

**COMPUTERIZATION OF STUDENTS CONTINUOUS
ASSESSMENT RECORDS (A CASE STUDY OF NEPA STAFF
SECONDARY SCHOOL, SHIRORO-NIGER STATE)**

BY

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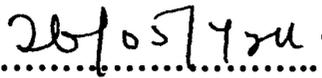
APPROVAL PAGE

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My special Praises to the almighty for been there always. I owe him my total existence.

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The staff and students of NEPA staff school, I thank you for your support and co-operation. Others too numerous to mention may the love of God be with us all.

DEDICATION

This work is solely dedicated to the Glory of Almighty God and my children – **AMIRA, ABBAS and BASHIR.**

ABSTRACT

Continuous assessment scores are very vital data in the school system particularly in the secondary school system. This is in view of the fact that they reflect the academic performance of capability of each student in the school system,

There is indeed the need for an effective management and maintenance of continuous assessment records to provide adequate information system that could assist the school authority in taking effective decision.

A design of the new system will be achieved by writing in Dbase IV with all the relevant documentation and high output will be achieved.

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CHAPTER ONE

1.0 INTRODUCTION

Continuous assessment may be viewed as the method of finding out in a systematic way where the pupil had gained from learning activities in terms of knowledge, thinking and reasoning character development and industry.

Various tools may be used to find out the outcome of these learning activities. These include tests, assignment, project, observations, interviews and questionnaires. The data obtained on the pupil will then be used to aid his further development.

Besides, accurate records of such data are filed for further use and for the purpose of providing information to the parents, guardians and other who can use them for the benefit of the pupils.

In this light therefore, Continuous Assessment is defined as a mechanism whereby the final grading of a student in the cognitive, effective and psychomotor domains of behavior systematically takes account of all his performance during a given period of schooling. Such an assessment involves the use of a great variety of modes of evaluation for the purpose of guiding and improving the learning and performance of the student.

1.1 RATIONALE FOR CONTINUOUS ASSESSMENT

Some of the reasons for the need for continuous assessment may be inferred from the policy statements of the Government on education, but there are other reasons not referred to in the National policy on education.

However, the following appears important for continuous Assessment:

- (a) Assessment is an interim part of the teaching process. It is therefore reasonable that the teacher school be involved in the final assessment of the pupils that have been taught.
- (b) An assessment procedure which takes into account the learner's performance through the entire period of school is likely to be more valid and indicative of the learner's overall ability than a single examination.
- (c) The readiness of instructors to introduce innovations into their teaching is often frustrated by the fact that a final external examination does not take into account of such innovation.
- (d) An important aspect of instruction is the appropriate guidance of the learner both in his/her learning. And in preparation for career, continuous assessment procedure facilitates such guidance function in a school.

(e) A teacher/instructor also needs to assess his/her own instruction methods from time to time in order to improve his/her performance.

1.2 PURPOSE OF THE STUDY.

The purpose of this study is to computerize students continuous assessment records in the secondary school level.

The study is aimed at designing a simplified system and applying computer to the processing and organization of student continuous assessment records in the school.

Besides, the teacher will find it easy to process and organize student continuous assessment records without errors. Also the various organs that might need information on the students continuous assessment will receive this at the appropriate time with lots of accuracy and without delay.

1.3 STATEMENT OF THE PROBLEM.

The processing and organization of continuous assessment scores in school particularly at the secondary school is done manually and since it involves large volume of data, the occurrence of errors is unavoidable.

Similarly, the teachers find the compilation of scores very tedious and this subsequently leads to errors, repetition of compilation and delay in the preparation of the termly statement of students results

Indeed, in school the students, continuous assessment records are poorly kept and maintained. This results to loss of records and make the retrieval of information for students records difficult

1.4 SCOPE AND LIMITATION OF THE STUDY

The study is concerned with the computerization of students continuous Assessment records in the secondary school.

However certain factors affect the wider scope of this study. Such factors or limitation include finance and has been done in such a way that the available limited financial resources could be used effectively and efficiently.

Also the time duration for the project affects extensive work to be done.

1.5 DEFINITION OF RELEVANT TERMS.

- (1) Continuous Assessment:- The systematic collection of marks or grades over a period of time and their aggregation into final grades.
- (2) Data – These are raw fact that have to be processed.
- (3) Record- A group of related facts treated as a unit representing a particular transaction.
- (4) Information- these are data that have been processed into a useful form for the user.
- (5) Computer- An electronic device that accept data process the data and produce accurate information to the user.
- (6) File- protection of information integrity and accessibility of a data base file.
- (7) File- A file is a collection of item arranged in form of records.
- (8) Organisation- This involves the arrangement of facts and the resulting output.
- (9) System- This is a component which interact with one another towards achieving a common goal.

1.6 PROBLEMS OF IMPLEMENTING OF CONTINUOUS ASSESSMENT.

The second extract from the national policy on education shows that government is aware that the implementation of the policy of continuous assessment poses certain significant problems for the educational system in general and teachers in particular. The policy therefore advocates a rigorous training program for teachers who in the final analysis have to implement continuous assessment. However, two major problem areas may be identified Namely:-

(1) **COMPABILITY OF STANDARDS:-** At present the single nation examination provides some basis for comparing the quality of students performances across school. Under a continuous assessment situation, such comparison become extremely difficult.

The difficult arises from two main sources namely:-

- (i) Differences in the quality of tasks and other assessment instrument used in different schools
- (ii) Differences in the procedure for scoring and grading the various assessment instruments in the various schools.

(2) RECORD KEEPING AND CONTINUITY OF RECORD:-

For continuous assessment to be meaningful, there has to be meticulous keeping of accurate records on each pupil.

Secondly, since these records are expected to be cumulative from class to class and from school to school, there is the need for uniformity in the kinds of record kept and the format for keeping such records. There is therefore, the problem that the educational system must expect several thousands, of teachers to keep accurate records with a more or less uniform format.

