerised database.
- (8) Management Information System (MIS):- A computer system that integrate equipment, procedures, and organisational personnel to develop information for managerial decision making.
- (9) Personnel System:- A business system that maintains complete files of data on the employees that work in an organisation.
- (10) Information System:- A general term denoting all the operations and procedures involved in a data processing system, i.e including all clerical operations and communications methods used within the organisation.

## CHAPTER TWO

### 2.0 REVIEW OF RELATED LITERATURE

Many studies have been carried out by eminent computer users in various aspects of life. This chapter is carried out with critical appraisal of conclusion based on the researcher's views and opinion of some few writers having relevance to the topic under study.

According to Prof. Thomas K. Adeyanju of NPEC in his paper presented on North-Western Regional meeting at Sokoto June 18th-21st 1995 "Filing System in our Primary Schools and the need for development of information system in educational administration has been felt and the need for the use of computer as the most reliable system of filing records is greatly appreciated." He further stressed that with computer approach, large information can be stored in file with reliability.

Senders (1979), "Data processing whether it is done by hand or by the latest electric methods, consist of input, manipulation and output operation". Input activities involves capturing the data in the form for processing and thus is done using different methods.

In manipulative operations, one or more operations need to be performed on the gathered data, that is classifying, sorting, calculating and summarising. In output and record management activities, one or more of the following activities are performed ie communication, sorting, retrieving and reproducing. All these transformation processes are essential to efficiently manage information.

### 2.1 PRIMARY SCHOOL EDUCATION SYSTEM

Education according to John Dewey "Is that reconstruction or re-organisation of experience, and which increases ability to direct the course of subsequent experience".

According to Olubisi Arunas "Education is a life long process aimed at the all round development of an individual which serves as an instrument for the individual to develop himself, life in harmony and contribute to the development of his society".

In line with the above definitions, a well-planned and effective primary education is a fundamental requirement for any society. This is education given to children who must have attained the age of six years.

At the end of Nigeria National Conference of 8-12 Sept. 1969, the following resolutions were made towards primary education:

- (i) A six-year primary education course is recommended throughout the federation.
- (ii) The age of six is considered suitable for the admission into primary school. However, where and when the need is felt, younger children between three and five years old may be enrolled in Nursery and Kindergarten classes to prepare them for lower primary classes.

### 2.2 THE AIMS AND PURPOSE OF PRIMARY EDUCATION

As defined in the National curriculum of Primary Education of 1969, the aims of primary education are as follows:

1. Character training and development of sound standards of individual conduct and behaviour.
2. Learning something about the community the state and Nigeria and what is of value to the communities and the individuals place in the community.
3. Learning something about Africa and the world and how Nigerian is related to other parts of the world.
4. Achievement of permanent literacy in English and the vernacular.
5. Learning some skills and appreciation of dignity of labour.
6. Physical, emotional and intellectual growth.
7. A sound basis of scientific and reflective thinking.

In translating these aims into action, it must be remembered that any system adopted must cater effectively for the educational abilities, and attitude of every child, so as to give the child; as much education and of such kind as he is capable of absorbing. It should meet the requirement of the society for the kind of economic and social services it needs. Since the country is committed to a democratic system of Government, the system of education adopted must produce democratically minded citizens who would be aware of their country's problems in a changing world situation, and of her own responsibilities in helping to work hard to achieve the stated objectives. The overriding principle with regards to Nigeria is the emphasis on the necessity to create consciousness of National Unity and National Solidarity through education.

(B) Purpose:- The conference noted that the general progress in the country in the last decade in the area of socio-economic

development. It realized that primary education is a terminal education for a great number of Nigeria Primary School-leavers. While a few many have the chance to go on to secondary education. The implication therefore is that the primary school must fulfil two basic functions:-

- (a) Prepare children for life and
- (b) Give those with the necessary background the opportunity to proceed to secondary school.

The conference stressed that a proper balance must be maintained in the curriculum to cater for the interests of the majority who may be unable to go on to secondary school, while the rest is adequately prepared to serve as a nucleus of Nigeria's future manpower needs. Within the two-fold purpose, education should serve to:

- (a) help a child to realize himself
- (b) help the child to relate to others in an atmosphere of natural understanding
- (c) promote self and national economic efficiency
- (d) promote effective citizenship through civic responsibilities
- (e) facilitate national consciousness in the area of National Unity and survival
- (f) promote social and political awareness
- (g) create scientific and technological awareness.

All the above aims and purpose of primary education are in line with the philosophy of Nigeria educational system which is based on the integration of the individual into a sound and effective citizen and equal educational opportunities for all

citizens of the nation at the primary both inside and outside the formal school system.

### 2.3 THE ORGANIZATION SET-UP IN LOCAL GOVERNMENT EDUCATION AUTHORITY (LGEA)

All Local Government Education Authority have bear fully established and to function under decree No. 96 of 1993.

According to the decree, the Local Government Education Authority are expected to administer primary school in their area of inrisdiction, acquire teaching materials and equipment as well as ensure general maintenance of primary schools. They are also expected to take all reasonable steps to ensure full enrolment and attendance in all primary schools in their areas. They are to provide reliable databank and regular feedback on people's reaction to government education measures. The decree enjoins them to give reliable annual report on all activities of the LGEA, especially on teaching and on-teaching staff.

Decree 96 of 1993 which is on the establishment of national primary education commission stated in section 90) that local govt eduction authority is subject to the control of state primary education board section 9(2) states that the authority is to comprise of a part time chairman appointed by the chairman of the local govt and section 9(2i) says that a secretary shall be appointed for the authority who by section 9(3) is to hold office for a period of five years in the first instance with a possible second tenure of five years.

