

**FEDERAL UNIVERSITY, NDUFU-ALIKE IKWO,
(FUNAI) EBONYI STATE.**



**STUDENT'S INDUSTRIAL
WORK EXPERIENCE SCHEME
(SIWES).**

A STUDIO PRACTICAL OF SIX (6) MONTHS
INDUSTRIAL WORK EXPERIENCE

AT

**MASCOT STUDIO, NO 43 IBAGWA ROAD NSUKKA ENUGU STATE
BY**

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DEPARTMENT OF FINE AND APPLIED ARTS
FA 322 (SIWES).

IN PARTIAL FULFILLMENT FOR THE AWARD
OF BACHELOR OF ARTS (BA) IN FINE AND APPLIED ARTS

DATE; OCTOBER 2017

CERTIFICATION

This is to certify that Ndukwe Isaac Okonkwo with the registration number FUNAI/AB/204/0906 completed his industrial training at mascot studio, 43 Ibagwa road Nsukka Enugu State.

.....
SIWES Coordinator	Signature	Date

.....
I.T Supervisor	Signature	Date

.....
HOD	Signature	Date

DEDICATION

This report is dedicated to almighty God whose by his grace grant me sickness free season all through my SIWES programme, and has made it a success and to family and well wishers.

ACKNOWLEDGE

I would like to express my appreciation to all those who provided me the necessary support to complete this report.

All the adoration be given to almighty God whose grace has made it possible for me to be successful in SIWES programme.

Furthermore, I would also like to acknowledge with much appreciation the role of my lecturer Mr. Mbawuike Cosmas for his crucial role to my SIWES programme to be a successful one. The unit head, sculpture Unit Department of Fine and Applied Art FUNAI Dr. Nnamele Cashmier. The entire lecturers in the Department of Fine and Applied Arts FUNAI. Special thanks goes to all my family members for their financial and spiritual supports. All my co-course mates for their encouragement. To the Director Mascot Studio Dr. Eva Obodo and all the entire members. And also to Mr. Sabastine Ugwuoke. My thanks also goes to the FUNAI SIWES coordinator and the entire staff of the SIWES unit for giving us opportunity to be part of training. My special thanks goes to Rev. Prof. Chris Ebigbo my former H.O.D for his relentless effort toward taking Fine and Applied Art FUNAI to its enviable height.

ABSTRACT

S.I.W.E.S stand for students industrial work experience scheme, it is a skills training programme designed to expose and prepare students of Universities and other tertiary institutions for the industrial work situation they are likely to meet after graduation. From the month of April 2017 to the month of September 2017,

I participated in SIWES programme in studio practice at mascot.

It is an arts studio where art works are carried out in practice, such as modeling and casting, curve-line wood work, metal work, drawing and exploration (tying of arts materials).

Mascot studio exposes SIWES candidate and other artists to seek, examine, investigate and discovery of new art materials.

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CHAPTER ONE

1.0 Introduction

SIWES

SIWES stand for students industrial work experience scheme, it is a skills training programme designed to expose and prepare students of universities and other tertiary institutions for the industrial work situation they are likely to meet after graduation.

The authorities of the Nigeria Universities commission (NUC) approved of the students industrial work experience scheme (SIWES) for Nigeria university and other institution of higher learning; for its students to undergo various training in their respective fields of students. These schemes were brought about by the inadequate practical experience gained by the student in higher institutions after graduation. Due to various factors such as lack of relevant equipments and machineries in their institutions.

It helps bridge the gap between theory and practice by providing students with an opportunity to apply their knowledge in real work situations. It is carried out in industries outside the school.

From the month of April 2017 to September 2017, I participated in SIWES programme in the studio practice of Masco studio No 43 Ibagwa road Nsukka Enugu state.

1.3 STUDIO ETHICS

1. Treading colleagues with respect: They are, rather in your creative pursuit if you are perceived as self important you may get a reputation as difficult to deal with, and you will lose interest, even if your work is strong.

To have good relationships with colleagues is important, and a collaboration is much more qualifying for both parties.

2. Don't tread on other Artists spaces, it is inappropriate to solicit interest in your work at some one else's event or at a party

3. Avoid desperation: Remember all careers go through ups and downs.

4. Avoid bitterness: exuding bitterness about your career is unhealthy and unproductive.

5. Students or employees are to acquire their basic satiety kit: comprising overall, safety boots, hand glove, face screen, ear blocker, nose cover and safety cap.

