A

TECHNICAL REPORT

ON

STUDENTS' INDUSTRIAL WORK EXPERIENCE SCHEME

UNDERTAKEN AT

IYANU OLUWA SCHOOL,

PLOT 2, IYANUOLUWA LANE, OTA, OGUN STATE

BY:

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ND/23/STA/FT/0020

SUBMITTED TO

THE DEPARTMENT OF STATISTICS,

INSTITUTE OF APPLIED SCIENCE,

KWARA STATE POLYTECHNIC, ILORIN,

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF NATIONAL DIPLOMA (ND) IN STATISTICS.

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CERTIFICATION

I**, AREMU ABDULLIAHI AJAO** with Matriculation number **ND/23/STA/FT/0020** hereby declare that I undergo my S.I.W.E.S Programme at **IYANU OLUWA COMPREHENSIVE COLLEGE** situated at Plot 2, Iyanuoluwa Lane, Ota, Ogun State and that this report is written by me to the best of the practical knowledge I gained during the course of the training programme.

AREMU ABDULLAHI AJAO   ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

STUDENT'S NAME   **SIGNATURE AND DATE**

DEDICATION.

This Students' Industrial Work Experience Scheme (SIWES) report is dedicated to Almighty God, the beneficent and the most merciful, the source of all knowledge, wisdom and understanding for His guidance and protection on me.

Finally, this report is also dedicated to my family; MR. & MRS AREMU, my brothers and everyone whom by any chance support me throughout my SIWES program for their unfailing love and support.

ACKNOWLEDGEMENT

 I thank the lord Almighty for His divine protection and provision throughout my training programme.

My profound gratitude goes to my Parents, siblings, friends and family and also extended to **IYANU OLUWA COMPREHENSIVE COLLEGE** staff for their love, prayers and support to ensure that the programme is a success.

I am highly indebted to the **PRINCIPAL of IYANU OLUWA COMPREHENSIVE COLLEGE**, my amiable supervisor; **MR OKUNLAJA OLATUNBOSUN** for their immense contribution and support towards the success of the programme. I appreciate all staff of the above-named organisation for their cooperation. I am grateful to you all.

Finally, my gratitude goes to the members of the Students' Industrial Work Experience Scheme (S.I.W.E.S) unit, Staff of the Department of Statistics and Kwara State Polytechnic for giving me the privilege to experience life outside the four walls of the classroom. May Almighty Lord reward you all!

REPORT OVERVIEW

This report is basically an account of the knowledge and experience gained during the Students' Industrial Work Experience Scheme (S.I.W.E.S) program, held at Iyanuoluwa comprehensive college (Plot 2, 3 Iyanuoluwa Lane Ota, Ogun State which lasted for a period of 4 months (August 2024 to November 2024). Students' Industrial Work Experience Scheme (S.I.W.E.S) is a program designed for students in the higher institutions of learning to acquire practical experience in their various fields of study. During the four months industrial attachment, I was privileged to work in the Admin department as the assistant secretary. In the course of this report, I will focus on the basic operational processes in the admin and also the various surveys carried out in the school.

TABLE OF CONTENTS

CHAPTER FOUR: CONTINUATION OF ACTIVITIES CARRIED OUT DURING THE INDUSTRIAL ATTACHMENT

CHAPTER FIVE   : SUMMARY, CONCLUSION, RECOMMENDATIONS

5.1   Summary

5.1.1   Experience gained

5.1.2   Challenges Faced

5.1.3   Suggestion for improvement

5.2   Conclusion

5.3   Recommendations

1.0   **CHAPTER ONE**

1.1   SIWES   INTRODUCTION

The Students' Industrial Work Experience Scheme (SIWES) is an accepted skill training program which forms part of the approved minimum academic standard in various programs for all Institutions in Nigeria.

It is an effort to bridge the gap in between theory and practical of Engineering and Technology, Science, Agriculture, Management and other professional educational program in the Nigeria Institutions.

1.2   GENERAL BACKGROUND OF SIWES

SIWES was established by Industrial Training Fund (I.T.F) in 1973 to solve the problem of lack of adequate practical skills. SIWES is funded by Federal Government of Nigeria and operated by I.T.F, the coordinating Agencies; Nigeria Universities Commission (N.U.C), National Council for Colleges of Education (N.C.C.E), National Board for Technical Education (N.B.T.E).

The beneficiaries of SIWES include; Undergraduate students of Agric Technology, Engineering, Environmental Sciences, Education, Medical Sciences, Pure and Applied Science.