Thirdly, the fact that a student even within the same level of education, may move from one place to another, for example, if the parents are transferred to another town demands that a mechanism must be involved to ensure that the record of the student from one school can be transferred to another school without removing those records from the first school.

CHAPTER TWO

2.0 CONTINUOUS ASSESSMENT SYSTEM

The continuous assessment system in one school is not quite different from any other school in the federal since they are following the same policy of education. One school year is made up of three terms and each term consists of about twelve (12) weeks. Within the first and the third weeks teacher give assignment to the student in different subjects offered in the school. The assignments are evaluated by the teachers and the scores obtained by the students are recorded. At the end of the third week, the teachers administer a test in each of the subjects, evaluate it and record the scores obtained by students. The teacher total the scores obtained by students in each subject for the first quarter of the term. The maximum obtainable scores for the first quarter of the term is usually 10marks.

At the beginning of the fourth quarter which from the tenth week to the twelfth week, the school conducts a terminal examination in which each teacher examines the students on what they have been taught during the term. The scores obtained by teacher from the assessment of the examination papers are recorded.

In grading students according to their total score the following guideline are used

80 – 100	Excellent
80 – 70	Very Good
60 – 70	Good
50 – 60	Credit
50 – 40	Pass
40 – below	Fail

2.1 CHARACTERISTICS OF CONTINUOUS ASSESSMENT

Continuous assessment may be characterized as follows:-

- (i) Systematic
- (ii) Comprehensive
- (iii) Cumulative
- (iv) Guidance oriented

- (1) **SYSTEMATIC:-** Continuous assessment is said to be system in the sense that it requires an operational plan which indicates what measurement is to be made of the students performance at certain time interval or time during the school year. The measurement is made and the result recorded.

(ii) **COMPREHENSIVE:-** Continuous assessment is comprehensive in the sense that many types of instruments are used in determining the performance, this include test, assignments, observation, examination etc.

Another aspect of the comprehensiveness is that the student is seen in his totality because decision are made based on information obtained in the cognitive, affective and psychomotor domains.

(iii) **CUMULATIVE:-** Continuous assessment is cumulative since any decision to be made at any point in time on the student takes into account all previous decision about such student. This requires the keeping of up-to-date record on each student.

GUIDANCE –ORIENTED:- Continuous assessment is guidance – oriented because information obtained is used to guide his further development.

2.2 SHORT COMINGS OF THE SYSTEM

It has been shown that the test of examination is for the most part, used as the dominant method of assessing pupils progress in this country. Our problem with this approach is that assessment is then directed mostly to the taught aspect of learning activities.

Knowledge, understanding and other thinking skills acquired in various subjects of the school curriculum are evaluated and marks are awarded relatively to pupils performance in the several subjects. Often total neglected in this procedure is the assessment of skills normally associated with both the character and the industry of the pupil.

Another problem with this system of assessment is that emphasis is laid on the performance at the year, the term or the course. One shortcoming of this practice is that by the time a decision is made, it is often too late to assist the pupils improve on their learning because most of them would be going on to other classes, courses or topics. As a result, the entire educational system is denied opportunity for meaningful growth.

A third problem of this system of assessment or practice is to be seen in the manner in which reports are sent to parents and guardians. In primary and secondary schools the common practice is to add new scores, as given by different teachers, find an average and give the student a rank among his

classmate on the basis of this questionable procedure. The problem with this is that marks obtained in different subjects or giving by different teacher may not have equal weights.

Another issue associated with the manner in which reports are presented to parents and guardians is that information provided is usually scanty. At best there are marks or letter grades indicating attainment in different subjects and an overall average which does not indicate much or indicate a false mark based on this average.

Other weaknesses include examination malpractices which has crept into the practice of assessment in this country as a symbol of national disgrace and poverty of the state of record keeping. There is therefore, definite need for change of practice.

2.3 WEAKNESSES OF THE EXISTING SYSTEM

- (1) The system is not economic because it consumes much papers i.e a lot of papers are used for printing the continuous assessment forms.
- (2) In compiling the continuous assessment of students the teachers make a lot of mistakes.

- (3) The job of compiling the scores is tedious. This leads to the delay in the release of students result.
- (4) Only one copy of the continuous assessment form is produced for each class and kept by principal. Hence it is difficult to lay hands on the score sheets of the students once the only copy got lost.
- (5) Searching and retrieval of information about students academic records in schools is tedious and consumes time.
- (6) The system is not flexible because of the volume of continuous assessment records to be processed by each teacher is increased, the job of compiling the continuous assessment records becomes boring.
- (7) Prone to manipulations by staff.

2.4 CATEGORIES OF EXAMINATIONS

The primary function of the college is to impart knowledge to students and also equip them for the end of terms examination and end of course examinations. These examinations are categorized into two namely:-

INTERNAL AND EXTERNAL EXAMINATION.

(1) INTERNAL EXAMINATION

Internal examinations are solely set and mark by the individual school teacher. The examinations consist of continuous assessment test, end of term examinations and promotion examinations. For each term, continuous assessment test is conducted twice. This will form part of the final terminal examinations.

In the junior secondary level, each of the continuous assessment test carries a maximum of 30 marks, while in the senior secondary level each continuous assessment test carries a maximum of 15 marks.

(2) EXTERNAL EXAMINATIONS

In this category, there are two types:-

- (i) The senior school certificate examination
- (ii) The junior school certificate

The former is organised by the West African examination council and the latter is conducted by the National Board of Educational measurement (NBEM) now changed to National Examination Council (NECO). In both cases the school has no control over mode of the Examinations.

FORM OF REPORTING SCORES

There are two forms of reporting score presently in our in our educational system.

(a) A lot of Schools report only the raw score, for instance, a pupil permanent record or the report card sent to his parents might contain the entry elementary mathematics of 60 marks.

The collated information that gives 60 its full meaning is not reported and in such a case, a parent can only make the assumption that 60 in mathematics is the same as 60 in Social Studies.

