A REPORT ON STUDENTS' INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)

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OLA-OLU ENGINEERING CONSTRUCTUION WORKS

5, AROMARADU STREET, ILORIN, KWARA STATE

BY

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SUBMITTED TO

THE DEPARTMENT OF WELDING AND FABRICATION, KWARA STATE POLYTECHNIC, ILORIN, KWARA STATE

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF NATIONAL DIPLOMA IN WELDING AND FABRICATION

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PREFACE

The writing of this SIWES REPORT is manufacture by the school authority that before attaining the certificate of National Diploma (ND) in Welding and Fabrication. Each student must undergo the three (3) months SIWES programme.

The SIWES record therefore contains the work done within the three months.

DEDICATION

This SIWES report is dedicated with all sense of humanity and adoration to Almighty God, for His blessing upon me and also to my parents.

CHAPTER ONE

1.0 STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)

Students Industrial Work Experience Scheme (SIWES) was established by the Industrial Training Fund (ITF) in 1973 with the aim of bridging the gaps between the skills which the labour market required with that of those acquired by the graduate students. The Polytechnic and College of Technology students for National Diploma programs will have four months' industrial attachment at the end of their first year while students in the university will have six months' attachment at the end of 200, 300, or 400 level. The scheme has over the years contributed immensely to the personal development and motivation of students to be able to understand the important connection between the taught and learnt content of their academic programmes and what knowledge and skill will be expected of them on professional practice after graduation.

1.1 BACKGROUND OF SIWES

SIWES was established by ITF in the year 1973 to serve the problem of lack of adequate practical skills preparatory for employment in industries by Nigeria Tertiary Institutions graduates. The scheme educates students on Industrial based skills essential for a smooth transition from the classroom to the world of work. Students of tertiary institutions is given the opportunity of being familiarized and exposed to the needed experience in handling machinery and equipment which are usually not available in the educational

institutions. Partaking in SIWES training has become a crucial pre-condition for the award of diploma and degree certificates in specific disciplines in most institutions of higher learning in Nigeria in line with the government education policies. This scheme is to bridge the existing gap between the theory taught in the classroom and practice of science, agriculture, medicine, engineering, technology and other professional programs in the Nigerian tertiary institutions. This program is aimed at exposing the students to the use of various machines and equipment's, professional work methods and ways of safeguarding the work areas in industries as well as other organizations and parastatals.

1.2 AIM AND OBJECTIVES OF SIWES

The aim of SIWES is to bridge the gaps between the skills which the labour market required with that of those acquired by the graduate students.

The objectives of SIWES includes;

i. Prepare students for the work situation they are likely to meet after graduations.
ii. Provide an avenue for students to acquire Industrial scheme and experience in their course of study.
iii. Make the transition from Tertiary institution to the world of work easier, and these enhance student contact for the later job placement.
iv. Enlist and strengthens employer's involvement in the entire educational process to prepare a graduate for employment in the

industries.

1.3 BODIES INVOLVED IN THE MANAGEMENT OF SIWES

The bodies involved are: Federal Government, Industrial Training Fund (ITF). Other Supervising Agencies are: National University Commission (NUC), National Board for Technical Education (NBTE) & National Council for Colleges of Education (NCCE). The functions of the above mentioned agencies are to:

i. Ensure adequate funding of the SIWES scheme.

ii. Establish SIWES and accredit SIWES unit in the approved institutions.

iii. Formulate policies and guideline for participating bodies and institutions as well as appointing SIWES coordinators and supporting staff.

iv. Supervise students at their places of attachment and sign their log-books and ITF Forms.

v. Vet and process students' log-books and forward same to ITF Area office.

vi. Ensure payment of Allowances for the students and supervisors.

Therefore, the success or otherwise of the SIWES depends on the efficiency of the Ministries, ITF, Institutions, Employers of labour and the general public involved in articulation and management of the programme.

1.4 ROLES OF STUDENT

i. Attend SIWES orientation programme before going on attachment.

ii. Comply with the establishment's rule and regulation.

iii. Record all training activity done and other assignment in the log book.

iv. Complete SPEI from ITF, FORM 8 and get it endorsed by the employer for submission to the ITF.