The duration for the program varies, thus: 4 months for Polytechnics & Education and 6 months for Universities.

1.3   OBJECTIVES OF SIWES

The Industrial Training Fund's Policy Document No 1 of 1973 outlined the following objectives;

- Provide an avenue for students in institutions of higher learning to acquire industrial skills and experience in their course of study.
- Prepare students for the industrial work situation they are to meet after graduation.
- Expose students to work methods and techniques in handling equipment and machinery that may not be available in their institutions.
- Make the transition from school to the world of work easier, and enhance students contact for later job placement.

2.0 CHAPTER TWO

2.1 LOCATION AND BRIEF HISTORY OF THE ESTABLISHMENT OF ATTACHMENT

IYANUOLUWA Comprehensive College is located at plot 2, Iyanuoluwa Lane, Ota, Ogun State, Nigeria.

IYANUOLUWA comprehensive college is one of Nigeria's best indigenous Institute positioned to train children to the peak level in other to be the best anywhere they found their selves. The School strives to help students have well-grounded knowledge of computer and software usage. ICT Trainings are Practical and knowledge driven which has set the School as one of the best institutes in Ogun state, Nigeria. Students at our institute can be assured of 100% satisfaction. The great Citadel of Learning offers courses with world class curriculum, state of the art training infrastructure, highly trained, experienced and professional certified trainers.

With a team of experienced and certified instructors, IYANUOLUWA impart IT knowledge and deep skills to students through instructor led classes, seminars and workshops. IYANUOLUWA comprehensive college is an institution with good proven track record in delivering quality training to students, with hands on approach and comprehensive scheme.

2.2 AIM & OBJECTIVES OF THE ESTABLISHMENT

The aims of secondary school are to prepare students for higher education and the workforce, and to help them develop into responsible citizens.

Academic knowledge
- Provide students with a well-rounded education
- Help students develop critical thinking and rational judgment skills

- Help students develop the ability to communicate effectively

Character development

- Help students develop values such as respect, responsibility, and empathy

- Help students develop into compassionate, principled, and socially conscious citizens

- Help students develop a healthy attitude towards honest labor

Social-civic aim

- Prepare students to be cooperating members of society

- Help students develop a sense of belonging

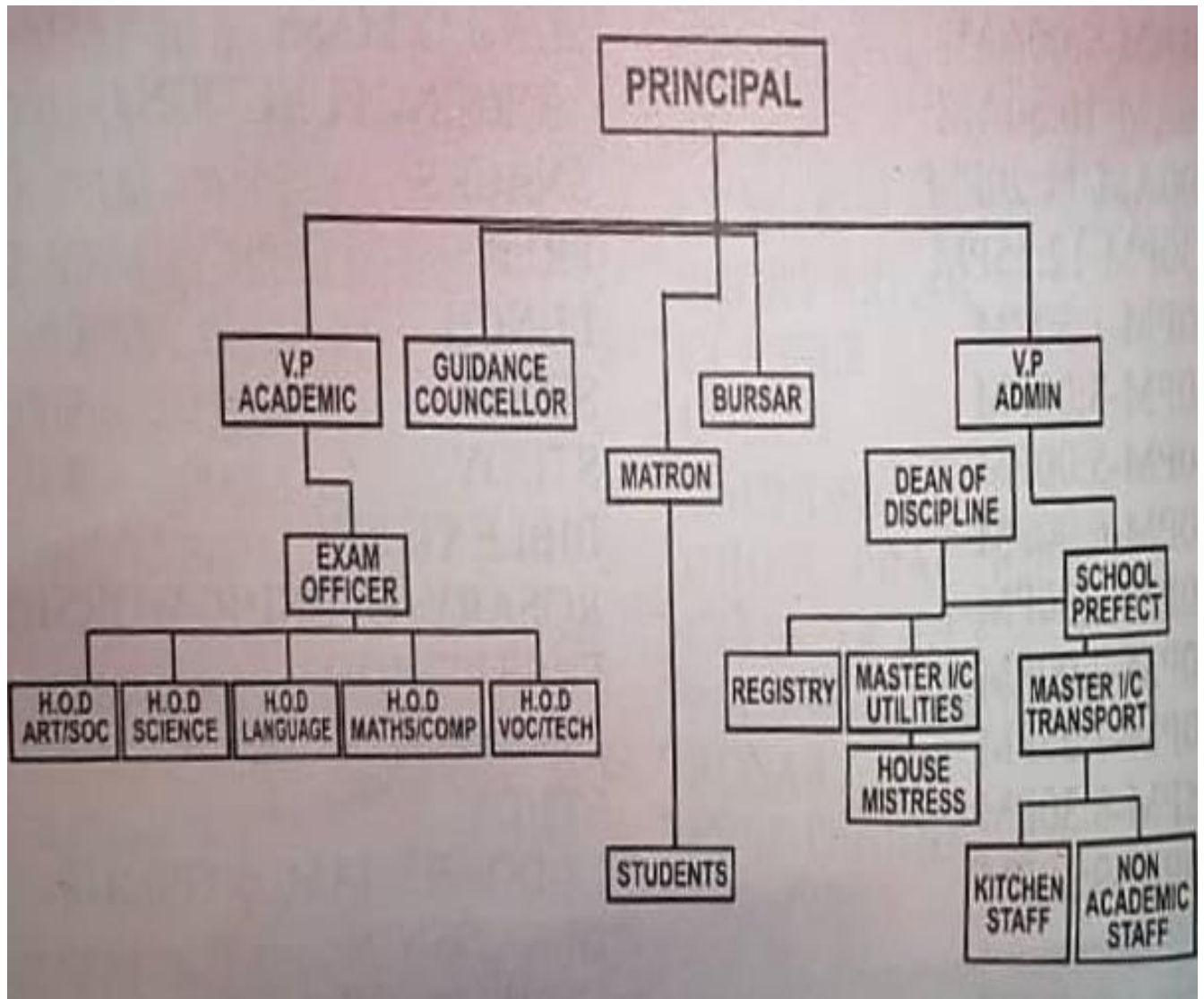- Help students understand and appreciate their cultural heritage