(b) Some Schools, in addition to the pupils master, report the class average or the pupils place in the order of merit. Even so, it will be an easy task for the parents to decide how better or worse is 60 marks in mathematics than 60 marks in Social Studies.

2.6 SCALING OF CONTINUIOUS ASSESSMENT

Any programme of studies or method of instructions usually results in a broad range of achievement among members of the group who participated in the program or received the training.

Teachers should not compare performance of their pupils across subject by subject by using just the raw scores. Hence there is the need for

teachers to be familiar with simple methods of processing raw scores. This involves the use of elementary statistical methods such as the mean (\bar{X}) mean deviation, Standard deviation, range, median and modes.

In order to facilitate meaningful analysis and interpretation, raw scores are usually transformed to other scores, one of which is called the standard scores. A standard score express an individual's performance in terms of that individual's deviation from the mean in standard deviation unit. The standard score is also called Z-Scores. In Z-Score, Scores can be subjected by common algebraic operations.

The formula for computing Z-Score is given as $Z = \frac{X - \bar{X}}{S}$ where X is

the score, \bar{X} is the mean and S is the Standard deviation.

For example suppose 6 students in a class have the following scores in a test score out of 10

	Students	Scores
1.	Stella	8
2.	Ramat	7
3.	George	6
4.	Jemila	5

5.	Ada	4
6.	John	6

To find the Z-Score for the above scores, first calculate the mean (X) then calculate the standard deviation (S)

$$X = \frac{8+7+6+5+4+6}{6} = \frac{36}{6} = 6$$

$$S = \sqrt{\frac{(8-6)^2 + (7-6)^2 + (6-6)^2 + (5-6)^2 + (4-6)^2 + (6-6)^2}{6}}$$

$$= \sqrt{\frac{2^2 + 1^2 + 0 + (-1)^2 + (-2)^2 + 0}{6}}$$

$$= \sqrt{\frac{4+2+2+4+0}{6}} = \sqrt{\frac{12}{6}} = 1.4$$

Hence the Standard Scores for the above Score becomes:-

$$(1) \text{ Stella} = \frac{8-6}{1.4} = 1.43$$

$$1.4$$

$$(2) \text{ Ramat} = \frac{7-6}{1.4} = 0.714$$

$$1.4$$

$$(3) \text{ George} = \frac{6-6}{1.4} = 0$$

$$1.4$$

$$(4) \text{ Jemila} = \frac{5-6}{1.4} = -0.714$$

$$1.4$$

$$(5) \text{ Ada} = \frac{4-6}{1.4} = -1.43$$

$$1.4$$

$$(6) \text{ John} = \frac{6-6}{1.4} = 0$$

$$1.4$$

Another example, if the mean score for school aptitude test score of a student is 48, the standard deviation is 8. what is the Z-Score equivalent of a score of 43 at the college.

$$Z = \frac{x - \bar{x}}{s} = \frac{43 - 48}{8} = -.625$$

That is, a raw score of 43 is .625 of standard deviation unit below the mean.

To achieve the goal of comparability of students performance therefore, the students raw scores must be standardized by using the following mathematical expressions given as a guide by the federal ministry of Education Science and Technology.

COMPUTING GUIDE:- FOR STANDARDIZING

RAW CONTINUOUS ASSESSMENT SCORE

SUBJECT BY SUBJECT

(1) Find the sum i.e. $1+2+3+4+5+\dots +n = \text{sum}$

(2) Calculate the mean $\frac{\text{sum}}{n}$

$n-1$

(3) Calculate $(X-\bar{X})^2$ where X represents a raw score and \bar{X} represents the mean.

(4) Compute the Standard deviation which is:-

$$\sqrt{\frac{\sum (X-\bar{X})^2}{n-1}} = \text{SD.}$$

(5) Calculate Z-Score i.e $\frac{X-\bar{X}}{\text{SD}} = Z$

SD

(6) Calculate T-Score i.e $50+10 \times Z = T$.

CHAPTER THREE

3.0. SYSTEM ANALYSIS AND DESIGN

System analysis is a critical study and analysis of the current procedures with a view to desisting a better and more efficient alternative procedures using computer and other resources to perform tasks which meet the information needs of an organisation.

The objective of system analysis is to design an effective computerised procedures which will create benefits in excess of those created by other means. It entails a process of collecting and analysing facts in respect of the existing operations and procedures in order to obtain a full appreciation of the situation prevailing so that an effective computer system may be designed and implemented.

3.1 FEASIBILITY STUDY

The feasibility was embarked upon to determine the potential or desirability of the proposed system by studying the existing method of continuous assessment. Since the establishment of continuous assessment procedure the manual method of continuous assessment has been employed in the preparation of student result.

Information generated from the study of the old system was used in the development of the new system. During the preliminary investigation, some

of the problems associated with the manual system were identified to be inadequate security and privacy of files.

Students records are not adequately secured as such unauthorized person can easily tampered with them with the aim to get relevant information about a particular student.

3.2 TESTING PROJECT FEASIBILITY

For any project or work to be judged feasibly, it must pass three tests i.e.

- (a) Operational feasibility test
- (b) Technical feasibility test
- (c) Economical feasibility test

(a) OPERATIONAL FEASIBILITY:-

This is concerned with the workability of the proposed system when developed and installed. In this case one consider the acceptability and support of the management for the project and the way the new system will affect performance.

(b) TECHNICAL FEASIBILITY:-

This is to test whether the proposed system can be done with the current equipment, existing software and the available personnel

(c) ECONOMICAL FEASIBILITY:-

This tests for the financial feasibility of the project to assess the cost of implementing the proposed project vis-à-vis the benefits to be derived from it.

