

**COMPUTERISATION OF GRADING SYSTEM IN  
STAFF COMPREHENSIVE SECONDARY SCHOOL,  
A J A O K U T A**

**BY**

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF MATHS/COMPUTER  
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FEDERAL UNIVERSITY OF TECHNOLOGY,  
MINNA.**

**MARCH 1997.**

APPROVAL PAGE

We the undersigned, certify that we have read this thesis and approve it as adequate in scope and quality for the Postgraduate Diploma in Computer Science.

  
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MR. YOMI AIYESIMI  
PROJECT SUPERVISOR.

6/3/98  
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DATE

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DR. ADEGBOYE.  
HEAD OF DEPARTMENT

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DATE

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EXTERNAL EXAMINER

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DATE

## A B S T R A C T

Organisations face the problems of managing the large amounts of data required for every day operations, decision making and planning.

Schools maintain records on students including courses taken and grades earned. These records are better maintained by using machines that can reduce the work to be done manually and be done more efficiently.

## ACKNOWLEDGEMENT

This study will not seem complete without expressing my gratitude to all people who have helped me in one way or the other.

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1.0 INTRODUCTION

The world has witnessed many major technological breakthrough in the last decade. Among them, the most fascinating and captivating one is the development of computer. In a way this technological breakthrough brought about a kind of revolution. This revolution is greater than any former revolution. The revolution is beyond our wildest imagination: the revolution affects our daily lives; the revolution that has changed and will continue to change the way in which we perceive our world. The impact of computers on human lives make it necessary for every one to be educated in both the fundamental of computer and their many uses.

1.1 The Computer

A computer is an electronic machine that can quickly make calculations, rearrange, store and retrieve information. Basically there are two types of computers. Digital computers and analog computer, Digital Computers are machines that perform calculation by operating on numbers while analog computers calculate by measuring physical quantities. Some literatures include hybrid computer as the third type. It combine the capabilities of analog computers and digital computers system in one.

An electronic computer is composed of five basic units each performing a specific function.

The units are:

- a control unit )
- an arithmetic/logic unit )
- central memory ) CPU
- Input device !
- Output device

similarities and drawing analogies between things. Artificial intelligence should be relevant to the design of teaching and learning systems, since these processes are generalisation of particular teaching and learning activities. Artificial intelligence makes the educational use of computer maximally beneficial to all concerned.

Computer Assisted Instruction is the use of computers to present drills, practice exercises and tutorial sequences to the students, and sometimes to engage the students in a dialog about the substance of the instructor. In a computer Assisted Instruction classroom today, students are seated at a desk that contains a terminal with a large display screen and a key board. Pupils work at their paces either learning a new lesson or being drilled on the previous lesson. Some students may be testing their knowledge using tests administered by the computer. The computer respond, rapidly to the demand of the students and keeps a running tally of each pupils performance. It may also have the ability to project slides requested by the Computer Assisted Instruction programe. The teacher is free to plan special lessons to assist the students who are not doing well according to their computer test score. The major problem of Computer Assisted Instruction programs is the difficulty to produce an imaginative lesson.

The school administration can also benefit from the use of computer to do some of the administrative tasks so that more time could be given to the preparing and teaching of lessons. Among the administrative work that computer can do is the keeping of school records especially records about the grades of the pupils.

## 1.2 Purpose of Study

In this study we wish to critically look at the method of grading in the Staff Comprehensive Secondary School, Ajaokuta and then observe the advantages of the method and also observe the disadvantages of the system.

We shall suggest an alternate method and how best to use the computer to simulate the grading system of the school. The study will also suggest the training of the people to operate and use the computer and suggest the type of software to use and the purchase of a computer. With the pressure of work increasing daily and the school population increasing exponentially other records and administration should be computerised.

## CHAPTER TWO

### 2.0 INTRODUCTION

Staff Comprehensive Secondary School, Ajaokuta is a Comprehensive Secondary School established in October, 1983 by Ajaokuta Steel Company Limited to meet the educational need of dependants of the staff of the Company. Staff Comprehensive Secondary School has grown from the initial enrollment of 48 pioneering students 1983 to about 1,200 in 1995.

### 2.1 Background History

Ajaokuta Steel Company Limited is located on the western sides of River Niger. It is bounded on the south by Ajaokuta village, on the west by hills, on the east by River Niger and on the north by vast grassland. It covers an area of about 24,000 hectares of land. Out of this the Steel Plant itself covers about 800 hectares of land.

The Federal Government of Nigeria started to show interest in the establishment of Iron and Steel Industry around 1958. Market survey were carried out to ascertain the prospect of establishing the industry. However the initial interest to establish a Rolling Mill was changed to that of establishing an integrated steel plant because Iron Ore deposit was available in the country (especially at Agbaja in the present Kogi State). The availability of coal in the country and the plan to establish Hydro-Electric Power at Kainji further strengthen the economic feasibility of establishing an integrated Iron and Steel Industry.

The Federal Government invited and received a number of proposals from foreign firms on the feasibility of establishing steel company based on the direct reduction processes between 1960 and 1967. However because the Iron Ore deposits at Agbaja and Udi were unsuitable for direct reduction processes the Federal Government could not achieve any success. As a result of the economic/technical co-operation between Nigeria and Soviet Union in 1967, a team of Soviet experts arrived in Nigeria to conduct a feasibility study on the establishment of an iron

Furnace processes of iron making and further recommended a survey of the country because the available iron deposits were of poor quality.

