



**A TECHNICAL REPORT ON STUDENT INDUSTRIAL  
WORK EXPERIENCE SCHEME (SIWES)**

**HELD AT**

**QUARRY LINK CONCEPT LIMITED**

**Km 14, Old Ogbomosho Eiyenkorin Ilorin kwara state**

**COMPILED BY**

**JIMOH ABDULRSAQ KOLAWOLE**

**ND/23/MPE/FT/0008**

**IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF  
NATIONAL DIPLOMA (ND) IN MINERAL AND PETROLEUM RESOURCES  
ENGINEERING**

**SUBMITTED TO:**

**DEPARTMENT OF MINERAL AND PETROLEUM RESOURCES ENGINEERING  
KWARA STATE POLYTECHNIC, ILORIN**

**2024/2025**

## **DEDICATION**

The report is dedicated to the almighty Allah and my parent **Mr. & Mrs. Jimoh**

## **ACKNOWLEDGMENT**

All thanks and adoration to almighty God for making this write up a successful one. I acknowledge the effort of my parent Mr and Mrs Jimoh who provided me the opportunity of passing through this third stage of education in my life, may you live long to eat the fruit of your labour.

I also acknowledge the effort of my supervisor. He had always been with me from the beginning of this four month program to the end, He put me through many things, encouraged me to be bold and vocal, He let me know all qualities of a good student. Sir, only God can repay you for this kind gesture.

## **PREFACE**

The Student Industrial Work Experience Scheme (SIWES) was introduced into the nation's tertiary education curricular because of the belief that there is value in putting into practice what has been learned beforehand. There was also the belief that SIWES would help students to acquire an understanding of the society and to interact with different people outside their institution.

It is in this light that the Student Industrial Work Experience Scheme for Polytechnics in Nigeria as stated in the National Board for Technical Education Syllabus aims to produce citizenry conscious of its role in a wider world, proud of its antecedent and prepared for effective leadership role in diversified society, thereby, ensuring a positive contribution on interaction, greatness and trying or becoming effective in their field of studies or field of specialization.

# **TABLE OF CONTENT**

Title page

Dedication

Acknowledgment

Abstract

Preface

Table of content

## **CHAPTER ONE**

1.1 Introduction to SIWES

1.2 History of SIWES

1.3 Aims and Objectives of SIWES

## **CHAPTER TWO**

2.1 Historical Background of the Organization

2.2 Aims and Objectives of the Organisation

2.3 Major Activities of the Organization

2.4 Vision and Mission Statement

## **CHAPTER THREE**

3.1 Experience Gained

## **CHAPTER FOUR**

4.1 Work actually carried out

4.2 Executive Summary

## **CHAPTER FIVE**

5.1 Challenges Faced

5.2 Conclusion

5.3 Recommendation

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 DEFINITION OF SIWES**

The Student Industrial Work Experience Scheme (SIWES) of the Nigeria Polytechnic and colleges of technologies is an arrangement in which practical is integrated with theory.

It was also established by the Industrial Training Fund (ITF) in 1974 to bridge the gap between theory and practicality. The programme has a nice focus on the development of industrial students in the world of work. Also how theory and practical are social skills -and insight in the world of work to create awareness and prospect are the challenges the programme tries to tackle to cope with the development process of the student.

### **1.2 HISTORY OF SIWES**

SIWES was founded in 1973 by ITF (Industrial Training Funds) to address the problem of tertiary institution graduates' lack of appropriate skills for employment in Nigerian industries. The Students' Industrial Work Experience Scheme (SIWES) was founded to be a skill training programme to help expose and prepare students of universities, Polytechnics and colleges of education for the industrial work situation to be met after graduation.

This system facilitates the transfer from the classroom to the workplace and aids in the application of knowledge. The program allows students to become acquainted with and exposed to the experience required in handling and operating equipment and machinery that are typically not available at their schools.

Prior to the establishment of this scheme, there was a rising concern and trend among industrialists that graduates from higher education institutions lacked appropriate practical experience for employment. Students who entered Nigerian universities to study science and technology were not previously trained in the practical aspects of their chosen fields. As a result of their lack of work experience, they had difficulty finding work.