3.3 COST AND BENEFITS ANALYSIS

(1) DEVELOPMENT COST	N	K
System Analysis & Design	30,000	00
For 6 weeks at N5,000 per wk		
Software Development	20,000	00
Personal Computer(2)	150,000	00
Laser Jet Printer (6L model)	45,000	00
Stabiliser/up (1000U.V.A)	35,000	00
Miscellaneous	15,000	00
	N295, 000:	00

(2) OPERATING COST

Supplies (stationers, Diskettes etc for Iyr)	100,000	00
Equipment Maintenance	25,000	00
Labour Cost (4operators at N3,000:00		
Pre Month for 3months)	36,000	00
2 Air conditioners (2 ½ HP)	80,000	00
Utilies	50,000	00
Miscellaneous Expenses	20,000	00
Total	N100, 211:00	
Grand Total	=	N395, 211 : 00

3.4 BENEFITS TO BE DERIVED FROM THE PROPOSED SYSTEM

(1)**ACCURACY** – Inaccuracies are the result of human errors and/or machine malfunctions. An important benefit of a well designed computer information system is their ability to provide much greater accuracy than the manual system which they replace.

(2) **TIMELINESS:-** This is another important characteristic of using computer in continuous assessment. The response interval of report should be short enough so that the information does not lose its freshness and value.

- (3) REDUCED Spending on stationeries
- (4) Better planning of information
- (5) Records not lost again
- (6) Security of users, book records

3.5 CHANGE OVER PROCEDURE

Change over procedure is to switch from the old system to the new one. This event is known as system conversion. The change over could be in any of the following forms:-

- (a) Parallel Changeover
- (b) Direct Changeover
- (c) Pilot Changeover

(a) Parallel Changeover requires that the old and new system to concurrently for sometime using the same inputs. The output of the two systems are compared. This will continue until the new system is confirmed to be working satisfactorily.

(b) DIRECT CHANGEOVER

This method is the complete replacement of the old system by the new in one move. When a direct changeover is planned, system tests and training should be comprehensive, and the changeover itself planned in detail.

(c) PILOT CHANGEOVER

This requires changing to the new system on a piece meal.

However, it is recommended that parallel changeover of the system be adopted for the full conversion of the system. This is to ensure that within the period of changeover students records in terms of storage and information retrieval are not in any way affected.

CHAPTER FOUR

4.0 SOFTWARE DEVELOPMENT/IMPLEMENTATION

4.1 INTRODUCTION

Software are basically programs. Without the software, the hardware will not be put into effective use. The software is also implemented. Implementation includes all those activities that take place to convert from the old system to the new one.

4.2 CHOICE OF LANGUAGE

The language used in programming is Database management system IV. A database management system is a software that constructs, expands and maintain the data contained in database. It provides the inter face between the user and the data in such a way that it enable the user to record, organize, select, report on and otherwise manage data contained in the database.

A database can be defined as a mechanized shared and centrally controlled of data used in an organisation it is any collection of useful information organized in a systematic and consistent manner. A database can also be regarded as an organized databank where data are stored.

FEATURES OF THE CHOSEN LANGUAGE

In data processing environment, data are view as a whole irrespective of their type.

Furthermore, the integration of data of different types are linked by logical relationship through Data Base management system. The features of DBMS are as follows:

- (1) **Data Integration:-** In a database, information from several files is co-ordinated, accessed and operated upon as though it is in a single file.

Logically, the information is centralized, physically the data may be located at different files.

- (2) **Data Redundancy is Eliminated:-** Data redundancy occurs when the same data appears in more than one file. This leads to wastage of storage space and duplication of efforts during data entry. DBMS eliminates data redundancy since data are not duplicated in files.

- (3) **Data Independence:-** DBMS ensures data independence because application programs are isolated from the physical or logical storage of data. This feature seeks to allow for change in the

content and organisation of physical data without re-programming of application

- (4) **Data Integrity:-** This is an important features of DBMS. Since data is stored once with duplication, the information retrieved is consistent as only one update is enough if there is a change in the data.

4.3 ADVANTAGES OF DATABASE MANAGEMENT SYSTEM

- (i) It is suitable for transaction processing application
- (ii) It is easy to use and understand
- (iii) It is easy to develop user-friendly application hence, data entry and updating can be easily performed.
- (iv) It is easy to make corrections.

4.4 TRAINING

The new system could be fully implemented by having an in-house training for teachers examination officer, senior staff and computer operator in the school. The duration of the training depends on how fast the personal involved can understand the system.

However, in a situation where such staff are lacking a new hand will be recruited to manage the system.

4.5 **SYSTEM TESTING**

The system was examined to ensure its workability. This is done by testing each individual program to prove that they are error-free. The testing of the program were done by using the data collected. The output obtained from testing the system shows that the programs were free from errors and the system as a whole is working.

4.6. **DOCUMENTATION OF THE SYSTEM**

The presents system involves the computerization of students continuous assessment scores in the junior secondary schools. In this system, only a systems analyst can change programs, master file, and storage facilities.

The vice-Principal's office,. Examination office, computer office and teachers are directly involved in the implementation of the system.

The benefits of this system include:-

1. The tedious task been perform by teachers in the preparation of students continuous assessment scores is reduced.

2. There is timely completion of processing and organisation of students' continuous assessment scores.
3. Students records of continuous assessment scores can easily be accessed when the need arises.
4. Students record of academic performance can easily be handed and maintained.
5. Information about students continuous assessment scores can easily be retrieved when required.

4.7. HARDWARE REQUIREMENTS

Personal Computers with the following configuration:-

- 80286,80386 and 80486 Main Processor
- At least 1024K of RAM
- At least one 3.5"or 5.25" floppy disk drive
- A colour Monitor
- Printer Laser-jet (5L model)
- 24-pin Dot-Matrix
- Stabilizer 1000 K.V.A
- UPS 1000 K.V.A

2. **SOFTWARE REQUIREMENT**

- MS-Dos Version 6.0 or later
- DBMS-D Base iv
- Clipper 5.0 Software Development kit
- Text Editor-MS. Dos.

STARTING THE PROGRAM:

The continuous Assessment program was developed with the Dbase IV compiler. The program makes use of a master database for keeping records of students. The structure of the database is described below.