In 1968 Soviet geological experts came to Nigeria and after a general geological investigation reported that there were high prospects for finding richer iron ore and coal deposits in the country. Consequently, in 1970 a contract was signed with the Techno Export of U.S.S.R. under which they agree to provide specialists and equipment to carry out further geological surveys in order to determine the quality of the deposits of iron ore and coal resources in that could be used for the proposed Iron and Steel Industry.

After extensive exploration in 1973 good Iron Ore Deposits were found at Itakpe, Ajaokuta and Shokoshoko all in the Region around Okene, Kabba and Lokoja. The Federal Government promulgated a decree that provided for the formation of Ajaokuta Steel Company Limited as well as other Steel Company. The Ajaokuta Steel Company became fully responsible for the construction, erection and operation of Ajaokuta Steel Plant.

Tiaj-Prom-Export (TPE) of U.S.S.R. was commissioned in 1973 to carry out Preliminary Project Report on the Iron and Steel Industry in Nigeria. The Report which was submitted 1974, studied alternate production schemes based on local and imported raw materials and was later discussed and accepted in 1975. It was agreed that the Blast Furnace Plant should utilise Itakpe Iron Ore concentrate with a blend of local and imported coals to produce long product only and Ajaokuta was chosen as the site for the plant.

Ajaokuta Steel Company Limited has about seven departments with about 14 units, has a working population of well over 5,000 people living in the Steel Township located on a virgin land far from any major town.

Ajaokuta Steel Industry as a company on a virgin land with large population (well over 10,000) need to meet the educational demand of the dependant of the staff members established some Primary Schools. In 1983, the first set of pupils passed out from the pioneering Primary School and hence the need to start a Secondary School. The Secondary School, Staff Comprehensive Secondary School started with an initial students of about 48 and 8, teaching staff on a temporary site. The student population increased rapidly because of the location of the Company which is far from any standard school.

The school finally moved to its present permanent site with the number of pupils looking for admission increasing more and more. The classrooms in the permanent site though many could not meet the need of enrollment increase. Because the infrastructures and teaching staff could not cope with this geometrical increase there is the need to make the best use of what the school has. The growth rate caused problems for the management of the school, the teaching staff and the township at large. The teachers are over burdened with teaching a large number of classes and many records to keep. Amongst the records, the grading system demands the attention of this study which will eventually lessen some of the burdens of teachers.

## 2.2 The Grading System

A system is an organised, interacting, interdependent and integrated components. (Schroderberb 1971) A system has a goal to be observed. A system must therefore regulate its interracting components so that its goal is realised. From the definition it is clear that any system has components which is transformed into output. A system which is a whole must be controlled in order to be able to achieve its goal. The system and its environment are interrelated and interdependent. A good system must be simple, flexible, reliable economical and

acceptable.

### System Analysis

System analysis is the method of determining how best to use computer and other resources to perform task which meet the information needs of an organisation. System analysis is concerned with converting the objectives of management as far as information and data are concerned into methods that are amenable processing by a computer. Each of the components parts has to be examined both as separate entity and in relation to the whole. There is need for the components to interact in a way that will make the goal attainable.

System Analysis consists of a number of steps to be observed and taken so as to yield a good result. They are:

- (a) the problem must be defined and a preliminary survey conducted to enable us to establish whether there is need for a new system and if so to specify the objective of the system.
- (b) a feasibility study should be conducted so as to investigate the problems and look for all possible alternative solutions.
- (c) a more detailed study is conducted so as to fully understand existing system and to identify the basic informations required.
- (d) the existing system should be critically analysed and the objectives of the proposed system should lead to a full specification of the user's requirement.
- (e) the analysis should lead to a number of possible alternative designs. Different combinations of manual and computerised elements should be considered. Once one alternative has been selected the purpose of design stage is to work from requirement specification to produce a system specification.



- (f) the type of hardware/software should be choosed and acquired or to write the needed software.
- (g) the new system should be implemented. This involves:
  - (i) design, write and test computer program.
  - (ii) train user
  - (iii) test clearable procedures
  - (iv) produce documentation
  - (v) create files
  - (vi) cut-over to new system
- (h) when the system is implemented and in full operation, it is examined to see if it has met the objectives set out in the original specification. It should be frequently reviewed and maintained. The grading system is as follow:

SCORE	GRADE	REMARK
75 and above	A1	Excellent
70 - 74	A2	Very Good
65 - 69	A3	Good
60 - 64	C4	Credit
55 - 59	C5	Credit
50 - 54	C6	Credit
45 - 49	P7	Fair Pass
40 - 44	P8	Fair Pass
<39	F9	Fail

### 2.3 Analysis of the Grading System

The grading varies in both Junior Secondary School and Senior Secondary School. The score consists of two parts:-

Continuous Assessment - 30 marks

Examination - 70 marks

For a student to be promoted from J.S.S. 1 to J.S.S. 2 and J.S.S. 2 to J.S.S. 3 the student must take and obtain not less than 45% with sometimes variation. An average of the total score obtained is found and when the average is 45 percent and above the student is considered to have passed. The subjects in J.S.S. are:

- |                                |                                  |
|--------------------------------|----------------------------------|
| (1) English Language           | (2) Literature in English        |
| (3) Mathematics                | (4) Social Studies               |
| (5) Integrated Science         | (6) Agricultural Science         |
| (7) Hausa                      | (8) Igbo                         |
| (9) Yoruba                     | (10) French                      |
| (11) Business Studies          | (12) Christian Religious Studies |
| (13) Islamic Religious Studies | (14) Introductory Technology     |
| (15) Home Economics            |                                  |

To qualify for the award of Junior Secondary School 3 three certificate conducted by the State Ministry of Education the student must take and pass English Language, Mathematics, Business Studies, Integrated Science and Social Studies plus any other three or four subjects.

In the Senior Classes the situation is different. The grading system is as shown in the grading system with some variations. For promotion from S.S. 1 to S.S. 2 and S.S.2 to S.S.3 promotion is determined by meeting certain conditions. The condition varies according to situation. The subject available in the Senior Secondary are:

- |                           |                           |
|---------------------------|---------------------------|
| (1) English Language      | (2) Literature in English |
| (3) Mathematics           | (4) Further Mathematics   |
| (5) Hausa                 | (6) Igbo                  |
| (7) Yoruba                | (8) Account               |
| (9) Commerce              | (10) Typing & Shorthand   |
| (11) Agricultural Science | (12) Biology              |

Name of subjects a student is offering.

Continuous Assessment scores for each subject

Scores for each subjects:

Grade:-

Sessesion:

Remark

- (b) List of promoted students will consist of all students who meet the criteria for promotion from S.S. 1 to S.S. 2 and from S.S. 2 to S.S. 3. The criteria varies and an example of such is passes at credit level in five subjects and any other passes in at least two subjects.

In case of West African Examinations Councils, Senior School Certificate Examinations Registration, the condition for registration is:-

- (1) English Language
- (2) Nigeria Language
- (3) Mathematics
- (4) One science subject (from Biology, Chemistry, Physic, Agric. Science)
- (5) One subject from (Literature in English, Economics, Geography, History).
- (6) One Vocational Subject (Home Economics, Technical subjects such as Wood work, Applied Electricity, Metal work, Auto Mechanic, and Tech. Drawing, Commercial Subjects such as Typing, Shorthand, Commerce and Accounts.
- (7) Plus at least any two other subjects or at most any other three subjects.

The list of all the students who do not meet the above promotion or registration criteria will also constitute another

# AJAKUTA STEEL COMPANY LTD.

STAFF COMPREHENSIVE SECONDARY SCHOOL P.O. BOX 99 AJAKUTA



NAME OF STUDENT \_\_\_\_\_ (Surname First)  
 FORM \_\_\_\_\_ YEAR \_\_\_\_\_ TERM \_\_\_\_\_  
 TIMES ABSENT AND REASON \_\_\_\_\_ NO IN FORM \_\_\_\_\_  
 SEX \_\_\_\_\_ AGE \_\_\_\_\_ AVE. AGE IN FORM \_\_\_\_\_

House \_\_\_\_\_ NEXT TERM BEGINS \_\_\_\_\_  
 Adm No \_\_\_\_\_ NEXT TERM ENDS \_\_\_\_\_  
 No Of Times School Opened \_\_\_\_\_  
 No Of Attendance \_\_\_\_\_

GROUPS	MARK OBTAINABLE	ACADEMICS								TEACHER'S REMARK	SIGNATURE	SKILLS & BEHAVIOUR							
		1ST SUMMARY		2ND SUMMARY		3RD SUMMARY		TERMS EXAMS				SUMMARY OF TERMS WORK		SKILLS	5	4	3	2	1
		MARKS OBTAINED	MARKS OBTAINED	MARKS OBTAINED	MARKS OBTAINED	TOTAL MARKS OBTAINED	HIGHEST MARK CLASS	LOWEST MARK CLASS	AVERAGE MARK CLASS			POSITION	Handwriting	Fluency	Games Sports & Gymnastics	Handling of Tools Lab & Workshop	Drawing, Painting & Crafts	Musical skills	BEHAVIOUR
1	ENGLISH LANG.																		
	LIT. IN ENGLISH																		
	FRENCH																		
	ARABIC																		
2	HAUSA IGBO YORUBA																		
	MATHEMATICS																		
	FURTHER MATHS																		
	BIOLOGY/INT. SCIENCE																		
3	CHEMISTRY																		
	PHYSICS																		
	HOME ECONOMICS																		
	AGRIC SCIENCE																		
4	PHY. EDUCATION																		
	C.R.S./I.R.S.																		
	HISTORY/GOVT.																		
	GEOGRAPHY																		
5	ECONOMICS/S. STUDIES																		
	MUSIC																		
	FINE ART																		
	COMMERCE																		
6	ACCOUNTS																		
	BUSINESS STD.																		
	BUSINESS METH.																		
	SHORTHAND																		
7	TYPEWRITING																		
	B. ELECTRONIC																		
	A. ELECTRICITY																		
	AUTO MECH.																		
	METAL WORK																		
	WOODWORK																		