6. Cuing up when necessary

7. No fighting

8. Be puncture at working place and also active to activities.

9. Be attentive to instructions and be observant while doing any work

10. Report injuries/ misbehaviors to the studio director.

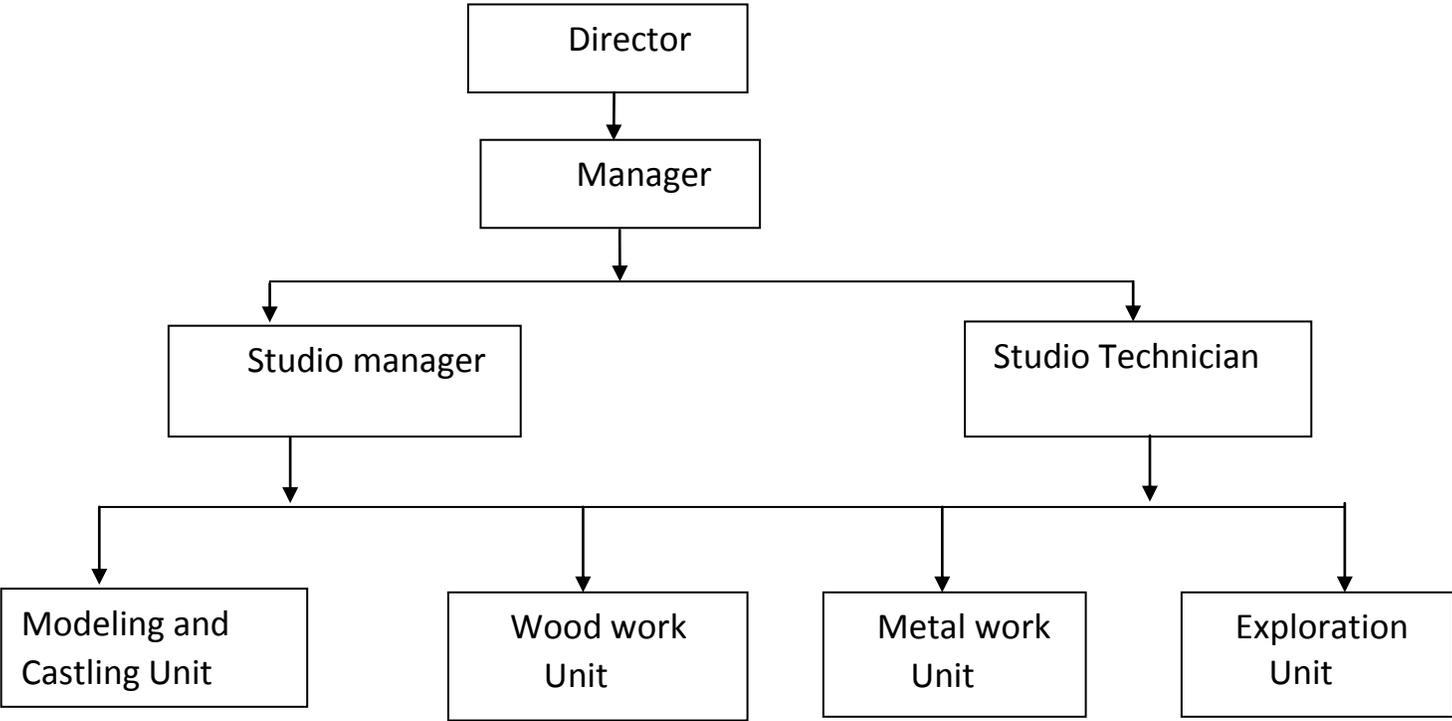
1.4 HISTORY ABOUT MY PLACE OF ATTACHMENT

Mascot studio no 43 Ibagwa road Nsukka Enugu state. It is an art studio where art works are carried out in practice, such as soft sculpture and exploration (tying of arts materials), modeling and casting, curve linear wood work, metal work, drawing. They explore with art material such as charcoal, wire of different colours sizes and type such as red, white, black, oxblood, brown of copper and aluminum. They modeled with clay, cement, and glass, body filler.

It is a medium size establishment with about one employee, three I.T student and the director.

They specialized on fine art in the area of sculpture both for aesthetic, monumental, record keeping and also for exhibition.