1.5 OBJECTIVES OF THE REPORT

The objectives of the SIWES report are;

i. To make thorough explanation of the work done during the four-month Industrial training.

ii. To fulfil the requirement for National Diploma in Welding and Fabrication.

iii. To contribute to the body of knowledge and to enhance the understanding of the writer about a similar or same job.

1.6 BRIEF HISTORY OLA-OLU ENGINEERING CONSTRUCTION WORKS

Ola-Olu Engineering Construction Works is a company which is located at 5 Aromaradu Street, Ilorin Kwara State. The organization is basically dealing with welding and fabricating and hitherto their existence has brought a positive addition to his host community Ilorin.

Welding and fabrication are essential processes in the engineering and

construction industry. Welding involves joining metal parts using heat, pressure, or both, while fabrication involves cutting, bending, and assembling metal structures. Common welding techniques include:

- Arc Welding: Uses an electric arc to melt and join metals.
- Gas Welding: Uses a flame produced by burning gases (e.g., oxy-acetylene) to melt metals.
- MIG Welding: Uses a wire electrode and shielding gas to join metals.
- TIG Welding: Uses a tungsten electrode and inert gas for precision welding.

1.7 OBJECTIVES OF OLA-OLU ENGINEERING CONSTRUCTION WORKS

Ola-Olu Engineering Construction Works, Ilorin**, is a well-established engineering firm that provides a wide range of services, including:

- Structural steel fabrication and welding.
- Construction of industrial and residential buildings.
- Manufacturing of metal products such as gates, tanks, and staircases.
- Maintenance and repair of engineering structures.

The company is equipped with modern welding and fabrication tools, including arc welding machines, gas welding equipment, cutting tools, and CNC machines. The firm is known for its commitment to quality and safety standards in all its projects.