STUD. DBF

Field Name	Field Type	Width	Decimal
Mat – num	Numeric	4	
Name	Character	20	
Class	Character	5	
Sex	Character	1	
Score 1	Numeric	2	
Score 2	Numeric	2	
Score 9	Numeric	2	
Score1	Numeric	2	
Score 2	Numeric	2	
Score 9	Numeric	2	

DELETE RECORDS:

The delete option is used to remove unwanted records from the database. However, before a record is removed the user is prompted to be sure of the operation.

REPORT GENERATION:

Three types of reports can be generated as provided in the report menu.

REPORT MENU

- T - Produce Test Summary
- E - Produce Exam Summary
- O - Produce Total Summary
- X - Exit

PRODUCE TEXT SUMMARY:

The text summary report displays the test scores in each of the subjects for all the students, total score and average score.

PRODUCE EXAM SUMMARY:

The Exam Summary report display, the exam scores in each of the subjects for all the students, total score and average score.

PRODUCE TOTAL SUMMARY:

This is a report of the addition of text score and exam scores in each of the subjects, the total score and average score.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 SUMMARY

The work is focussed on the computerization of students' continuous assessment records in secondary schools. The present system was reviewed and analyzed through observation and inspection. The analysis showed the urgent need for computerization and the requirement of the system.

A design of a new system was carried out by specifying the system output, input types of file structure and organization, and the system procedure.

5.2. CONCLUSION

The output obtained from the implementation of the system led to the following conclusions.

1. The system is simple, easy, reliable economical and flexible.
2. The new system is error free in processing and organisation of students' continuous assessment records.
3. The output is produced without delay.

4. Where there is an omission of students' records, such records can be replaced without destroying the entire work.
5. Retrieval of information about students' continuous assessment records will be fast and easy.

5.3. **RECOMMENDATIONS**

- I. As a result of the immense benefits of the system, school administrator in both the private and public schools should adopt this system of continuous assessment.
- II. The Federal and State, Public and Private groups involved in education should lay greater emphasize on the use of this system of continuous assessment in schools under their jurisdiction.
- III. Greater awareness and computer literacy should be encouraged to ease the burred on teachers and students whose future might be ruined by lose of his her records.

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```

set talk off
set bell off
set confirm on
set date to brit
set color to w+/b,,r+
set status off
SET DEVICE TO SCREEN
do password with 'ACCESS'
CLEAR
SET TALK OFF
SET ECHO OFF
SET ESCAPE OFF
SET STATUS OFF
K = .T.
DO WHILE K
@4,25 SAY "CONTINUOUS ACCESSMENT SYSTEM"
@6,26 SAY "IN JUNIOR SECONDARY SCHOOL"
STORE SPACE(1) TO CHOICE
@7,20 TO 22,60 DOUBLE
@08,22 CLEAR TO 21,59
@10,25 SAY [R----REGISTER STUDENTS]
@12,25 SAY [S----SCORES ENTRY ]
@14,25 SAY [M----MODIFY RECORD(s)]
@16,25 SAY [D----DELETE RECORD(s)]
@18,25 SAY [P----REPORT GENERATION]
@20,25 SAY [X----EXIT]
@22,25 SAY [ENTER YOUR CHOICE]
@22,45 GET CHOICE PICT "@!"
  READ
  CLEAR
  DO CASE
    CASE CHOICE='R'
      DO ADDREC
    CASE CHOICE='S'
      DO SCORES
    CASE CHOICE='M'
      DO MODIFY
    CASE CHOICE='D'
      DO DELETE
    CASE CHOICE='P'
      DO REPORT
    CASE CHOICE ='X'
      K = .F.
  ENDCASE
CLEAR
loop
ENDDO
RETURN

```

PROCEDURE SCORES

```

X = .T.
DO WHILE X
CLEAR
CHOICE=' '
@4,20 TO 23,70 DOUBLE
@6,22 SAY "MASTER FILE MENU"
@10,30 SAY "[T----TEST SCORES] "
@12,30 SAY "[E----EXAM SCORES] "
@14,30 SAY "[X----EXIT] "
@16,30 SAY "[ENTER YOUR CHOICE] "

```

```

@16,55 GET CHOICE PICT "@!"
READ
DO CASE
CASE CHOICE='T'
DO ADDTEST
CASE CHOICE='E'
DO ADDEXAM
CASE CHOICE='X'
CLEAR
X = .F.
ENDCASE
loop
ENDDO
RETURN

```

PROCEDURE REPORT

```

H = .T.
DO WHILE H
STORE SPACE (1) TO CHOICE
CLEAR
@3,30 SAY "REPORT"
@4,10 TO 22,65 DOUBLE
@8,15 SAY "[T----PRODUCE TEST SUMMARY]"
@10,15 SAY "[E----PRODUCE EXAM SUMMARY]"
@12,15 SAY "[O----PRODUCE TOTAL SUMMARY]"
@14,15 SAY "[X----EXIT]"
@16,15 SAY "[PLEASE ENTER YOUR CHOICE]"
@16,45 GET CHOICE PICT "@!"
READ
DO CASE
CASE CHOICE='T'
DO REPT1
CASE CHOICE='E'
DO REPT2
CASE CHOICE='O'
DO REPT3
CASE CHOICE='X'
CLEAR
H = .F.
CLOSE DATA
ENDCASE
ENDDO
RETURN

```

PROCEDURE PASSWORD

```

parameter pass
SET COLOR TO GR+, G+
CLEA
trial = 0
store space(6) to pword
do while trial <= 3
@8,33 say "Security"
@10,12 to 12,61 doubl
@11,13 say " Enter your password "
set colo to R,B,W+,B
@11,37 clear to 11,41
store 0 to k, counter
Pword = space(0)

```