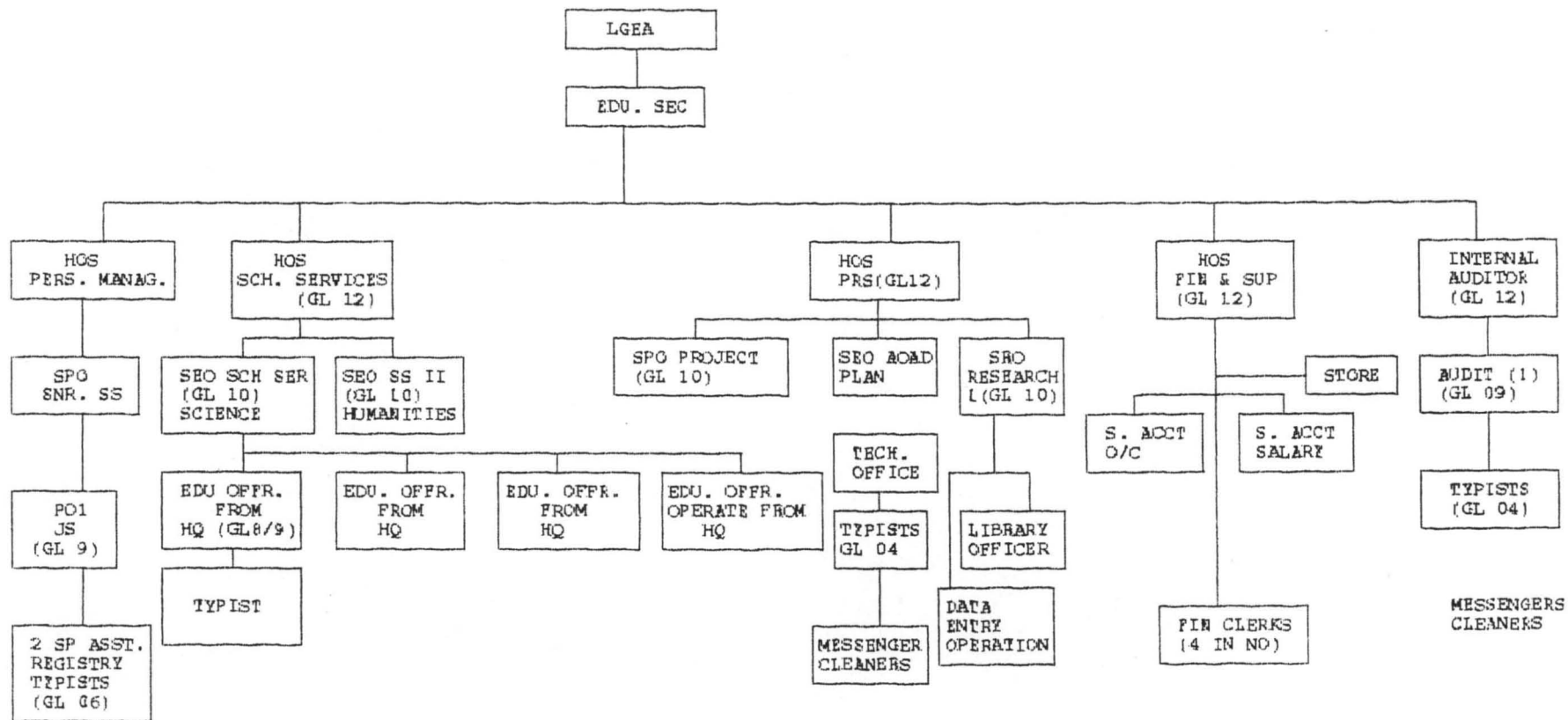
section 10(1) of the decree states that the functions of the authority are to be carried out subject to the control of the

primary education board. These functions shall include among others:

- Day-to-day running of primary schools
- Submission of annual estimates, annual account and monthly returns to the Board.
- Payment of salaries, allowances and benefits to the all teaching and non-teaching staff of the authority
- Acquisition and distribution of materials to primary schools.
- Undertaking of maintenance of primary school buildings and
- ensuring /full enrolment and attendance in schools for the effective management of primary schools, the management of local govt education . Authority has been divided into five major sections, each with their sectional head and respective responsibilities. All the five sectional heads are answerable to the education secretary who is the head of the department. Attached is the organogram of LGEA.



LGEA ORGANOGRAM



(1) Internal Audit:- The section is established with the following objectives:

- (a) Pre-auditing of all payment vouchers before any payment is made.
- (b) Checking compliance with laid down management policies and procedures.
- (c) Detection and prevention of errors or fraud
- (d) Verification of all assets and liabilities and to ensure that the assets are well safeguarded and liabilities have been properly incurred.
- (e) Vetting of all staff claims including retirement of all advances.
- (f) Examination of the LGEA's accounting records, including Cash Book , Advances Ledger, Payroll and fixed Assets Register.
- (g) Examination of Bank Statements and ensuring that Bank Reconciliation statements are prepared on monthly basis.
- (h) Audit visits to all schools to carry out on the spot checks of their Accounting Records.
- (i) Verification of all items/assets in the store bought by the LGEA.

From the foregoing, it can be seen that the purpose of internal Auditing is not only to discover fraud as people think. A properly conducted Internal Audit may reveal discrepancies, mistakes, loopholes and sometimes fraudulent manipulations as a by-product of the work.

(2) Personnel Management Section:- This section is in-charge of recruitment, appointment, promotion, development and discipline, training and personnel performance assessment, leave matter and personnel audit.

(3) School Services:- This section is in-charge of educational services, like abidance and counselling, nomadic education, special education, submission of quarterly report, inclusively curriculum service like organisation of primary school curriculum, interpretation and implementation of lesson rater modules, evaluation of instruction in learning etc.

(4) Planing Research and Statistic:- This section is in-charge of projects, research and statistics, school surveys, complete bill of quantities, supervise projects and other activities under project. Also the section carries out action oriented research on academic and physical projects, building baseline data for research planning, storage and retrieval through computer system, monitoring of policy implementation. The section serves as the databank of the organisation.

(5) Finance and supplies:- The store and supplies are under head of sections direct supervision. The section is subdivided into two, ie. those in-charge of expenditure payroll of Local Education Authority and Accounts/Budget and other in-charge of find to and from Local Government Education Authority and receive the organisation returns.