ORGANIZATIONAL CHAT OF THE INDUSTRY



CHAPTER TWO

2.0 MODELING AND CASTING

It is a standard or example for imitation or comparison.

It is an image in clay, wax, or the like, to be reproduced in more durable material. Modeling is the process of producing sculpture form with some plastic material, as clay and cement.

It is the art of sculpting models from clay etc, to create a representation of some thing. It is the representation of depth in a two dimensional image.

HUMAN BUST

Human bust is a sculptural portrayal of a person's head and shoulders

2.1 PROCESSES UNDERGO IN STUDY OF MY BUST

- i. Construction of armature: this is an under-structure, it holds the clay up and on, and keeps it from slipping and dropping down. This can consist of a thick that piece of board, with an upright pieces of pipe screwed into the middle. An elongated, elliptical wire is hooped at the top of the pipe
- ii. Mass the clay on to the armature, and use my hands to thump it on. I put on as much as needed to approximate the eventual size. The consideration of proportions,

shapes and sizes and their relationships is of the greatest important to me.

- iii. I use wire tools to dig out the eye sockets under the brow and establish the central line from the sternum up through the neck chin, mouth, nose, forehead, over the top of the head and down the back
- iv. I use my hand to detail the forms

2.2 MATERIAL FOR MODELING AND CASTING

- i. Cement for modeling or cast in moulds
- ii. Clay
- iii. (POP) plaster of Paris
- iv. Fiber glass

2.3 CEMENT

Cement, according to English dictionary is a powdered substance that develops strong adhesive properties when mixed with water

It is a accessional art material use for modeling and also for casting. Cement is not used on its own for sculptural purpose. It is usually mixed with aggregates for a desired effect and for maximum strength. It can either be us directly as a plastic material.

2.4 PROCESSES OF MODELING WITH CEMENT

- i. You build your armature for reinforcement
- ii. You cover the armature with chicken mesh
- iii. You apply the ratio one to one, this is the mixture of equal cement and sand with water (first layer).
- iv. You apply the ratio three to one, this the mixture of one part of cement equal three part of sand. With water (second layer)
- v. You apply the ratio one to one, this is the mixture of equal cement and sand with water (last layer).
- vi. You detail the image by bring out all the forms, features and shapes and this is achieve by close observation.

2.5 PROCESSES OF MOLD MAKING WITH CEMENT

After you are satisfy with the modeling (image on clay).

- i. You partition the image: this is done by attaching some pieces of metal such as zinc to partition the image.
- ii. You apply oil at the body of the modeled image: This will serve as separator between the mold which is the negative and the image of the clay.
- iii. You apply your goo: This is the mixture of only cement and water
- iv. You apply the ratio one to one: This is the mixture of equal cement with sand and water (first layer)

- v. You apply the ratio one to two: this is the mixture of one part of cement two parts of sand. (second layer)
- vi. You reinforce the mold with rods ranging from binding guarder rod to one inch.
- vii. You apply ratio one to three: This is the mixture of one part of cement three part of sand with water act it will serve as the final layer. (third layer)
- viii. You continue to pour water on it for about two to three day before you separate your mold. (picture)

2.6 PROCESSES OF PICKING/TAKING YOUR MOLD WITH CEMENT.

- i. You apply oil with brush to serve as separator between the mod and the second position
- ii. You apply the ratio one to one with spoon: This is the mixture of equal part of cement and sand with water first layer
- iii. You apply ratio two to one with spoon: This is the mixture of two parts of sand one part of cement with water (second layer)
- iv. You lay chicken matt on top of the second layer and re-enforced with rods.
- v. You apply the ratio three to one: this is the mixture of three parts of sand and one part of cement and it is serve as the final layer (third layer)

2.7 MY EXPERIENCE MODELLING AND CASTING CEMENT

- i. It receives high polish when mixed very well.
- ii. It can remain plastic and workable two to three days.
- iii. It is mostly good for outdoor sculpture.
- iv. It is durable and weather friendly.
- v. It lasts longer before degrading.
- vi. It can serve for the purpose of mold making and also for the purpose of mold taking/picking.
- vii. It is easy to break as a wet mold.

2.8 MY CHALLENGE MODELLING/CASTING WITH CEMENT

- i. It is hard to sculpt
- ii. Difficult to manipulate
- iii. It degrades when kept longer outside
- iv. It is heavy to move around



2.9 CLAY

Clay is an earth material with ductile qualities.