```

    p = 37
    @ 11,37 say spac(23)
do while counter < 6 .and. k<>13
    p= p+1
    k=0
Do while k = 0
    k = inkey()
enddo
    set colo to /gb+
    if k <> 13
        @11,p say "%"
        pword = pword + chr(k)
    endif
enddo
    if pword <> pass
        trial = trial + 1
        @ 11,14 say space(30)
        @ 11,14 say "Invalid Password, Try Again"
        wait ""
        loop
    else
        exit
    endif
enddo
if pword = pass
    @ 11,14 say space(30)
    @ 11,14 say "Correct Password, Access Granted"
    return
else
    QUIT
endif
return

```

PROCEDURE ADDREC

```

use stud
ans = "Y"
do while ans = "Y"
    clear
    @ 2,30 to 4,50 double
    @ 3,32 say "ADD RECORDS"
    @ 6,10 to 18,70
    store space(20) to mname
    store 0 to mmat_num
    store space(5) to mclass
    store space(1) to msex
    @ 8,15 say "Enter Student Number: " get mmat_num pict "9999"
    read
    locate all for mat_num = mmat_num
    if found()
        @ 10,15 to 12,65
        @ 11,20 say "Record already exist"
        wait ""
    else
        do accepter
        read
        append blank
        repl name with mname
        repl class with mclass
        repl sex with msex
        repl mat_num with mmat_num
    endif
endif

```

```

endif
@ 19,20 to 21,60
@ 20,25 say "Are there more records (Y/N) ? " get ans pict "!";
    valid ans $ "YN" error "Invalid Entry !!!"
read
enddo
close data
return

```

PROCEDURE ADDTEST

```

use stud
ans = "Y"
do while ans = "Y"
    clear
    @ 2,25 to 4,55 double
    @ 3,30 say "ADD TEST RECORDS"
    @ 6,10 to 19,70
    store 0 to mmat_num
    store 0 to mscort1, mscort2, mscort3, mscort4, mscort5
    store 0 to mscort6, mscort7, mscort8, mscort9
    @ 8,15 say "Enter Student Number: " get mmat_num pict "9999"
    read
    locate all for mat_num = mmat_num
    if .not. found()
        @ 10,15 to 12,65
        @ 11,20 say "Record does not exist"
        wait ""
    else
        do acceptest
            read
            repl scort1 with mscort1
            repl scort2 with mscort2
            repl scort3 with mscort3
            repl scort4 with mscort4
            repl scort5 with mscort5
            repl scort6 with mscort6
            repl scort7 with mscort7
            repl scort8 with mscort8
            repl scort9 with mscort9
        endif
    @ 19,20 to 21,60
    @ 20,25 say "Are there more Test Scores (Y/N)" get ans pict "!";
        valid ans $ "YN" error "Invalid Entry !!!"
    read
enddo
close data
return

```

PROCEDURE ADDEXAM

```

use stud
ans = "Y"
do while ans = "Y"
    clear
    @ 2,25 to 4,55 double
    @ 3,30 say "ADD EXAM RECORDS"
    @ 6,10 to 19,70
    store 0 to mmat_num
    store 0 to mscore1, mscore2, mscore3, mscore4, mscore5
    store 0 to mscore6, mscore7, mscore8, mscore9
    @ 8,15 say "Enter Student Number: " get mmat_num pict "9999"

```

```

read
locate all for mat_num = mmat_num
if .not. found()
  @ 10,15 to 12,65
  @ 11,20 say "Record does not exist"
  wait ""
else
do acceptexa
  read
  repl score1 with mscore1
  repl score2 with mscore2
  repl score3 with mscore3
  repl score4 with mscore4
  repl score5 with mscore5
  repl score6 with mscore6
  repl score7 with mscore7
  repl score8 with mscore8
  repl score9 with mscore9
endif
@ 19,20 to 21,60
@ 20,25 say "Are there more Exam Scores (Y/N)" get ans pict "!";
  valid ans $ "YN" error "Invalid Entry !!!"
  read
enddo
close data
return

```

Procedure Acceptor

```

@ 10,15 say "Enter Student Name : " get mname pict "@!"
@ 12,15 say "Enter Student Class : " get mclass pict "JSS9A"
@ 14,15 say "Enter Student Sex : " get msex pict "!";
  valid msex $ "MF" error "Invalid Entry !!!"
return

```

Procedure Acceptest

```

@ 10,15 say "Test Score in Mathematics: " get mscort1 pict "99" range 0,
@ 11,15 say "Test Score in English : " get mscort2 pict "99" range 0,
@ 12,15 say "Test Score in Int. Sci. : " get mscort3 pict "99" range 0,
@ 13,15 say "Test Score in Soc. Stu. : " get mscort4 pict "99" range 0,
@ 14,15 say "Test Score in Bus. Stu. : " get mscort5 pict "99" range 0,
@ 15,15 say "Test Score in Intro Tech : " get mscort6 pict "99" range 0,
@ 16,15 say "Test Score in Hom/Agric : " get mscort7 pict "99" range 0,
@ 17,15 say "Test Score in CRS/IRS : " get mscort8 pict "99" range 0,
@ 18,15 say "Test Score in Language : " get mscort9 pict "99" range 0,
return

```

Procedure Acceptexa

```

@ 10,15 say "Exam Score in Mathematics: " get mscore1 pict "99" range 0,
@ 11,15 say "Exam Score in English : " get mscore2 pict "99" range 0,
@ 12,15 say "Exam Score in Int. Sci. : " get mscore3 pict "99" range 0,
@ 13,15 say "Exam Score in Soc. Stu. : " get mscore4 pict "99" range 0,
@ 14,15 say "Exam Score in Bus. Stu. : " get mscore5 pict "99" range 0,
@ 15,15 say "Exam Score in Intro Tech : " get mscore6 pict "99" range 0,

```

```

@ 16,15 say "Exam Score in Hom/Agric : " get mscore7 pict "99" range 0,
@ 17,15 say "Exam Score in CRS/IRS : " get mscore8 pict "99" range 0,
@ 18,15 say "Exam Score in Language : " get mscore9 pict "99" range 0,
return

```

PROCEDURE MODIFY