**2.4 RELATIONSHIP BETWEEN THE STATE PRIMARY EDUCATION, BOARD (SPEB), LOCAL GOVERNMENT EDUCATION AUTHORITY (LGEA) AND DISTRICT EDUCATION COMMITTEE (DEC)**

The District Education Committee is headed by the District Head of the Community and the Headmaster of that community serves as the secretary.

The State Primary Education Board, Local Government Education Authority and the district education committees are statutory bodies established by one enabling decree with the sole purpose of funding and managing primary education in such a way as to improve primary education. They operate at different levels and their operations have cost implications which are coordinated by the commission.

The funding of the three bodies is from three principal sources:- National fund, State Government contribution, and Local Government Contribution which are deducted from the source. The decree No. 96 of 1993 stipulates that New capital projects be carried out by State Primary Education Board, while the Local Government Education Authority will take care of maintenance of School buildings and infrastructure including acquisition and distribution of instructional materials and equipment.

The funds for different primary education purpose are disbursed to State Primary Education Boards to disburse these funds, as appropriate, for his own activities and those of the Local Education Authorities. The Local Government Education

Authorities in turn, makes provisions for their own activities and those of the district education committees.

The State Primary Education Board monitors and moderates the activities of the Local Government Education Authorities and district education committees. While the Local Government Education Authority monitors and moderates the activities of the District committees and school. Hence, the District Education Committees are directly responsible to the Local Government Education Authorities. While the Local Government Education Authorities are directly responsible to state primary education boards.

#### **2.5 COMPUTER APPLICATION TO MANAGEMENT OF PRIMARY SCHOOL.**

Nobate (188) in one of his essays titled "Computer Usage in Modern Education" in the New Nigeria Newspaper ; page 7 of 15/12/88, stressed the increasing trend of computer usage in all spheres of modern life, even in the non-scientific occupation and profession. He, therefore justifiably called for the rapid introduction of computer literacy particularly in our schools.

The recent attempt by the Federal Ministry of Education to introduce computer education in our schools is no doubt a welcome decision in this regard. Talking about computer usage in our schools, an area seems to exist through which computer education, computer literacy, and computer usage can be made more easily acceptable to improve the efficiency of innovations in the educational system in our primary schools.

For the purpose of achieving effective planning and managing of our primary school education, the planning research and statistics unit which is the data bank of the local government education authorities should ensure relevant information are collected and filed rightly through the computer system.

The data to be generated among others by the local government education authorities are:-

- Information about individual pupil.
- Information about teachers and the teaching subjects.
- Information about the various facilities of the school.
- Teacher's payroll.
- Enrolment of pupils records.

## **CHAPTER THREE**

### **3.0 SYSTEM ANALYSIS AND DESIGN**

#### **3.1 INTRODUCTION**

System analysis and design is usually with man-made system involving inputs, processing and outputs. It is a set of interacting elements responding to inputs to produce output. This is the stage where set of rules are required for the solutions to the problems. It involves the listing and ordering of successive steps and activities to be undertaken to achieve the desired goals. In short it is the planned structure and strategy use in developing the software package conceived as management information system so as to obtain solution to the difficult tasking, uneconomic and time wasting traditional way of filing system in primary school to day.

#### **3.2 PROBLEM IDENTIFICATION AND DEFINITION**

the traditional manual nature of filing system in primary schools to day need more effective and reliable method to use problems of this type of nature resulted from the following:-

- (i) Data processing is always very slow due to vigorous nature of searching for a file in the file cabinet.
- (ii) Poor file handing resulting in destruction or mutilation of vital documents.
- (iii) The system occupies a lot of space and very cumbersome.

- (iv) The information is easily exposed to insecurity. Some vital informations can easily be removed out the file.
- (v) Operations are prone to error and
- (vi) Reported cases of missing files.

### 3.3 **FEASIBILITY STUDY**

The feasibility study is the preliminary investigation carried out on the proposed project to determine whether or not the filing system is desirable. The method used to collect data for the study are as following:-

- Documentation review
  - Oral interview and
  - Observation.
- (i) Documentation Review:- this involves the examination of the organisation as well as the operating procedures and functions of various sections and individual office files. The result of the study show how these components relate to one another.
- (ii) Oral interview It is quite true that written documents provide information on how the system should operate but they may not include enough details to allow decisions to be made on the proposals nor do they present current users views about current operations. This made the use of oral interview meritable. This method allows the investigation to have direct discussion with the key personnel in the organisation eg Education Sec. (E/S) principal Research



Officer (PRO) and principal personnel officer (PRO). This enable the writer to have reliable and valid information on how the current system is operating.

Observation: This method is employed because of the desire to obtain not only a first hand information about how activities are carried out but also to actually observe closely how documents are processed and handled through filing system.

#### **SCOPE OF FEASIBILITY STUDY**

The scope of data collection for the feasibility study is limited to the following areas:

- (i) Personnel data
- (ii) Method of data processing.
- (iii) Method of file organisation and storage .
- (iv) File movement/information dissemination
- (v) Security and safely of files.

#### **3.4 TESTING THE PROJECT FEASIBILITY:-**

(a) Operational feasibility:- The operational feasibility (O/F) of the proposed system was conducted during which it was discovered that the new system being envisaged is operationally feasible because of the following:-

- Management have accepted the idea of computerization.
- It was established that officers are going

computerization and .

- There was yawning need for a change for modern technology.

(b) Technical Feasibility:- This study reveals that there are no constraints as to the technical feasibility of this projects. It is developed to be ran with computer which are already available in some of our organisation.

(c) Economical:- The cost for financial feasibility is undertaken to asses the cost and benefits in implementing this project. This is achieve by preparing the estimated cost of implementing the system (ie developing and using the system as well as forecasting the benefits derived from the system.

### 3.5 OBJECTIVE GUIDING THE INVESTIGATION

During the period of investigation a lot of information were gathered on the operation of existing system. It was confirmed that the present filing system has outlived its usefulness because of the following basic facts:-

- The speed with data that are collects and processed is not fast enough to meet the challenges of today.
- The existing system allows too much rom for errors and
- information on personnel matters are not readily available when needed.

- The current system is exposed to insecurity.