FORM TEACHER'S REMARKS \_\_\_\_\_

HOUSE MASTER'S/MISTRESS'S REMARKS \_\_\_\_\_

PRINCIPAL'S REMARKS \_\_\_\_\_

KEY TO GRADINGS	
76-100	A1 (Excellent)
70-75	A2 (V. Good)
66-69	A3 (Good)
60-65	C4 (Credit)
56-59	C5 (Credit)
50-55	C6 (Credit)
46-49	P7 (pass)
40-45	P8 (Pass)
01-39	F9 (Failure)

KEY TO RATINGS	
5	MAINTAINS AN EXCELLENT DEGREE OF OBSERVABLE TRAITS
4	MAINTAINS HIGH LEVEL OF OBSERVABLE TRAITS
3	ACCEPTABLE LEVEL OF OBSERVABLE TRAITS
2	SHOWS MINIMAL REGARD FOR OBSERVABLE TRAITS
1	HAS NO REGARD FOR OBSERVABLE TRAITS

ACCOUNTS  
 1 School fees Owing this term \_\_\_\_\_  
 2 School fees due next term \_\_\_\_\_  
 3 Other dues \_\_\_\_\_  
 Total Amount \_\_\_\_\_

S/NO.	SUBJECT	NAME OF TEACHER	SIGN. OF TEACHER
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

Fig. 3.3

### 3.4 Student History File

Student History File consist of all vital informations about a student from the first day in the school when the student was admitted into the school till the last day the student leaves the school.

Essentially it consist of the following:

- (a) Personal Particulars
- (b) Activities and achievements
- (c) Personal qualities
- (d) Scholarstic Records
- (e) Details of Transfer

Personal Peticulars consist of informations about Date of Birth, Place of Birth, Town, State, Nationality, Tribe and Religion. Other informations include schools attended, Address, Parents Name and address.

The Activities and Achievements includes, office held when in school or class, clubs and societies one belong and the office held there, Games and Honours, Position (academics) in class, Scholarstic Honour, Honour due to conduct, Interest/Aptitudes Test and Medical History.

The Personal Qualities includes, the evaluation of the personal qualities of the student's concerned which includes Honesty and Integrity, workand study habit, Team work, Initiative self control, sense of



### SCHOLARSTIC RECORD

SUBJECTS	TERM	FORM 1			FORM 2			FORM 3			FORM 4			FORM 5			FORM 6			RESULTS		OVERALL RESULT			
		1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	Final	Grade	1st	2nd	3rd	
I	ENGLISH LANGUAGE																								
	FRENCH																								
	LITERATURE IN ENGLISH																								
	ISLAMIC REL. KNOW.																								
	BIBLE KNOWLEDGE																								
	II	HISTORY/GOVERNMENT																							
	GEOGRAPHY																								
	ECONOMICS																								
	SOCIAL STUDIES																								
	III	MATHEMATICS																							
	ADD. MATHEMATICS																								
	PHYSICS																								
	CHEMISTRY																								
	BIOLOGY																								
IV	HEALTH SCIENCE																								
	PHYSICAL EDUCATION																								
	INTEGRATED SCIENCE																								
	AGRICULTURAL SC.																								
	V	WOOD/METAL WORK																							
	TECH. DRAWING																								
	ART																								
VI	TYPING/SPORT HAND																								
	COMMERCE/STATISTICS																								
	PRINCIPLES OF ACCTS.																								
Position in Class																									
Number of students in class																									

A. Outstanding (Top 10%) B. Above Average (Next 20%) C. Average (Next 40%) D. Below Average (Next 20%) E. Very Weak (Bottom 10%)

#### DETAILS OF TRANSFER

Date	Reasons for Transfer	Copy of History Card sent to

#### CAREER INFORMATION

Career Interests	Suitability	Remarks

Career on leaving \_\_\_\_\_

#### FINAL COMMENTS BY PRINCIPAL

PRINCIPAL



in games.

The Scholarstic Records contains records about the performance of the students academically. It include the performance year by year in each of the subjects. For each class the scores of the students in each of the subject are recorded term by term and the overall picture of the student's record can be seen and appreciated. An example of Scholarstic Record is attached.

Details of Transfer as the name implies deals with informations about Date of Transfers, Reasons for transfer, copy of history card sent, Career Information such as career interests, suitability and remarks. One other important thing to mention is the information about career on leaving the school. An example is hereby attached as Fig. 3.4 (a) & (b).

### 3.5 Creation of Database Files

A database is the collection of interrelated data stored together with minimum redundancy to serve multiple applications with the data stored in such a way that it is independent of the hardware on which it is stored. When a database is organised and stored on axillary storage facility, application program can refer to data in the database independent of how the data is arranged or organised. A database is one or more files which is a collection of related information stored together. Hence a database includes at least one database file.

Our database file includes:

- (a) Registration
- (b) class selection
- (c) Scores Update
- (d) Grading
- (e) Promotion Exercise

(a) The Registration File

The registration file consists:

- (i) New Student Entry



- (iii) Viewing of Student Entry
- (iv) Deleting of Student Entry
- (v) Quit

Usually personal informations are included with the above informations. They are:

Reg. No.:	Sex:-
Surname:-	Age:-
First Name:-	State:-
Other Name:-	No. of Subjects

In other to register for a subject you only need to enter the subject code.