```

use stud
ans = "Y"
do while ans = "Y"
  clear
  @ 2,30 to 4,50 double
  @ 3,32 say "MODIFY RECORDS"
  @ 6,10 to 18,70
  store space(20) to mname
  store space(5) to mclass
  store space(1) to msex
  store 0 to mmat_num
  @ 8,15 say "Enter Student Number: " get mmat_num pict "9999"
  read
  locate all for mat_num = mmat_num
  if .not. found()
    @ 10,15 to 12,65
    @ 11,20 say "Record does not exist"
    wait ""
  else
    store name to mname
    store class to mclass
    store sex to msex
    store mat_num to mmat_num
    do acceptor
    read
    repl name with mname
    repl class with mclass
    repl sex with msex
    repl mat_num with mmat_num
  endif
  @ 19,20 to 21,60
  @ 20,25 say "Are there more records (Y/N) " get ans pict "!";
  valid ans $ "YN" error "Invalid Entry !!!"
  read
enddo
close data
return

```

PROCEDURE DELETE

```

use stud
ans = "Y"
do while ans = "Y"
  clear
  @ 2,30 to 4,50 double
  @ 3,32 say "DELETE RECORDS"
  @ 6,10 to 18,70
  store space(20) to mname
  store 0 to mmat_num
  @ 8,15 say "Enter Student Number: " get mmat_num pict "9999"
  read
  locate all for mat_num = mmat_num
  if .not. found()

```

```

    @ 10,15 to 12,65
    @ 11,20 say "Record does not exist"
    wait
else
    store name to mname
    store class to mclass
    store sex to msex
    do acceptor
    clear gets
    res = "Y"
    @ 19,20 to 21,60
    @ 20,25 say "Are you sure (Y/N) ? " get res pict "!";
    valid res $ "YN" error "Invalid Entry !!!"
    read
    if res = "Y"
        delete
        pack
    endif
endif
@ 19,20 to 21,60
@ 20,25 say "Are there more records (Y/N) " get ans pict "!";
    valid ans $ "YN" error "Invalid Entry !!!"
read
enddo
close data
return

```

Procedure REPT1

```

clear
@ 2,30 to 4,50 double
@ 3,32 say "REPORT PROGRAM"
@ 6,10 to 18,70
store space(5) to mclass
@ 8,15 say "Enter Class to Print: " get mclass pict "JSS9!"
read
set device to file 'rept1.out'
set space on
use stud
go top
@ 2,38 say "*****"
@ 3,38 say "* SUMMARY OF TEST SCORES *"
@ 4,38 say "*****"
@ 6,5 say "CLASS : " + mclass
@ 8,5 say "*****"
@ 9,5 say "*"
@ 10,5 say "* S/NO STUD.NO. NAME MAT ENG INT SOC"
@ 11,5 say "*****"
sn = 1
m = 11
do while .not. eof()
if class = mclass
m = m + 1
@ m,5 say '|' + str(sn,3) + ' | ' + str(mat_num,4) + ' | ' + name + ' |'
i = 1
msum = 0
do while i <= 9
newsto = "SCORT" + str(i,1)
@ m,40+(i*5) say str(&newsto,2)
i = i + 1

```

```

        msum = msum + &newsto
    enddo
    @ m,91 say ' |'+str(msum,4)+' |'+str(msum/9,6,2)+' |'
    sn = sn + 1
endif
    skip
enddo
@m+1,5 say "*****"
set device to screen
wait
close data
return

```

Procedure REPT2

```

    clear
    @ 2,30 to 4,50 double
    @ 3,32 say "REPORT PROGRAM"
    @ 6,10 to 18,70
    store space(5) to mclass
    @ 8,15 say "Enter Class to Print: " get mclass pict "JSS9!"
    read
set device to file 'rept2.out'
set space on
use stud
go top
@ 2,38 say "*****"
@ 3,38 say "* SUMMARY OF EXAM SCORES *"
@ 4,38 say "*****"
@ 6,5 say "CLASS : " + mclass
@ 8,5 say "*****"
@ 9,5 say "*"
@ 10,5 say "* S/NO STUD.NO. NAME MAT ENG INT SOC"
@ 11,5 say "*****"
sn = 1
m = 11
do while .not. eof()
if class = mclass
    m = m + 1
    @ m,5 say ' |'+str(sn,3)+' | '+str(mat_num,4)+' | '+name+' |'
    i = 1
    msum = 0
    do while i <= 9
        newsto = "SCORE"+str(i,1)
        @ m,40+(i*5) say str(&newsto,2)
        i = i + 1
        msum = msum + &newsto
    enddo
    @ m,91 say ' |'+str(msum,4)+' |'+str(msum/9,6,2)+' |'
    sn = sn + 1
endif
    skip
enddo
@m+1,5 say "*****"
set device to screen
wait
close data
return

```

Procedure REPT3

```

    clear

```

```

@ 2,30 to 4,50 double
@ 3,32 say "REPORT PROGRAM"
@ 6,10 to 18,70
store space(5) to mclass
@ 8,15 say "Enter Class to Print: " get mclass pict "JSS9!"
read
set device to file 'rept3.out'
set space on
use stud
go top
@ 2,35 say "*****"
@ 3,35 say "* SUMMARY OF TEST+EXAM SCORES *"
@ 4,35 say "*****"
@ 6,5 say "CLASS : " + mclass
@ 8,5 say "*****"
@ 9,5 say "*"
@ 10,5 say "* S/NO  STUD.NO.          NAME          MAT  ENG  INT  SOC"
@ 11,5 say "*****"
sn = 1
m = 11
do while .not. eof()
if class = mclass
m = m + 1
@ m,5 say '|' + str(sn,3) + ' | ' + str(mat_num,4) + ' | ' + name + ' | '
i = 1
msum = 0
do while i <= 9
newsto1 = "SCORT" + str(i,1)
newsto2 = "SCORE" + str(i,1)
newval = &newsto1 + &newsto2
if newval >= 70
@ m,40+(i*5) say str(newval,2) + "A "
endif
if newval >= 60 .and. newval <= 69
@ m,40+(i*5) say str(newval,2) + "B "
endif
if newval >= 50 .and. newval <= 59
@ m,40+(i*5) say str(newval,2) + "C "
endif
if newval >= 40 .and. newval <= 49
@ m,40+(i*5) say str(newval,2) + "D "
endif
if newval <= 39
@ m,40+(i*5) say str(newval,2) + "F "
endif
i = i + 1
msum = msum + newval
enddo
@ m,91 say ' | ' + str(msum,4) + ' | ' + str(msum/9,6,2) + ' | '
sn = sn + 1
endif
skip
enddo
@ m+1,5 say "*****"
set device to screen
wait
close data
return

```

 * SUMMARY OF EXAM SCORES *

CLASS : JSS1B