Based on the above, it is suggested that a total replacement of the current manual filing system with computerised system too improve performance and solve some difficult problems in preference to the old system.

### 3.6 THE CURRENT SYSTEM

The current system of filing and arranging our documents are traditional manually in nature.

As discussed in chapter one the system is divided into two, i.e

- The Book system of filing and  
The spilt system.

The Book file system is a method of filing where by letters and minutes interspersed are enclosed on the left hand side of the file-face to cover-in chronological order and numbered on the top right hand corner as the case may be.

- The spilt is a system of filing-whereby all minutes are put on the left hand side of the files and the incoming on outgoing correspondence placed on the right hand side, and numbered consecutively from the bottom to the top.

Presently, the spilt system has largely fallen into disuse in this country and most local government offices changed to book filing system.

Currently, there are two general methods of storage of files that is

- Horizontal system and
- Vertical system of filing.

### **3.7 REQUIREMENT SPECIFICATION FOR THE PROPOSED NEW SYSTEM**

The activity leads to a description of features for a new system based on the analysis of data produced during the fact finding investigation. Requirement specification should be done thoroughly because the quality of work performed at this stage would definitely reflect later as a peculiar characteristics of the new system.

Ideally, a requirement specification be formulated according to the needs of the user.

The following are the system requirement specification for the new system.

(i) IBM PC and IBM Compatible.

Intel 80486 Sx/33 MHz ELISHA processor

Tower case 4MB RAM (Expandable at 64 MB)

200MB IDE HARD DISK, ISMS SEEK TIM.

2 serial 1 parallel ports.

4 free expansion sloth

3.5 floppy Disk drive

5.25 floppy Disk drive

101 enhanced key board.

(ii) Output: The Video Display unit:- i.e the screen or monitor of 14" SVGA (1024 x 768 pixel 0.28 dot/pitch is required.

- The Printer:- A serial printer of at least 160 characters

in a line is ideal for pint - cuts, or LQ 1050 Duty Epson printer LQ 2250, LQ1170 or LQ1050 132 column.

Parallel/serial interface

360 x 360 dpi Resolution.

(iii) Environmental Requirement:- Requirement against environment Problem should be provided by the facilities.

(a) Stable Power Supply:- A matchable voltage stabilizer is recommended for the computer system to check power fluctuations. Also APC start Un-interruptible Power Supply (UPS) is required.

(b) Working Temperature:- Computer should be installed to work at 15°C to 25°C temperature range. Thus Air-condition (AC) is needed for a good working condition.

(iv) Accommodation and Furniture:- At least 12m<sup>2</sup> room with computer chair/table and well ventilated with 2HIP. Air-Conditioner is required.

(v) Softwares:- DOS (Operating System Version) 6.00 Tailored program Database (4th generation language structure) and As then Tate DBase III+.

(vi) Consumables:- Sonny Data Cathridges

3.5" HD Diskettes (Maxwell)

5.25" " "

2 Parts plain paper

Ribbons

(vii) Personnel:- The availability of personnel who is versatile in the system or the possibility of having one

trained on the system is another requirement for effective utilization of the system.

### 3.8 COST AND BENEFITS ANALYSIS OF THE NEW SYSTEM

The cost of implementing the processed system would be quite reasonable and affordable as the required computers and all other - systems are available in the market.

Cost analysis could be seen as followings:

(a) Operating Cost

(i) Supplies for one month	=	₦20,000.00
(ii) Equipment maintenance	=	₦10,000.00
(iii) Program maintenance	=	₦12,000.00
(iv) Labour Cost	=	₦ 8,000.00
(v) Utilities Cost	=	₦ 5,000.00
(vi) Miscellaneous expenses.	=	₦ 5,000.00

-----  
₦60,000.00  
=====

(b) Development Cost

- System Analysis and Design for 3 weeks for 150 men for 10 hours at ₦5000 per week = ₦15,000.00

- Software Development

- Equipment (1) PC (Compatible)	-	₦290,000.00
(2) Printer	-	₦120,000.00
(3) Stabilizer	-	5,000.00
(4) Air-conditioner	-	60,000.00
(5) APC Start (UPS)	-	100,000.00

-----  
₦590,000.00  
=====

(c) Consumable

(i) 3.5" HD Diskette - 2PCS at ₦1,200	-	₦2,400.00
(ii) 5.25" " " " "	-	2,400.00
(iii) Installation	-	20,000.00
(iv) Personnel training for 3 men 3 weeks at ₦5000 each	-	15,000.00
Total	=	----- ₦39,800.00 =====
Grand Total of (A+B+C)	-	----- ₦689,800.00 =====

**BENEFITS OF THE PROPOSED SYSTEM**

The likely benefits might include:

- Fast means of data processing and information presentation.
- Reduction in space occupied by file and file cabinets.
- Reduction in time spent in screening and sorting data.
- High degree of accuracy.
- Better management of filing system.
- More effective, reliable and security of information in the organisation.

3.9 **ELEMENT OF DESIGN-INPUT, OUTPUT FILE, AND STORAGE CAPACITY**

- (a) Input:- This mainly concerned with transferring of data or program instructions into memory from some peripheral unit. Data transferred from the input devices are stored in the memory permanently or temporarily. The provision is always there at the installation computer system. The hard and

floppy disks provide for permanent storage. Temporally storage which is provided by Ram (Random access memory) of the computer is not ideal for the work but it is useful for the purpose of entries.

- (b) Output This is the end-product of the data processing. It is often obtained in a printed or plotted form or as a display on the screen or the monitor.
- (c) The storage capacity:- This the amount of information which can be held in store, usually expressed as the number of units of data (words, characters), can be retained over a period of time and allows it to be retrieved and used when required.



## CHAPTER FOUR

### 4.0 SOFTWARE DEVELOPMENT & IMPLEMENTATION

#### 4.1 INTRODUCTION

This process involves the planning of the new system to replace or complement an existing one. This is done after a thorough understanding of the old system and determination on how best the computer can be used if at all necessary to make its operation more effective.

Software development involves the actual writing of computer programs to incorporate all the requirements determined for the system to perform according to specifications. In this segments, description shall be restricted to the steps taken in the development of this system.