It is an earth minerals, usually the end product of geologic weathering and degradation of igneous rock by heat and water. It possesses the qualities of being plastic and workable when mixed, with the right amount of water that make it an easy and ideal

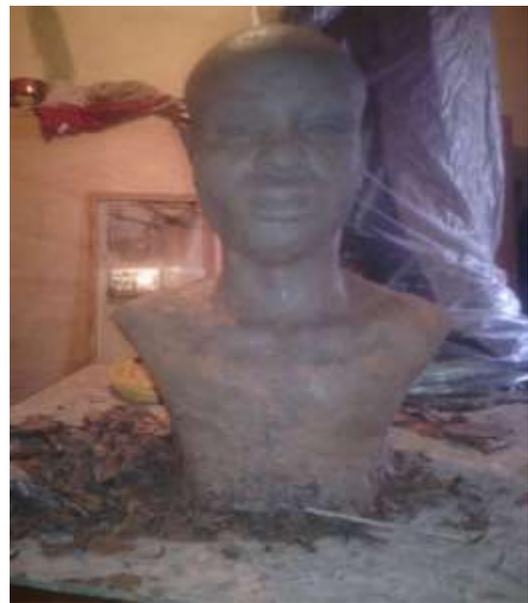
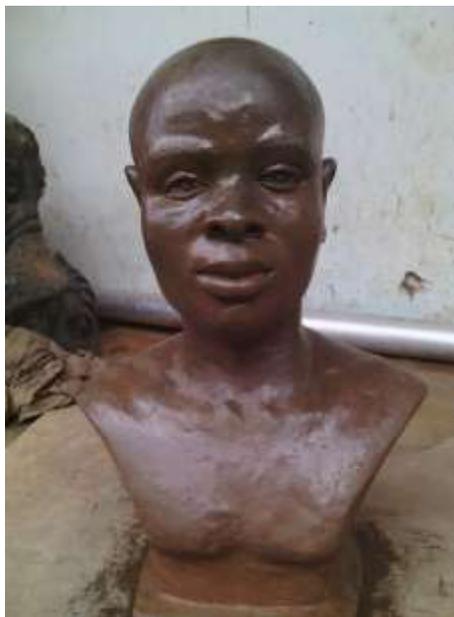
2.10 MY EXPERIENCE MODELING WITH CLAY

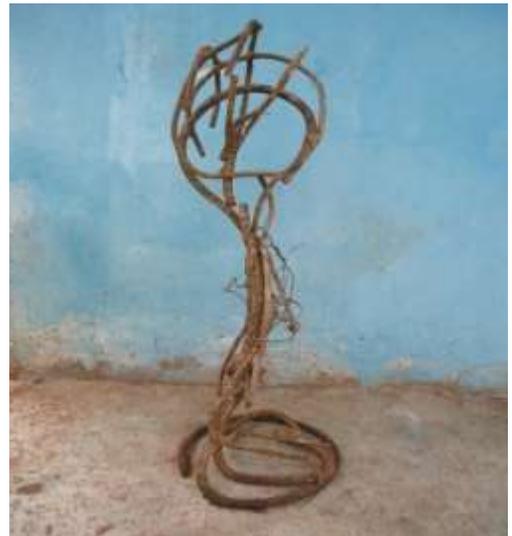
- (i) It is an obedient servant and very, easy to manipulate while modeling with it.
- (ii) It is meal able and easy to add.
- (iii) It is easy to in bringing out forms and feature of an image.
- (iv) It give easy separation when it serve as a transitory media for the purpose of mold making.

2.11 CHALLENGES MODELLING WITH CLAY

- (i) It is a temporary (transitory) media
- (ii) It is not wealthier friendly
- (iii) It is not durable
- (iv) It crack.

material for modeling in sculpture. Clay also services as a transitory media for the purpose of would taking and casting in a more permanent media.





2.12 FIBER GLASS CASTING

Fiber glass: This is a silica based glass extruded into fibers that possess a length at least 1000

It is a composite material made from fine fibres of spun glass held together with resin (also called glass referenced plastic)

2.13 PROCESSES OF MOLD MAKING WITH FIBERGLASS

After being satisfied with the image you have modeled on clay.