Economic-vocational aim

- Prepare students to be prospective workers and producers

- Help students develop the ability to identify and develop their talents

VISION

Iyanuoluwa comprehensive college aims to pioneer best students by envisioning innovative, compassionate, that adheres to global standards while making a significant in national impact.

2.3   ORGANIZATIONAL CHART OF THE ESTABLISHMENT

3.0   **CHAPTER THREE**

3.1   **EXPERIENCES GATHERED DURING THE ATTACHMENT**

AT IYANU OLUWA COMPREHENSIVE COLLEGE, I was assigned the secretarial duties, where we systematically and accurately managed the data available to draw a meaningful conclusion for the principal.

Statistical analysis plays a pivotal role in the realm of institution. The integration of statistical methodologies within industries settings has become increasingly vital for evidence-based decision-making.

3.2   **APPLICATION OF STATISTICAL METHODS**

During the industrial training, statistical methods were extensively applied to analyze data, draw meaningful conclusions, and make informed decisions. The application of statistical methods played a pivotal role in various projects and tasks.

THE FOLLOWING DATA WAS OBTAINED FROM THE BIOLOGY TEACHER, IYANU-OLUWA COMPREHENSIVE COLLEGE.

SCORE OF 50 SS-2 STUDENTS BIOLOGY TEST.

58	63	81	35	44	63	25	64	71	45
44	65	81	85	27	42	50	53	33	70
70	91	85	71	57	54	62	63	59	58
27	31	90	85	42	45	44	71	28	38
20	82	58	81	81	91	70	17	3	62

DESCRIPTIVE STATISTICS WERE USED TO ANALYZED MY DATA

USING STRUGES RULE TO ANALYZE MY RECORDS
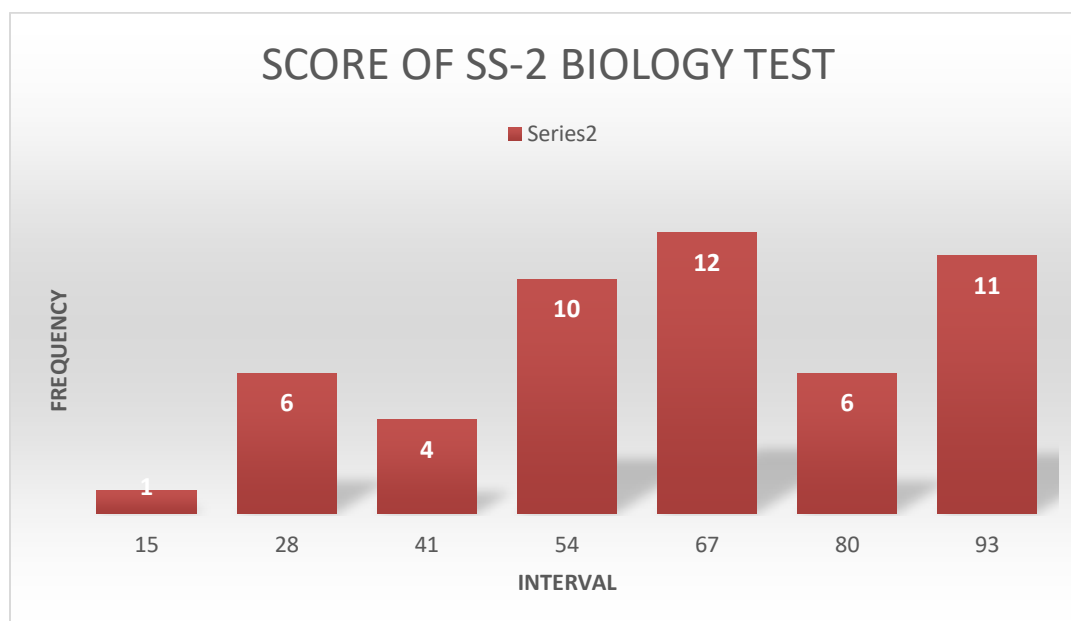
RANGE=88