#### 4.2 CHOICE IF LANGUAGE

The main computer language use in writing the program that formed the application of software package is the Database III+.

#### 4.3 FEATURE OF THE LANGUAGE CHOSEN

- i. Database III+ program contains English Language such as IF, DO etc which make the programming language easy to be used.
- ii. Database III+ handles storages, retrieval and organisation of information in an efficient manner better than other micro-computer based DBMS eg. COBOL.

- iii. Use of basic filing: Dbase III+ can be used either for basic filing or to construct quite complex application. Its versatility is perhaps one reason why it is so popular.
- iv. User-friendly:- Dbase 3 + can be used either for basic filing or to construct quite complex application. Its versatility is perhaps one reason why it is so popular.
- v. User-friendly:-- Dbase 3 + facilitate for the user queering language in processing information stored.
- vi. programming commands:- It's commands remainder,
- vii. Debugging - Dbase 3 + program bugs:- few programming language after such facilities.
- viii. Report Generation:- It allows for customisation of reports.

#### 4.4 WORKSTATION REQUIREMENTS

The following Hardwares are the Workstation requirements

- (1) IBM 80286 AT WITH processor opened of 16 MHZ
- (2) Harddisk capacity of 20 MB expandable to 30 MB RAM 1024 KG  
(Base 640 EX + 348 KB)
- (3) One parallel part
- (4) One serial part
- (5) Monitor - VGA
- (6) Printer- Epson printer (FX 286 E) with speed NGL 36 cps.  
Normal mode-120 cps
- (7) Power Backup - Uninteruptable power supply (UPS)
- (8) Disk drives -3 1/2 of 1.44 MB & 5 1/4 of 720 KB.

#### 4.5 SOFTWARE REQUIREMENTS AND ITS FEATURES

Software requirements of a computer system is a collection of programs that are responsible for the controlling of the activities of the computer.

The essential features requirements are MS-DOS operating system version 6.00 tailored programm

- Database (4th generation language structure) (Query language)
- Asthon Tate Dbase III+

#### 4.6 SOFTWARE DEVELOPMENT AND TESTING

Software development involves the actual program writing which incorporates all the necessary requirement determined for the system to perform according to the specifications. This helps the programmer to present instructions to the computer in the form the computer will understand. Programming language are concepts which describe the language in which the software development requires the programmer to seek out instructions.

PROGRAM TESTING :- Every program must be tested before it can be used for production runs program testing determines the reliability of the program.

Program testing is also known as debugging. After all arrors or ' buys' have been removed the program is considered to be "error free" and ready to be used for production runs with actual data. The correctiveness of the program logic and the reliability in achieving accurate results must be considered in conjunction with the debugging of program.

#### 4.7 CHANGEOVER PROCEDURE/SYSTEM CONVERSION DOCUMENTATION

This is the process of changing over from the old system to new one. These are four Basic Methods of the change over to new system.

- The parallel
- Defect
- Pilot system
- Phase change over

THE PARALLEL RUNNING :- Here the main attacation is that the old system is left alive and operational until the new system has been proved for at least one system curly full live data in the leaf operational environment of place, people equipment and time.

DIRECT CHANGEOVER :- This Method is the complete replacement of the old system by the new is one Move. It is a Bold Move, which should be undertake only when everyone concerned has confidence in the new system. When a direct changeover is placed system tests and training should be comprehensive, and the changeover itself planned in detail.

PILOT SYSTEM :- Data from one as more previous periods either part or whole of the system is run the new system after result have obtained from the old system and new system is compared with the old system.

PHASE CHANGEOVER :- This involves a series of limited size direct changeovers, the new system introduced piece by piece. A complete part, or logical section, is committed to new system while the remaining part or sections are processed by the system. Only when the selected parts is operating satisfactorily in the reminder transferred.

Out of the above Methods Mentioned direct Method is the best for this study. This is because the old system is replaced with the new one. Direct Method is Mainly good for personnel data.

FILE CONVERSION:- The file of various individual facilities of the school records have to be converted from Manual to computer form.

Presently, each individual staff personnel data and either related information about staff pupils are kept as a record in a file. Therefore with this new system, there is need that individual staff record are entered into the computer files for each staff and pupils. This may take some periods of time due to the nature and population of pupils and staff.

There is also need print out the file to compare with the old files if it will consume papers it can be viewed by the visual display unit (VDU).

#### 4.8 STARTING THE SYSTEM

At the Dos (Disk Operating system) prompt, change directory to DBASE sub - directory or set Dos path to the DBASE

directory if it is not already set in your AUTOEXEC. BAT file  
(Refer to Dos manual for more information on the usage of PATH)

(a) At the Dos prompt,

Type DBASE and press the Enter key

Wait for some few second, DBASE 3 plus will

be loaded and present you with the dot prompt.

Insert your program disk in either A: or B: and change default to the drive where the programs reside by typing the following commands at the dot prompt.

SET DEFA A: or B:

(b) At the dot prompt, Type Do MENU and press the ENTER key.  
DBASE III+ will execute the program file call MENU.PRG

During the execution, the program will clear the screen, and present the user with the main menu consisting of listed options

#### MENU.PRG

Menu prg is the main program file that display the menu options in the rectangular box at the centre of the screen called the opening menu options provided are described below:-

#### EXIT TO DOS

By choosing this option from the menu the program will quit and pusses return to Dos prompt. A Message will be displayed on the screen reminding the user to make a back-up copy of all database files. All variable names used in the program will be released. The SET ON and SET To commands used in the program will be reset

back to their defaults. \* Refer to Appendix VI (a) - for sample layout of the opening menu with the options.

#### ADD.PRG

Choosing this option the program will execute and then procedure called Add.prg. this procedure will enable the user to add new records to the database

The data entries form will be presented to the user to enable him input some records. The entered records does not go to the database file directly in order to maintain database integrity. At the end of entering a records the program will pause and present the user with the message "Are these Entries OK (Y/N)? this will enable him/her to validate the entered record. If the user choose N denoting that the entered record is not correct, the program control will immediately transfer the cursor to the first field in the data base to enable the user to effect the desired changes on the other hand, if the user choose Y meaning that the entered record is correct, the program will then write the record from the variable field names to their corresponding field in the database file. After the record has written to the file the program will again present the with the text "Do you want To Add more Records (Y/N)? this will enable the user to decide whether he wants to continue to add more records or not.