(b) Class Selection:

Since we are dealing with grading in the senior classes, there are three classes to select from. They are SS.1; SS. 2, and SS. 3; To select a particular class you only need to press the class code.

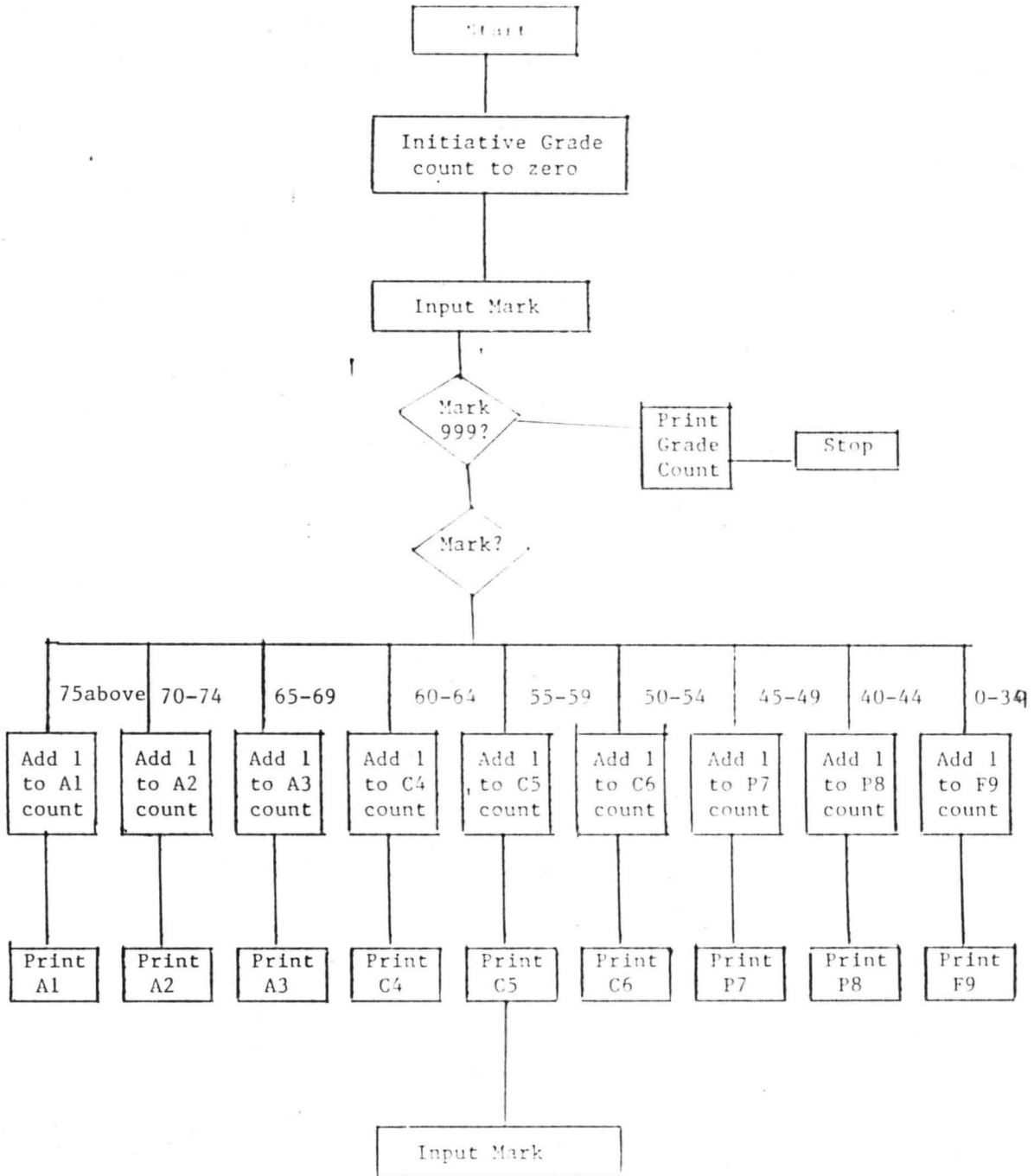
(c) Score Update

Score update contains scores for each subject. The scores have two parts namely continuous assessment and Examination. The final grades are calculated from the sum of scores from the continuous assessment and examination. The promotion is based on the performance of the student on at most 9 subjects.

(d) Grading System:

The score on each subject has two parts the examination and the continuous assessment. Total score is the addition of the two. The grading is as follows:

Grading



affect the S.S. 3 as their results is basically determined by their performance in the Senior School Certificate Examination conducted by West African Examinations Council.

6. **Printing Result:** The results are normally printed out for many purpose. First it is given to students for onward transmission to their parents who uses result to determine the performance of their own children. Sometime authorities like School Management Board, Management, the Ministry of Education may require them. The result sheet usually contain personal information like Name in full, Registration Number, Sex, Age, State of Origin and the subjects offered and the scores and grades obtained in them.