N= 50

NUMBER OF CLASS=1+3.322(log N)

1+3.322(1.69897) =6.6

CLASS WIDTH=13

CLASS-INTERVAL	FREQUENCY	TALLY	CLASS BOUNDRIES
3-15	1	I	2.5-15.5
16-28	6	ЖII I	15.5-28.5
29-41	4	IIII	28.5-41.5
42-54	10	ЖII ЖIII	41.5-54.5
55-67	12	ЖII ЖIII II	54.5-67.5
68-80	6	ЖII I	67.5-80.5
81-93	11	ЖII ЖIII I	80.5-93.5
	50		

DIAGRAMATIC REPRESENTATION OF MY DATA

4.0   **CHAPTER FOUR**

4.1   CONTINUATION   OF   THE   EXPERIENCES   GAINED/ACTIVITIES CARRIED OUT

During the course of the Industrial Training at IYANUOLUWA SCHOOL, I got acquainted with the Statistical software used at the school (e.g., SPSS) and below are summary of activities carried out from the First week of the training till the final week.

✓ **Orientation and Introduction**

I had Orientation and meeting with staff; overview of the school's data management system and I equally Observed data collection processes for student assessments. Also, I participated in organizing student data for analysis.

✓ **Data Collection and Management**

Part of the duties being assigned is the Data collection and Management; I collected and input data from student assessments, learned about ethical considerations in data handling.

I was actively engaged in the preparation of a dataset for analysis, Exploring data storage solutions used by the school.

Participated in a workshop on data cleaning techniques.

✓ **Data Analysis Techniques**

Under the tutelage of the School SIWES Supervisor, I began with training in advanced statistical techniques and analyzing data trends from recent student performance results.

I created visual representations of data using graphs and charts.

Discussed findings with teachers to identify areas for improvement and compiled a report summarizing initial findings.

✓ **Application of Statistics in Education**

During the Industrial Attachment Programme, I attended a seminar on educational statistics and collaborated with teachers to understand how they use data in planning, analyzed survey data on student satisfaction.

Presentation of findings to a small group of educators was carried out and got feedback on presentation skills and data interpretation.

✓ **Advanced Data Techniques**

The training equally got me exposed to Regression analysis and its applications which is a set of statistical processes for estimating the relationships between a dependent variable and one or more error-free independent variables.

I was assigned to conduct regression analysis on student performance data and preparing data for a conference presentation.

Participated in discussions on data-driven decision making and also compiled a report detailing the regression analysis.

✓ **Educational Research Methods**

It was an interesting experience for me to have gathered knowledge on qualitative & quantitative research methods; Qualitative research focuses on understanding phenomena through detailed, narrative idea. It explores the "how and why" of human behavior, using methods like interviews, observations and content analysis.

In contrast, quantitative research is numeric and objective, aiming to quantify variables and analyze statistical relationships. It addresses the " when and where", utilizing tools like surveys, experiments and statistical models to collect and analyze numerical data

I was engaged in designing a survey for student feedback and collection of survey responses from students. Preliminary analysis of survey data was done and presentation of preliminary findings to staff was done.

- ✓ **Data Visualization**

Data Visualization was part of important areas of Statistics touched during the Industrial Training and was so interesting.

Focused on creating effective data visualizations and I also worked on a project to visualize student performance data.

Presented visualizations to educators for feedback.

Revised visualizations based on input.

Completed a visual report on student data.

I had reporting and presentations

- ✓ **Implementing Changes Based on Data**

Under this section, the SIWES Coordinator discussed strategies for implementing data-driven changes.