#### EDIT OLD RECORD.

This option will enable the user to effect change to the existing records in the database file. The program will display a text Edit what staff No: and pause for the user to input staff Number, teh program will then search the database file for a match with the staff Number Entered. If a match is found the corresponding record to that staff Number will be displayed on the screen and the cursor will be in the first field of the form to enable the user effect the desired changes. Also a text will be display asking the user if he/she want to modify more records or not. \* Refer to Appendix vi (b) for sample layout of modify screen.

#### INDEXING OF FILE.

The indexing of file will enable the user to arrange the record help in the database choronologically according to his desire. The program allowed arrangement of records in a Ascending or Desending order on the index key field Grade Level.

ASCENDING :- Indexing in assending order will arrange thee records serally with the smallest Gracte level above.

DESCENDING:- Indexing in descending order will arrange records serially with the highest grade level above and the smallest below.



### MISCELLANEOUS MENU

The miscellaneous menu provide the user with a submenu to the opening menu. This menu consists of the following options:-

#### EXIT TO OPENING MENU

By choosing this option the program will return to the menu.

#### INITIALISING OF FILE

This option will enable the user to out all existing records in the database file.

#### DELETING OF A RECORD

The programme to delete a record looks familiar with that of modify. At the beginning of running of the program a text is displayed on the screen to enable the user enter the staff/pupil number to be deleted. The program search the database file for the corresponding staff/pupil number. If a match is found the rocrd will be displayed on the screen to enable the user view the record he wanted to delete, at the same time the text "DELETE THIS RECORD (Y/N)?" will be displayed at the botton of the record. If the user choosen N denoting that he dosen't want the record to be deleted, the program will write the record back to the Dbase file. On the other hand if the user choses Y meaning that he want the record to be deleted, the program will permanently remove the record from the database file.

### SUSPEND A STAFF/PUPIL

The suspend of a staff option will enable the user to temporarily remove the name of the suspended staff or pupil from the database. At the running of this option the text SUSPEND WHAT STAFF OR PUPIL NO: will be displayed on the screen to enable the user type in the unique staff or pupil number. The supplied staff or pupil number will be searched in the database file. If it match is found the record will be set to meet the filter condition. On the other hand, if a match is found in the database file an error message "NO SUCH RECORD EXIST" is displayed on the screen.

### RECALL A RECORD:

At the running of this procedure to program will display a text to enable the user enter the desire staff or pupil number to be recalled, the program will search the database file for the entered staff or pupil number, if a match is found the filter condition that hide the record will be set off. On the other hand if a match is not found, the program will display an error message "NO SUCH RECORD EXIST". The user should press any key to continue.

### REPORT GENERATION

The Report Generation menu has three condition viz:

- (0) Exit to opening menu
- (1) General staff or pupil list
- (2) View Suspended/Terminated staff/pupil.

## MENU STRUCTURE

This directed to the specification of the file structure, this implies the specification of the field required for the system and of course the field space.

The following specification were made for the database use in the system.

Format file called pupil FUT, staff FMT, and inventory FMT were created. This files contains some commands not different from the customised format.

Screen of the Dbase III+.

The format files were created using the database file structure that was first created as given below:-

### 1. Structure for Database pupil DBF

<u>Field</u>	<u>Field Name</u>	<u>Type</u>	<u>Width</u>
1	File Num	Numeric	6
2	Adm Num	Numeric	6
3	S-Name	Character	8
4	O-Name	Character	10
5	Date-Birth	Date	8
6	Date-Adm	Date	8
7	P-Name	Character	17
8	P-Address	Character	40
9	L-School	Character	30
10	N-School	Character	40
11	L-Class	Character	4
12	N-Class	Character	4
* TOTAL **			----- 181 =====

### 2. Structure for database file: Pupil Academic DBF

Name of database Record:- 3: Date of update 4 - 10 - 97

<u>Field</u>	<u>Field Name</u>	<u>Type</u>	<u>Width</u>
1.	Field Num	Numeric	6
2	Name	Character	18
3	Type-Exam	Characxter	35
4	Subject	Character	12
5	N-Test	Numeric	3
6	N-Exam	Numeric	3
7	Total	Numeric	3
8	Position	Numeric	3
9	R-Class TEA	Memo	18
10	R-Head TEA	Memo	20
11	R-Subject TEA	Memo	17
* TOTAL **			----- 122 =====

3. Structure for database: B: Teacher DBF

Number of data Records :2

Date of update 4-10-97

<u>Field</u>	<u>Field Name</u>	<u>Type</u>	<u>Width</u>
1	File Num	Numeric	6
2	Name	Character	25
3	Previous Name Lef.	Character	25
4	Rank	Character	10
5	Marital Status	Character	6
6	Sex	Character	1
7	Date-Birth	Date	8
8	Religion	Character	6
9	State of Origin	Character	12
10	L.G.A.	Character	12
11	Qualification	Character	30
12	Qual-Date	Date	8
13	Subj-Speciality	Character	11
14	Tribe	Character	5
15	Former Employer	Character	6
16	Present Employer	Character	6
17	Type of Appointment	Character	9
18	Date of Appointment	Date	8
19	Date of 1st Appointment	Date	8
20	Permanent Home Address	Character	40
* TOTAL **			----- 242 =====

4. Structure for Dbase B: inventory DBF

Date of last update 4-10-97

<u>Field</u>	<u>Field Name</u>	<u>Type</u>	<u>Width</u>
1	Field Num	Numeric	6
2	Type-Building	Character	20
3	Num-Buiding	Characxter	3
4	Type-Furniture	Character	20
5	Num-Furniture	Numeric	3
6	Type-LAB-Equip	Character	13
7	Num-LAB-Equip	Numeric	4
8	Type-Vehicle	Character	10
9	Num-Vehicle	Numerical	1
* TOTAL **			----- 85 =====

FILE MAINTENANCE:- This involves updating of information which includes the programs for necessary changes.