1.8 ORGANIZATIONAL STRUCTURE OF OLA-OLU ENGINEERING CONSTRUCTION WORKS

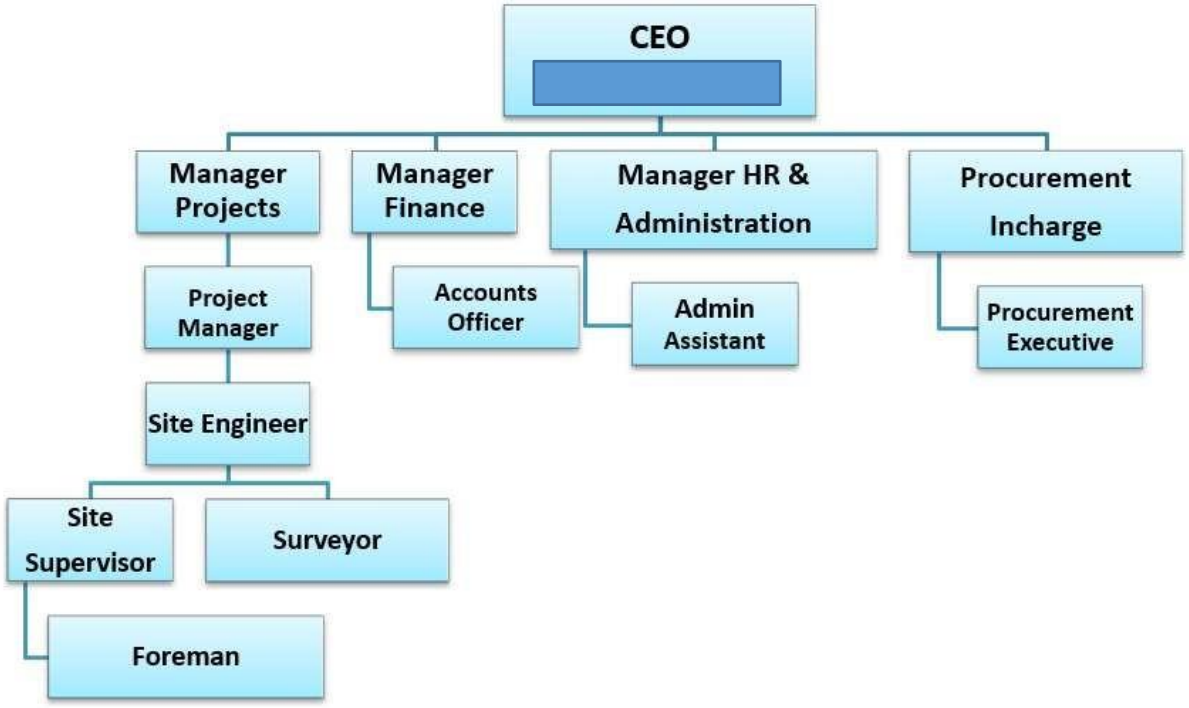

Figure1.1: Organization diagram of Ola-Olu Engineering Construction Works

CHAPTER TWO

EXPERIENCE GAINED (SKILLS AND KNOWLEDGE ACQUIRED)

During my SIWES program, I was actively involved in the following activities:

1. Safety Training: Learned about workplace safety, including the use of personal protective equipment (PPE) such as helmets, gloves, and safety boots.

2. Welding Operations:

- Practiced arc welding and gas welding under the supervision of experienced welders.
- Learned to weld different types of joints, including butt joints, lap joints, and T-joints.

3. Fabrication Processes

- Assisted in cutting and shaping metal sheets using cutting tools and machines.
- Participated in the assembly of metal structures such as gates, tanks, and staircases.

4. Maintenance Work:

- Assisted in the repair and maintenance of welding equipment.
- Learned troubleshooting techniques for common welding problems.

5. Team Projects:

- Collaborated with other trainees and staff on large-scale fabrication projects.
- Gained experience in reading engineering drawings and specifications.

2.1 SKILLS ACQUIRED

Through the SIWES program, I acquired the following skills:

- Proficiency in using welding equipment and tools.

- Ability to interpret engineering drawings and specifications.

- Knowledge of safety protocols in welding and fabrication.

- Improved hand-eye coordination and precision in welding.

- Enhanced teamwork and communication skills.

CHAPTER THREE

MAJOR ACTIVITIES AND PROJECT CARRIED OUT

3.1 CONTRIBUTION TO OLA-OLU ENGINEERING CONSTRUCTION WORKS

i. **Keeping records of daily activities:** I helped in keeping records of daily activities of the project carried out on daily basis, this helps in keeping client details, activities carried out in the department.

ii. **Attending to clients:** I helped in attending to customer be it in the absence of my instructor or when he is not around.

CHAPTER FOUR

CONCLUSION AND RECOMMENDATIONS

4.1 CONCLUSION

The SIWES program at Ola-Olu Engineering Construction Works was a transformative experience that provided me with hands-on skills in welding and fabrication. It deepened my understanding of industrial practices and prepared me for a career in the engineering field. I am grateful to the company and my institution for this opportunity.

4.2 PROBLEMS ENCOUNTERED

Despite the valuable experience gained, I faced some challenges during the program:

- Heat and Fatigue: Prolonged exposure to heat during welding caused physical discomfort.

- Equipment Malfunctions: Some welding machines occasionally broke down, delaying work.

- Skill Gap: Initial difficulty in mastering welding techniques due to limited prior practical experience.

However, these challenges were overcome through perseverance, guidance from supervisors, and consistent practice.

4.3 RECOMMENDATIONS

I use this medium to make the following recommendations concerning the training of student in industrial attachment.

i. This program should be continued for polytechnic students because it bridges up the gap up between the practical and the theoretical skill aspect in the course of study. Government should also ensure a proper supervision of SIWES student so that the purpose of the programme will be achieved.

ii. This program enables us to be self-reliance and employer of labor instead of looking for white collar job after the ND graduation.

iii. In order to guarantee quality assurance of institution and the ITF. The ITF should ensure that the backlog in payment of students allowance is cleared urgently to remove the negative image being created for SIWES.

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