I worked with teachers to develop an action plan and assisted in planning a follow-up survey.

Participated in a meeting discussing student intervention strategies and helped draft materials for teacher training on data use.

- ✓ **Continuing Data Collection**

Collected data from the follow-up survey.

Analyzed the impact of changes implemented based on previous data.

Documented results and comparisons with past data.

Prepared a mid-term report for the school administration.

Presented findings to the administration.

✓ **Advanced Statistical Methods**

The Students Industrial Work Experience Scheme provided me an avenue to get practically exposed to the theoretical knowledge I have had in the classroom.

Explored hypothesis testing.

Conducted hypothesis tests on student data.

Reviewed results and discussed implications.

Collaborated with faculty on research papers.

Assisted in preparing data for external reporting.

CHAPTER FIVE

SUMMARY, CONCLUSION, RECOMMENDATIONS

5.1   SUMMARY

The report stated the objective of SIWES which is to provide an avenue for students in institution of higher learning to acquire industrial skills and experience in their approved course of study and also prepare students for the industrial works situation which they are likely to meet after graduation.

The report also stated the description of the establishment of attachment and the work carried out during the attachment period.

More so, it also stated the problems encountered during the programme and also gave suggestion for improvement of the scheme.

5.1.1   EXPERIENCE GAINED

1.   I gained hands-on experience in applying statistical methodologies to the academic performance of the student and letting them know the usefulness of a Statistician to every firm.

2.   I worked closely with the secretary to collect and manage data's, fostering effective communication and collaboration skills essential for interdisciplinary production settings.

3.   I developed proficiency in systematically managing and analyzing production data, honing skills in data retrieval, storage, and utilization for informed decision-making in a venture environment.

5.1.2   CHALLENGES FACED

1. <u>Data Quality Issues</u>: One prominent challenge encountered during the training was the inconsistency and quality of data. In the realm of industrial statistics, working with inaccurate or incomplete data can compromise the integrity of analyses.

2. Time Constraint: Meeting project deadlines and completing tasks within a stipulated timeframe posed another significant challenge. The fast-paced nature of industrial settings often demands quick turnarounds, leaving limited time for in-depth analysis and thorough exploration.

3. Project Ambiguity: Some projects lacked clear guidelines or had ambiguous objectives. This ambiguity made it challenging to devise a structured approach and necessitated creative problem-solving skills.

5.1.3 SUGGESTIONS FOR IMPROVEMENT

In view of relevance of the S.1.W.E.S program, it is sustained by the government through the Industrial Training Fund (ITF) as it exposes the students to work tools equipment and facilities that may not be available in their respective institutions in relation to their course of study.

To this end, I recommend that the following points should be implemented.

1. The program coordinator from the industrial training fund in the various states should ensure that the students concerned are placed in the relevant department in the organization.

2. Proper placement of the student for such programme by the industrial training department of each institution through creating a strong alliance with different companies.

3. Improvement of allowance and free transport services for student attached to the various organization.

4. Students should be made to realize that S.I.W.E.S is not a holiday just but a course of study designed to enhance their relevance production skills and employ ability after graduation.

5. The code of conduct should be strictly adhered to by students participating in SIWES.

5.2   CONCLUSION

The industrial training at Iyanuoluwa comprehensive college has proven to be a transformative experience, providing a comprehensive immersion into the practical applications of statistics in a production/industrial setting. The exposure to real-world challenges, coupled with the application of statistical methods, has been invaluable in bridging the gap between theoretical knowledge and practical implementation.

The institute commitment to providing a conducive learning environment, coupled with the mentorship and guidance received from experienced professionals, has played a pivotal role in shaping the skills and competencies of the trainees. The collaborative and interdisciplinary nature of the projects undertaken has not only enriched my understanding of statistics but has also fostered teamwork and communication skills that are crucial in professional settings.

In conclusion, the industrial training at Iyanuoluwa comprehensive college has been a cornerstone in my educational journey, providing a holistic and practical perspective on the role of statistics in education. The experiences gained will undoubtedly serve as a strong foundation for my future endeavors in the field.

5.3   RECOMMENDATIONS

The I.T.F should prepare public operational rules and regulations, provide logistics needed to administer the scheme. The ITF should organise regularly, conferences and seminars on S.I.W.E.S so as to broaden the knowledge of the students about the programme and to prepare them for the challenges ahead. The ITF through government should make it mandatory for all ministries, companies and government agency to offer placements to students during the period of this programme. The government should make a policy that includes a clause in every major contract lasting over six to nine months being awarded to employ students on attachment.