Data tends to be dynamic, and most of them are subject to periodic revision. Some information are subject to frequent modification. Sometimes, when revisions to are extensive, an organisation considers completing restructuring or reprogramming the job instead. Specific programmers could be assigned to the job of program maintenance.

## PROGRAM

This is set of instructions composed for solving a given problem by computer at a particular time. Menu was designed to display list of options from which the user can choose.

```
***** PRINCIPAL PROGRAM *****
Set talk off
Set escape off
Set scoreboard off
Set status off
CLEA
Do PASS
DO Box with 3,5,23, 75
Set Colo to W/r w +
@ 3,5 clear to 7, 74
Set Colo to w/rg
@ 4,6 clea to 7,74
@ 5,25 say "SCHOOL MANAGEMENT SYSTEM"
Set colo rto r/w
Do box with 7,6 22,74
Set colo to b/rgt
@ 8,7 clea to 20,73
@ 10,20 say "WELCOME TO SCHOOL MANAGEMENT SYSTEM"
@ 12,5 say "This system is designed to take
           care of ADDING, UPDATING, VIEWING and"
@ 13,5 say "DELETING Records, and GENERATING REPORTS."
Set colo to r/w
Do box with 21, 18, 23, 60
@ 22, 20 say "Press any key to get into the
             MAIN MENU"

WAIT " "
clea
Set colo to r/w
do ycls
Set colo to w/rgt
@ 12,13 clear to 15,65
@ 13,23 say "Please you need an Entry PASSWORD"
Set colo to
K = 0
do while K < 300
K = k + 1
endo
do ycls
Do password
clea
```

\*\*\*\*\* Main Menu \*\*\*\*\*

```
col = 5
Row = 3
Do while row < = 23
Set colo to W/RG+
Do Box with 2,3 24,79
@ Row, Col say "WELCOME TO MAIN MENU PLEASE"
Row = row + 1
Col = Col + 2,
End do
N = 0
Do while N < 300
N = N + 1
End do
Do while .T.
CLEA
Set colo to W/RG+
```

\*\*\*\*\* Screen format for main menu \*\*\*\*\*

```
Clea
@ 2, 2 say Replicate (CHR (178), 74)
@ 23, 2 say Replicate (CHR (178), 74)
@ row, 2 say CHR (178)
@ row, 3 say CHR (178)
@ row, 75 say CHR (178)
@ row, 76 say CHR (178)
Row = row + 1
End do
```

\*\*\*\*\* Screen format Inscription \*\*\*\*\*

```
Set colo to w/r+
Do box with 1, 30, 3, 44
@ 2, 30 say "MAIN MENU"
Set colo to n/n
@ 3, 14 clear to 6,26
Set colo to b/g+
@ 2,13 clear to 6,25
@ 2,15 say "Staff Record"
STAFF = "A"
Set colo to R/W
@ 2,16 say STAFF
Set colo to n/n
@ 6,20 clea to 10,32
Set colo to W/R+
@ 5,19 clea to 9,31
@ 5, 21 say "Pupils Record"
PUP = "S"
Set colo to R/W
@ 5, 22 say PUP
Set colo to n/n
@ 9,26 clea to 13,38
```

```
Set colo to w/b+
@ 8,25 clea to 12,37
@ 8, 27 say "INVENTORY"
Set colo to R/W
INVEN = "I"
@ 8,28 say INVEN
```

```
Set colo to n/n
@ 11, 32 clea to 15,44
Set colo to w/g+
@ 10,31 clea to 14,43
Set colo to n/n
@ 14,38 clea to 18,50
set colo to w/rt
@ 13,37 clea to 17,49
@ 13,39 say "REPORT SHEET"
set colo to r/+
  REP = "R"
@ 13,40 say REP
```

```
Set colo to n/n
@ 15,45 say "QUIT"
set colo to r/+
QUI = "Q"
@ 15,46 say QUI
set colo to gr/n
```

```
***** Selection of Choice *****
store space (1) to CHOICE
Do box with 22,24,24,55
@ 23,25 say "Enter your CHOICE (from A to Q)"
@ 23,55 Get choice pict "@ A!"
Read
```

```
DO CASE
  CASE CHOICE = "A"
    MENU
  DO STAFF
  CASE CHOICE = "S"
    MENU
  DO PUPIL
  CASE CHOICE = "I"
    MENU
  DO INVENTORY
  CASE CHOICE = "R"
    MENU
  DO ACADAREC
  CASE CHOICE = "Q"
    QUIT
ENDCASE
ENDDO
Set talk on
```



```
set Escape on
Set scoreboard on
Return
```

```
***** Password Program *****
```

```
Set console off
Pas = Space(8)
Do while .T.
@ 12,23 say "Enter your PASSWORD"
Accept to pas
IF-UPPER (PAS) = "AMSA"
EXIT
ELSE
LOOP
ENDIF
ENDDO
Set console on
```

```
***** MENU Program *****
```

```
Do while .T.
CHOICE = " "
Set colo to W/b+
@ 1,10 to 3,70 double
@ 2,12 say "ADD"
@ 2,18 say "DELETE"
@ 2,26 say "UPDATE"
@ 2,35 say "VIEW"
@ 2,43 say "REPORT"
@ 2,51 say "EXIT"
Set colo to R+
@ 2,12 Say "A"
@ 2,18 Say "D"
@ 2,26 Say "U"
@ 2,35 Say "V"
@ 2,43 Say "R"
Set colo to w/b+
@ 12,25 say "ENTER YOUR CHOICE" GET CHOICE PICT "@A!"
Read
DO CASE
CASE ANSWER = "A"
DO ADDRESS
CASE ANSWER = "D"
DO DELETE
CASE ANSWER = "U"
DO UPDATE
CASE ANSWER = "V"
DO VIEW
CASE ANSWER = "R"
DO REPORT
CASE ANSWER = "E"
EXIT
```

```
OTHERWISE'  
LOOP  
ENDCASE  
ENDDO  
CLOSE DATABASES  
RETURN
```

```
***** ADD RECORD PROGRAM *****
```

```
IF CASE CHOICE = "A"  
    Select 1  
Use Staff  
IF CASE CHOICE = "P"  
    Select 2  
Use Pupils  
IF CASE CHOICE = "R"  
    Select 3  
Use Academic  
IF CASE CHOICE = "I"  
    Select 4  
Use Inventory  
CLEAR  
WAIT "Press any key to begin entering New Records"  
Use Staff  
begin = reccount ( )  
Ans = .T.  
Do while Ans  
clear  
Apend  
Read  
@ 22,0 say "**** Record Entered ****"  
@ 24,0 say "Entered Another ? (Y/N)" Get Ans  
Read  
If UPPER (ANS) = "Y"  
    LOOP  
    ELSE  
    EXIT  
    ENDIF  
    ENDDO  
Clear  
@ 11,0 say "You have added "+ Ltrim (Str (Reccount ( ) -  
begin,0)); + "Records"  
Wait "Press any key to exit Entry"  
CLOSE DATABASE  
RETURN
```

```
***** UPDATE PROGRAM *****
```

```
IF CASE CHOICE = "A"  
    Select 1  
Use Staff  
IF CASE CHOICE = "P"  
    Select 2  
Use Pupils
```

```

IF CASE CHOICE = "R"
  Select 3
Use Academic
IF CASE CHOICE = "I"
  Select 4
Use Inventory
CLEAR
Want = .T.
@ 10,20 say "DO YOU WANT TO UPDATE A RECORD (Y/N)"
  GET WANT
READ
Do while want
Clea
@ 12,20 clea to 18,60
@ 14,22 say "EDIT RECORD"
@ 18,22 say "ENTER FILE NUMBER"
FNum = 0
@ 18,25 GET FNUM
Read
LOCATE FOR FNUM = FILE-NO
IF .NOT. FOUND()
@16,22 Clea to 17,59
@ 17,25 say "No. SUCH RECORD"
  N = 0
Do while N < = 200
  N = N + 1
ENDDO
Clea
?
?
WAIT
LOOP
ELSE
READ
ENDIF
ENDDO
CLOSE DATABASE