(1)

AJAOKUTA STEEL COMPANY LIMITED, AJAOKUTA  
STAFF COMPREHENSIVE SECONDARY SCHOOL

COMPUTERISED GRADING SYSTEM

MAIN MENU

MENU CODE	MENU
1	REGISTRATION
2	SCORES UPDATE
3	GRADING
4	PROMOTION EXERCISE
5	PRINTING RESULT
6	Q U I T

Press a MENU CODE for choice

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COMPUTERISED GRADING SYSTEM

CLASS SELECTION MENU

CLASS CODE	CLASS
1	SS1
2	SS2
3	SS3
4	EXIT

Press a CLASS CODE

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COMPUTERISED GRADING SYSTEM

REGISTRATION MENU

MENU CODE	MENU
1	NEW STUDENT ENTRY
2	EDIT STUDENT ENTRY
3	VIEW STUDENT ENTRY
4	DELETE STUDENT ENTRY
5	Q U I T

Press a MENU CODE for choice

AJAOKUTA STEEL COMPANY LIMITED  
STAFF COMPREHENSIVE SECONDARY SCHOOL

NEW REGISTRATION ENTRY

REGISTRATION NUMBER: 584	SEX : M
SURNAME : ADAMU	AGE : 12
FIRST NAME : MOHAMMED	STATE OF ORIGIN: NIGER
OTHER NAME : UMAR	NO OF SUBJECTS : 9

SUBJECT REGISTRATION SECTION ENTER SUBJECT CODE ONLY

SUBJECT 1: 11	SUBJECT 4: 14	SUBJECT 7: 17
SUBJECT 2: 12	SUBJECT 5: 15	SUBJECT 8: 18
SUBJECT 3: 13	SUBJECT 6: 16	SUBJECT 9: 19

SAVE THIS ENTRY (Y/N):

AJAOKUTA STEEL COMPANY LIMITED  
STAFF COMPREHENSIVE SECONDARY SCHOOL

VIEW REGISTRATION ENTRY

REGISTRATION NUMBER: 584	SEX : M
SURNAME : ADAMU	AGE : 12
FIRST NAME : MOHAMMED	STATE OF ORIGIN: NIGER
OTHER NAME : UMAR	NO OF SUBJECTS : 9

SUBJECT REGISTRATION SECTION ENTER SUBJECT CODE ONLY

SUBJECT 1: 11	SUBJECT 4: 14	SUBJECT 7: 17
SUBJECT 2: 12	SUBJECT 5: 15	SUBJECT 8: 18
SUBJECT 3: 13	SUBJECT 6: 16	SUBJECT 9: 19

PRESS ANY KEY TO CONTINUE

AJAOKUTA STEEL COMPANY LIMITED  
STAFF COMPREHENSIVE SECONDARY SCHOOL

EDIT REGISTRATION ENTRY

REGISTRATION NUMBER: 584	SEX : M
SURNAME : ADAMU	AGE : 12
FIRST NAME : MOHAMMED	STATE OF ORIGIN: NIGER
OTHER NAME : UMAR	NO OF SUBJECTS : 9

SUBJECT REGISTRATION SECTION ENTER SUBJECT CODE ONLY

SUBJECT 1: 11	SUBJECT 4: 14	SUBJECT 7: 17
SUBJECT 2: 12	SUBJECT 5: 15	SUBJECT 8: 18
SUBJECT 3: 13	SUBJECT 6: 16	SUBJECT 9: 19

REPLACE THIS ENTRY (Y/N):

4

AJAOKUTA STEEL COMPANY LIMITED  
STAFF, COMPREHENSIVE SECONDARY SCHOOL

DELETE REGISTRATION ENTRY

REGISTRATION NUMBER: 584	SEX	: M
SURNAME : ADAMU	AGE	: 12
FIRST NAME : MOHAMMED	STATE OF ORIGIN:	NIGER
OTHER NAME : UMAR	NO OF SUBJECTS :	9

SUBJECT REGISTRATION SECTION ENTER SUBJECT CODE ONLY

SUBJECT 1: 11	SUBJECT 4: 14	SUBJECT 7: 17
SUBJECT 2: 12	SUBJECT 5: 15	SUBJECT 8: 18
SUBJECT 3: 13	SUBJECT 6: 16	SUBJECT 9: 19

TO DELETE RECORD (Y/N):

AJAOKUTA STEEL COMPANY LIMITED, AJAOKUTA  
STAFF COMPREHENSIVE SECONDARY SCHOOL

COMPUTERISED GRADING SYSTEM

S C O R E S M E N U

- 1 CONTINUOUS ASSESSMENT
- 2 EXAMINATION
- 3 EXIT

Enter your choice

AJAOKUTA STEEL COMPANY LIMITED  
STAFF COMPREHENSIVE SECONDARY SCHOOL

SCORES ENTRY SCREEN - CA

REGISTRATION NUMBER: 584	SEX : M
SURNAME : ADAMU	AGE : 12
FIRST NAME : MOHAMMED	STATE OF ORIGIN: NIGER
OTHER NAME : UMAR	NO OF SUBJECTS : 9

DETAILS OF SCORES

PHYSICS 67.0	P.H.E. 71.0	GEOGRAPHY 74.0
HOME ECON 42.0	C.R.S. 80.0	ECONOMICS 71.0
AGRIC. SC 59.0	I.R.S. 60.0	FINE ART 56.0

SAVE THIS ENTRY (Y/N) :