As a result, employers believed that theoretical education in higher education was unresponsive to the needs of labor employers. Thousands of Nigerians faced this difficulty till 1973. The fund's main motivation for establishing and designing the scheme in 1973/74 was launched against this context.

The ITF (Industrial Training Fund) organization decided to aid all interested Nigerian students and created the SIWES program. The federal government officially approved and presented it in 1974. During its early years, the scheme was entirely supported by the ITF, but as the financial commitment became too much for the fund, it withdrew in 1978. The National Universities Commission (NUC) and the National Board for Technical Education (NBTE) were given control of the scheme by the federal government in 1979. The federal government handed over supervision and implementation of the scheme to ITF in November 1984. It was taken over by the Industrial Training Fund (ITF) in July 1985, with the federal government bearing entire responsibility for funding.

### **1.3 AIMS AND OBJECTIVE OF SIWES**

- The reality of employing student is o fit in industrial and commercial development.
- To broadens the skill of student most especially on the practical aspect.
- To give an industrial experience.
- To make student have vision of what particular section they want to belong and area of specialization.

## **CHAPTER TWO**

### **2.1 HISTORICAL BACKGROUND OF THE ORGANIZATION**

QUARRYLINK CONCEPT LIMITED was incorporated in ILORIN, Nigeria with Registration Number 629882. It was registered on 28 July 2005 and its current status is unknown. Company's registered office address is Old Ogbomosho Eiyenkorin Ilorin kwara state.

Several years of experience had shown the need, the status to organize some form of publicity for its work and progress and it had become clear, forgo to corporation was established, that no other could care for the business of spreading information and education in the state better than the state itself indeed, experience has shown that a great deal Is of the work of development, which had been carried out in the state and according to the tastes ,dictates and desires of the people, had been treated like a candle put under the bushel would give publicity to the art and culture of the people of Kwara state, and according to the edict, carry report of outstanding and general interest as well as informed criticism and features.

### **2.2 AIMS AND OBJECTIVE OF THE ORGANIZATION**

The core value of the establishment is to provides stones of different dimension (from aggregate to blocks) and raw materials for several agro-industrial purposes.

### **2.3 MAJOR ACTIVITIES OF THE ORGANIZATION**

The major activities of the organization is based on informing people on what is going on in the society and also to educate them on how to behave morally in the society and to entertain people to their maximum satisfaction and to back all the functions the minerals and petroleum resources department is the backbone of the organization cannot function effectively.

Some of these activities also include the following:

- To maintain an experienced and qualified management team, suitable for the needs of both our customers and our company
- To commit to the continual improvement of all processes and systems through ongoing investment in technology and resources

- To actively encourage participation in the review of systems and processes by all employees
- To effectively communicate the company's health, safety, environmental and quality objectives

## **2.4 VISION**

Our vision is to be an environmentally responsible quarrying operation with a key focus on safety, conservation and delivering a reliable supply of high-quality product

### **MISSION**

Our mission is to produce end-products that contribute to the local economy and surrounding community infrastructure. We are focussed on growing sustainable production while delivering our commitments for excellence.



## **CHAPTER THREE**

### **3.1 EXPERIENCE GAINED IN QUARRY LINK CONCEPT KWARA STATE**

During my Students Industrial Working Experience Scheme (SIWES) at Quarry Concept.

We were able to learn and gain a lot of industrial and organizational experience.

One of my major experiences in quarry link is that I know more about the crushing process which entails the process whereby large rocks are extracted from the ground and then processed through a primary crusher, secondary crusher, and screens to produce the final product. The types of crushers used in quarry crushing include jaw crushers, cone crushers, impact crushers, and gyratory crushers. We were also taken round and witness different machineries and hand tools used in quarry industry.

One of the important experiences taken from the quarry link concept is the crushing of marble. This process entails the following:

1. Crushing stage: The bulk material is crushed to feed fineness (15mm-50mm) of the mill.
2. Grinding stage: Small pieces satisfying the grinding conditions are grinded into powder in the grinding chamber.
3. Classification stage: The material after grinding is classified by the separator.
4. Pulverizing stage: Fine powder enters the pulverizing system. The finished powder is sent to the warehouse, and then packed.