```

```

***** VIEW PROGRAM *****

```

```

IF CASE CHOICE = "A"
  Select 1
Use Staff
IF CASE CHOICE = "P"
  Select 2
Use Pupils
IF CASE CHOICE = "R"
  Select 3
Use Academic
IF CASE CHOICE = "I"
  Select 4
Use Inventory
Want = .T.

```

```

@ 10,20 say "DO YOU WANT TO VIEW RECORD (Y/N)" GET WANT
READ
Do while want
Clea
@ 12,20 clea to 18,60
@ 13,22 say "VIEWING RECORD"
@ 16,22 say "ENTER FILE NUMBER"
      FNum = 0
@ 18,25 GET FNUM
Read
LOCATE FOR FNUM = FILE-NO
DISPLAY
IF .NOT. FOUND()
@ 16,22 Clea to 17,59
@ 15,28 say "No. SUCH RECORD"
@ 18,25 say "PRESS ANY KEY TO CONTINUE"
WAIT " "
LOOP
ENDIF
ENDDO

```

```

***** DELETE PROGRAM *****
IF CASE CHOICE = "A"
  Select 1
Use Staff
IF CASE CHOICE = "P"
  Select 2
Use Pupils
IF CASE CHOICE = "R"
  Select 3
Use Acadarec
IF CASE CHOICE = "I"
  Select 4
Use Inventory
clea
Want = .T.
@ 10,30 say "ENTER FILE NO." GET FNUM PICT "999999"
READ
Do while .NOT. Eof()
LOCATE FNUM = FILE-NO
IF .NOT. FOUND()
CLEA
@ 12,0
LIST FILE-NO, S-NAME
@ 22m0
Wait space (19) + "Press Any key to continue"
Clea
Ans = Space(1)
@ 12,25 say "Are you sure you want Record Deleted (Y/N)"
      Get Ans PICT "@!"
Read
Do while .NOT. Ans & "YyNn"

```

```
11 ANS & 1y"  
DELET  
PACK  
Clea  
@ 12,30 say "Record Deleted"  
T = 0  
Do while T<150  
T = T+1  
Enddo  
EXIT  
ELSE
```

## CHAPTER FIVE

### SUMMARY, RECOMMENDATION AND CONCLUSION

i. SUMMARY:- In conformity with the objective of this project, it is confirmed that the manual filing system is converted to a computerised system. There have been an indebted study of the existing system and why the need for computerisation.

The course of the project, also present the analysis of the existing system and what is expected of the new system. The analysis brings out the problem been experienced by the existing system and the need for correction or improvement of the system.

The chapter four presents the design of the new system which includes computer programs for the running of the system and the specification of the system to be used.

The implementation of the design system for the use by the Local Government Education Authority include the training of the existing staff on the new system and method of conversion.

Finally, chapter five presents the summary recommendation of the new system to the organisation and conclusion.

ii RECOMMENDATION:- The system has been tested and found to be reliable and effecient, therefore, it is recommended not only to the National Primary Education Commission but to State Primary Education Board, Local Government Education Authority and also to all Government Parastatals that have to do with staff records and inventory of their offices.

Going by the benefits of the New System the followings are recommended for implementation.

1. Intensive training on computer knowledge to the staff of the organisation so as to enable the new system to be fully implemented.
2. As a matter of fact, curriculum on computer discipline should be developed and should be taught in all our schools from primary to secondary schools will enable every school leaver to be computer literate by the year 2000.
3. State Primary Education Board (SPEB) in conjunction with National Primary Education Commission (NPEC) should provide at least one PC to each Local Government Education Authority for effective and reliable implementation of the new system.

iii. CONCLUSION:- The main aim and objective of this project is to effectively design and develop a computerised system that could reduce chances of errors in filing system, exposure of the system to insecurity and reduction of time spent in searching and sorting data.

The project is also designed to give a high degree of accuracy, effective and reliability of information in the organisation.

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