```
*****
*
*                               INT  HOM  IRS
* S/NO  STUD.NO.      NAME      MAT  ENG  INT  SOC  BUS  TEC  AGR  CRS  LANG.  TOTAL  AVE.  *
*****
```

S/NO	STUD.NO.	NAME	MAT	ENG	INT	SOC	BUS	TEC	AGR	CRS	LANG.	TOTAL	AVE.
1	1105	AISHAT BELLO	56	67	45	45	34	67	66	55	44	479	53.22
2	1201	POPOOLA SEGUN	54	42	24	56	36	27	65	44	65	413	45.89
3	1108	KULE MARSHALL	54	67	56	56	45	33	67	12	34	424	47.11
4	1112	GEORGE TELEMI	43	43	23	57	46	64	32	68	45	421	46.78
5	1207	LADOKE KEMI	57	43	67	45	4	54	67	34	6	377	41.89
6	1131	KOLEDOWO PETER	0	0	0	0	0	0	0	0	0	0	0.00

```
*****
```

 * SUMMARY OF TEST+EXAM SCORES *

CLASS : JSS1A

```
*****
*
* S/NO  STUD.NO.      NAME                MAT  ENG  INT  SOC  BUS  TEC  AGR  CRS  LANG.  TOTAL  AVE.  *
*****
```

S/NO	STUD.NO.	NAME	MAT	ENG	INT	SOC	BUS	TEC	AGR	CRS	LANG.	TOTAL	AVE.
1	1111	JULIANA WILLIAMS	54C	67B	49D	88A	63B	60B	48D	45D	40D	514	57.11
2	1101	JOSHUA KOLADE	35F	57C	75A	26F	80A	53C	75A	76A	71A	548	60.89
3	1102	LIMAN IBRAHIM	47D	77A	64B	91A	83A	82A	85A	61B	86A	676	75.11
4	1109	OLOKUNLE JAMES	55C	78A	79A	66B	37F	71A	91A	83A	63B	623	69.22
5	1121	FRED BRICKSWEORTH	77A	68B	47D	79A	52C	90A	81A	49D	34F	577	64.11
6	1123	PETER BANES	52C	53C	77A	88A	67B	90A	76A	65B	65B	633	70.33

```
*****
```

 * SUMMARY OF TEST SCORES *

CLASS : JSS1A

```
*****
*
* S/NO  STUD.NO.      NAME                MAT  ENG  INT  SOC  BUS  TEC  AGR  CRS  LANG.  TOTAL  AVE.  *
*****
```

S/NO	STUD.NO.	NAME	MAT	ENG	INT	SOC	BUS	TEC	AGR	CRS	LANG.	TOTAL	AVE.
1	1111	JULIANA WILLIAMS	11	13	15	22	29	4	15	10	17	136	15.11
2	1101	JOSHUA KOLADE	12	12	21	23	24	19	21	11	17	160	17.78
3	1102	LIMAN IBRAHIM	24	23	21	26	15	28	18	19	20	194	21.56
4	1109	OLOKUNLE JAMES	2	22	22	10	3	17	24	26	7	133	14.78
5	1121	FRED BRICKSWEORTH	12	23	12	12	19	23	25	4	0	130	14.44
6	1123	PETER BANES	18	19	21	23	22	24	22	21	20	190	21.11

```
*****
```

 * SUMMARY OF TEST+EXAM SCORES *

CLASS : JSS1B

```
*****
*
* S/NO  STUD.NO.      NAME                MAT  ENG  INT  SOC  BUS  TEC  AGR  CRS  LANG.  TOTAL  AVE.  *
*****
```

S/NO	STUD.NO.	NAME	MAT	ENG	INT	SOC	BUS	TEC	AGR	CRS	LANG.	TOTAL	AVE.
1	1105	AISHAT BELLO	68B	78A	55C	58C	53C	76A	84A	70A	54C	596	66.22
2	1201	POPOOLA SEGUN	62B	58C	42D	77A	56C	44D	88A	55C	85A	567	63.00
3	1108	KULE MARSHALL	54C	67B	56C	56C	45D	33F	67B	12F	34F	424	47.11
4	1112	GEORGE TELEMI	43D	43D	23F	57C	46D	64B	32F	68B	45D	421	46.78
5	1207	LADOKE KEMI	66B	62B	81A	68B	22F	75A	92A	53C	32F	551	61.22
6	1131	KOLEDOWO PETER	0F	0	0.00								

```
*****
```

 * SUMMARY OF EXAM SCORES *

CLASS : JSS1A

S/NO	STUD.NO.	NAME	MAT	ENG	INT	SOC	BUS	INT TEC	HOM TEC	IRS CRS	LANG.	TOTAL	AVE.
1	1111	JULIANA WILLIAMS	43	54	34	66	34	54	33	35			
2	1101	JOSHUA KOLADE	23	45	54	3	56	34	67	42	68		
3	1102	LIMAN IBRAHIM	23	54	43	65	68	54	67	57	56	490	54.44
4	1109	OLOKUNLE JAMES	53	56	57	56	34	54	67	57	56		
5	1121	FRED BRICKSWEORTH	65	45	35	67	33	67	56	45	34	447	49.67
6	1123	PETER BANES	34	34	56	65	45	66	54	44	45	443	49.22