On the marble aspects, I learn the specific aspects of offloading which is how finished marble are being transferred from the marble firm to the final site of being use with the use of hard work equipment.

We were able to capture the process of making and producing POP. POP is created by heating the element gypsum to a very high temperature of around 373K. Gypsum is basically the raw material required in the manufacturing Plaster of Paris (POP) which possesses an outstanding property and a good material for producing ceiling board. The materials procured for the project are plaster of Paris, fiber, water and mould.

Production of Chipping is also one of the experiences I had. Granite chipping

are rock aggregates derived from the blasting of rock to derive different sizes of boulders and then the reduction of the boulders to the desired sizes in the primary and secondary crushers. They are basically used in the construction of roads, houses and bridges and other construction activities.

We were able to learn on maintenance of diesel machine and others plant machinery. Here are best practices for maintaining diesel engines: Stick to a Maintenance Schedule: Regular oil changes, filter replacements, and inspections are non-negotiable. Monitor Fuel Quality: Use premium diesel fuel to reduce buildup and enhance engine performance.

## **CHAPTER FOUR**

### **4.1 WORK ACTUALLY CARRIED OUT**

The paramount importance of industrial training experience scheme is to gain additional knowledge to what a person has been taught and learnt in class before. It gives the students a chance to put in practice their beforehand knowledge. The paramount importance of industrial training experience scheme is to gain additional knowledge to what a person has been taught and learnt in class before. It gives the students a chance to put in practice their beforehand knowledge.

- I Participate in maintenance of machinery and cleaning for easy daily work.
- Techniques and handling of machineries in the industry
- Offloading of marbles in the site
- Packaging and sealing of final production of POP
- Extraction of marbles in the industry
- Loading of POP intro industry truck for sale.
- Loading of bags of calcium for production
- Connection of holes.

### **4.2 EXECUTIVE SUMMARY**

The students industrial work experience scheme (SIWES) is a training fund (ITF) in 1973 to bridge the gap between theory and practical oriented among students of engineering, technology, social science and medical science on Nigeria higher institution of learning.

It provides for the job practical experience for students as they are expose to work method and machinery that may not be Available in their institution.

At inception in 1974, the scheme started with 748 from 11 institution and 104 eligible course by 2008. 210 student participate in the course from 219 institution over the 112 eligible

course. However the rapid growth and exposition of SIWES has occurred against the backdrop of successive economic crisis which have affected the smooth operation and administration of the scheme.

Most industries are operating below in storage capacity while other are completely shutdown in Nigeria. This has impacted negatively on the scheme as higher institution of learning find it increasingly difficult to secure placement for students industries where they could acquire the much practical experience.

## **CHAPTER FIVE**

### **5.1 CHALLENGES FACED**

The major challenge I faced during the four months program is that of transportation both scarcity of vehicles and financially. I always have a tough morning before getting a cab and later that of charges. There was competition among we SIWES students, everyone wants to be the best and thus, you fight and reconcile between one another.

Transportation, the organization did not have a transportation means to take around whenever there is an event somewhere so we are always sent out to go and cover the event with our own money and bring back stories without any compensation is another challenge I faced at Quarry concept. these challenges didn't make me weak but rather gave me more strength to work hard so that I can become a full fledged journalist in the nearest future.

### **5.2 CONCLUSION**

The SIWES Programme was an interesting one in the organization because what I was taught as a theoretical part in school I was able to put into practical aspects. Things I don't know were being explained and shown to me. The program however prepare me for the task and discipline that I might likely meet in future.

### **5.3 RECOMMENDATION**

As a student who has undergone the industrial training, I hereby recommend that government should continue funding this program both financially and morally.

I also recommend that if there is any way in which the government can improve the program in order to benefit the student better and also to increase the technical and practical knowledge of the student so as to enhance the academic performance of student in the country as a whole. It would be a great benefit if the SIWES coordinator of each institute invest in the program in our higher institution, it would be a solid foundation for all.