AJAOKUTA STEEL COMPANY LIMITED  
STAFF COMPREHENSIVE SECONDARY SCHOOL

SCORES ENTRY SCREEN - EXAM

REGISTRATION NUMBER: 584	SEX : M
SURNAME : ADAMU	AGE : 12
FIRST NAME : MOHAMMED	STATE OF ORIGIN: NIGER
OTHER NAME : UMAR	NO OF SUBJECTS : 9

DETAILS OF SCORES

PHYSICS 57.0	P.H.E. 45.0	GEOGRAPHY 73.0
HOME ECON 89.0	C.R.S. 82.0	ECONOMICS 56.0
AGRIC. SC 90.0	I.R.S. 71.0	FINE ART 70.0

SAVE THIS ENTRY (Y/N) :



Structure for database: C:\student.dbf

Number of data records: 3

Date of last update : 04/04/96

Field	Field Name	Type	Width	Dec
1	RNUMB	Character	5	
2	SURNAME	Character	15	
3	FIRST	Character	15	
4	OTHER	Character	15	
5	SEX	Character	1	
6	AGE	Character	2	
7	STATE	Character	12	
8	SUBNO	Numeric	1	
9	SUB1	Character	2	
10	SUB2	Character	2	
11	SUB3	Character	2	
12	SUB4	Character	2	
13	SUB5	Character	2	
14	SUB6	Character	2	
15	SUB7	Character	2	
16	SUB8	Character	2	
17	SUB9	Character	2	
18	CA1	Numeric	4	1
19	CA2	Numeric	4	1
20	CA3	Numeric	4	1
21	CA4	Numeric	4	1
22	CA5	Numeric	4	1
23	CA6	Numeric	4	1
24	CA7	Numeric	4	1
25	CA8	Numeric	4	1
26	CA9	Numeric	4	1
27	E1	Numeric	5	1
28	E2	Numeric	5	1
29	E3	Numeric	5	1
30	E4	Numeric	5	1
31	E5	Numeric	5	1
32	E6	Numeric	5	1
33	E7	Numeric	5	1
34	E8	Numeric	5	1
35	E9	Numeric	5	1
36	S1	Numeric	5	1
37	S2	Numeric	5	1
38	S3	Numeric	5	1
39	S4	Numeric	5	1
40	S5	Numeric	5	1
41	S6	Numeric	5	1
42	S7	Numeric	5	1
43	S8	Numeric	5	1
44	S9	Numeric	5	1
45	G1	Character	2	
46	G2	Character	2	
47	G3	Character	2	
48	G4	Character	2	
49	G5	Character	2	
50	G6	Character	2	
51	G7	Character	2	
52	G8	Character	2	
53	G9	Character	2	
54	REMARKS	Character	4	
55	TERM	Character	6	
** Total	SESSION	Character	24	

Structure for database: C:subject.dbf

Number of data records: 23

Date of last update : 07/11/91

Field	Field Name	Type	Width	Dec
1	S_CODE	Character	2	
2	S_NAME	Character	30	
3	S_ABBR	Character	7	
4	ABBR	Character	9	
** Total **			49	

*See*  
*28/8/76*

CHAPTER FIVE

5.1 DISCUSSION OF THE RESULT AND SUGGESTION

In this section, we shall discuss the result of computerisation the grading system and suggestions. We also consider the implication of the system on education.

The study has examined the importance of using computer in computing grading system. We have shown that computer can be used in processing and keeping of school records. We can also use the computer to collect, process, store, and retrieve information with precision and accuracy at a fast rate. The system will enable staff members access information easily and quickly so that more time could be devoted to preparing and teaching of subjects and other works in the school. Other informations about the day to day running of the school and other administrative informations and procedure could be carried out using computer.

One of the problems involved is whether the staff members of the school will be able to use the system in a situation where more than ninety percent of the members of staff are not computer literate. The effectiveness of the system depend on its usefulness and readiness with which the staff members are ready to be trained not only in the school but in the community which is a technology or industrial community. Whether people will be ready to be trained will not constitute a bit obstacle. The usefulness of computer in the present world and the urge to keep the trend in the industrial world will definitely make many of the teachers and other staff member of the Company want to be trained when the opportunity is there. The other problem that may not easily be solved is whether the materials for the training could be readily available or obtained. In the first case they are not readily available in the community at large and in the school in particular. To obtain the needed materials will require some huge amount of capitals that may

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SS1 RESULT - LIST OF UNPROMOTED STUDENTS

S/NO.	REG. NO.	NAME	SEX	AGE	STATE	REMARK
1	584	ADAMU MOHAMMED UMAR	M	12	NIGER	FAIL
2	505	TANKO JUMMAI	F	21	ADAMAWA	FAIL

```

set talk off
set stat off
set date brit
set scor off
set safe off
do while .t.
  clea
  @ 2,15 to 24,64
  @ 0,19 to 4,60 doub
  @ 1,20 say 'AJAOKUTA STEEL COMPANY LIMITED, AJAOKUTA'
  @ 3,22 say 'STAFF COMPREHENSIVE SECONDARY SCHOOL'
  @ 5,25 to 7,53 doub
  @ 6,26 say 'COMPUTERISED GRADING SYSTEM'
  @ 9,21 to 23,58
  @ 20,23 to 22,56
  @ 8,34 to 10,44
  @ 9,35 say 'MAIN MENU'
  @ 12,23 say 'MENU CODE'+spac(11)+'MENU'
  @ 13,23 to 13,31
  @ 13,43 to 13,46
  @ 14,27 say '1'+spac(11)+'REGISTRATION'
  @ 15,27 say '2'+spac(11)+'SCORES UPDATE'
  @ 16,27 say '3'+spac(11)+'GRADING'
  @ 17,27 say '4'+spac(11)+'PROMOTION EXERCISE'
  @ 18,27 say '5'+spac(11)+'PRINTING RESULT'
  @ 19,27 say '6'+spac(11)+'Q U I T'
  @ 21,25 say 'Press a MENU CODE for choice'
do while .t.
  choice1=' '
  @ 21,54 get choice1
  read
  if choice1 $ '123456'
    exit
  endi
endd
if choice1='6'
  exit
endi
@ 8,21 clea to 23,58
@ 10,28 to 22,51
@ 19,29 to 19,50
@ 9,29 to 11,50
@ 10,30 say 'CLASS SELECTION MENU'
@ 13,29 say 'CLASS CODE'+spac(5)+'CLASS'
@ 14,29 to 14,38
@ 14,44 to 14,48
@ 15,33 say '1'+spac(10)+'SS1'
@ 16,33 say '2'+spac(10)+'SS2'
@ 17,33 say '3'+spac(10)+'SS3'
@ 18,33 say '4'+spac(10)+'EXIT'
@ 21,30 say 'Press a CLASS CODE'
do while .t.
  choice2=' '
  @ 21,49 get choice2

```

CHAPTER THREE

3.0 INTRODUCTION

Design is the process of applying various techniques and principles for the purpose of defining the system in sufficient details to permit its physical realisation. Our task here is to determine the content and structure of the database, the type of retrieval and report required, the available input and how the input is processed to produce the required output.

3.1 Design of the System Output

The output of a system is the primary contact between the system and most users. The quality of this output and its usefulness determines whether the system will be used, so it is essential to have the best possible output. We shall begin by specifying what is expected from the system and then determine what input is required to produce this desired output.

The output which is on records of students will be needed as often as examinations are conducted and results are to be compiled so that students will be able to collect their results as at when due. In addition it will be required when new students are to be admitted and when students are leaving the school so as to update records and know whether there will be chances for new intakes and for issuing of transfer certificates.

The output will be needed by individual students as Reports of their performance and progress in school. The parents of students will need the output for some purposes such as when a parent wants to transfer his child to another school, or for other record purposes. The school authority is sometimes required by the Ministry of Education or the School Management Board to submit such reports to them for their use and record keeping. The West African Examinations Council at one time requires the



authority, the school management board and the company, management to make resources available for the take off of the system may yield a high result. The prevailing situation in the company as an industrial community may help in this direction.

As an engineering or industrial community the level of awareness in technology is high, the management of the company is putting all hands on deck to install computer in some department and computerise some of the units of the company so as not to be left behind. This situation will be a good one for the school to move ahead.

We also suggest that there should be computer training programme for the staff members and the purchase of some P.Cs. We suggest the purchase of some books on the teaching of computer science in the school. As at present many schools in the country have introduced computer teaching in their schools so that the students will be aware and familiar with the computer and its uses. The students too will be able to handle informations. We also suggest training programme for the members of staff that will handle these school records to start with and gradually extending the training to other staff members who will be connected with teaching of computer science. We suggest that teaching of computer should be gradually introduced into the school as it has been done elsewhere. This will mean the training of more personnel to handle the class teaching.

In conclusion we suggest that more research work should be conducted into teaching of computer science in schools and using computer to handle other school records and school administration.

## 5.2 Implication for Education

Computerisation of grading system is an effective method of education. We have shown that the school can use the computer to manage other school records and other information. We also show that



information processing could be made to become easy to handle and less time consuming by using computer; that computer training will be needed to make the teaching of computer science possible in school; Introducing the students into computer training brings computer awareness and training to the students. The study also show that cumbersome of administration could be reduced by using the computer to store information and retrieve it when needed with much ease. The problem of keeping of records will just be reduced to storing it in the computer and retrieve it when needed with ease. Other administrative jobs could also be effectively done when records about them are kept safes and not distroyed. The overall increase in the performance of the school will be improved when more time that was hitherto, wasted on calculating scores and grades and keeping records are now done easily and fastly and the teachers can <sup>now</sup> ~~not~~ devote more time to teaching.

### 5.3 Summary

Computer studies has much influence on our society. In the science and technology the use of computer abound in high esteem; in medicine the use of computer is increasing at high rate; in the business world the importance of computer can not be over emphasised. In all human endeavour computer has found a strong footing; computer has proved to be a huge success in education in areas where they have been applied. In our situation or environment which is a technological one computer application is necessary in all areas.

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STAFF COMPREHENSIVE SECONDARY SCHOOL

SS1 RESULT - LIST OF PROMOTED STUDENTS

S/NO.	REG. NO.	NAME	SEX	AGE	STATE	REMARK
1	404	KKK AAA RRR	M	23	KOGI	PASS
2	112	JOHNSON WRIGHT	M	21	KWARA	PASS
3	123	MUSA TANKO AYUBA	F	30	KANO	PASS