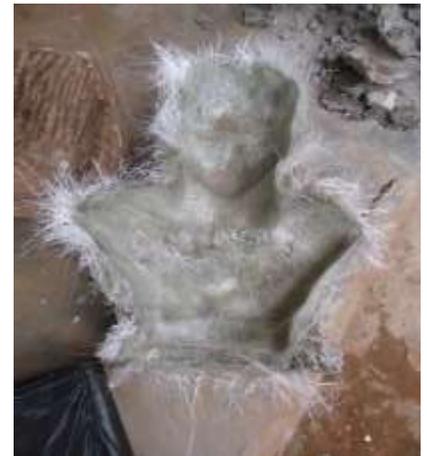
- i. You partition the image with metal-like object such as zinc.
- ii. You apply oil round the image to serve as separator between the image and the mold.
- iii. You apply the first layer: This is the mixture of resin, catalyst, accelerator and mercury at the body of the image (first layer) with brush as reinforcement with hand.
- iv. You apply the second layer: This is the mixture of resin, catalyst and accelerator with brush. And live it for about 30 minutes before separation. The quality of catalyst and accelerator mix with the resin determine the level fastness in drying.

2.14 PROCESSES OF PICKING YOUR MOLD WITH FIBERGLASS

- i. You apply oil around the mold to serve as a separator between the mold and the image.

- ii. You apply the first layers: This is the mixture of resin, catalyst, accelerator and mercury inside the mold with brush.
- iii. You lay fiber matt on top of the first layer to serve as reinforcement.
- iv. You apply the second layer; This is the mixture of resin, catalyst and accelerator.

FIBREGLASS CASTING



2.15 EXPERIENCES CASTING WITH FIBRES GLASS

- i. It dry faster and save time
- ii. It is very light-weight.
- iii. It is a mobile mold.
- iv. It is smooth where apply well.
- v. It high the quality of works.
- vi. It is easy to join.

2.16 CHALLENGES CASTING WITH FIBERGLASS

- i. Dangerous to wealth
- ii. Cost of material
- iii. It is only limited to indoor sculpture.
- iv. It serve for only casting purpose.
- v. It is not easy to control.

2.17 TOOLS USE IN MODELING

1. Wire tools,
2. shovel,
3. head pan,
4. trowel,

CHAPTER THREE

3.0 CURVE LINEAR UTILITY WOOD WORK.

Materials use for building curve linear utility wood work.

Nail, top board, sand paper, drilling bead, water bead, pyrography stone. Table/side stool/chair disk, curve linear wood.

- i. Drilling machine
- ii. Circular saw
- iii. Angle grinder
- iv. Router
- v. Miter saw
- vi. Electric jackplane
- vii. Electric gun spraying machine
- viii. Brush
- ix. Human
- x. Hack saw
- xi. Chisel
- xii. Mchant
- xiii. Gass burner
- xiv. Jik saw
- xv. Axe

3.1 PROCESSES OF BUILDING CURVE LINEAR UTILITY WOOD WORK.



(i) Peeling off the bark of the table disk and curve linear wood.



(ii) Leveling of the table disk, side stool disk, and chair top.



(iii) Smoothing of the disk and the stand (the legs)



(iv) You join the curve linear woods to form the stand (the legs) this may amount between three to six pieces of curve linear woods.

- (v) You perforate and join the areas it touches each other with nail.
- (vi) You cut both the up and the down side of the curve linear wood to achieve balance in it.



- (vii) You place the disk on top of the leg.
- (viii) Perforate joint areas and nail it.



(ix) You apply wood finish.

3.4 MATERIALS USE IN BUILDING CURVE LINEAR UTILITY WOOD WORK

1. Top bond – use to stain the wood before spraying.
2. Sand paper – use to smooth the wood (sand papery).
3. Drilling bead – use to perforate holes of various sizes
4. Router bead – use to engrave the disk top.
5. Pyrography stone – use to cut designs on table.
6. Table/Side stool/chair disk – serve as the top table.

3.5 MACHINES USE IN BUILDING CURVE LINEAR UTILITY WOOD WORK

1. Drilling machine: This machine is use to perforate the areas need to drive nails. It is also use to perforate holes of different sizes to other places for the purpose of design.



2. Circular size: This machines is use to cut woods of different sizes. It is not limited to any size of she of wood, but pattern of your choice.
3. Angle grinder: This machine serve for some many purpose (multi purpose machine). It serve the purpose of sand papery of the wood into different grade of textures. It also serve as cutter and sand papery it will enable reduce the wood to any level of your choice. It is use to decorate the table, chair or side stool with pyrography, designs.



4. Router: This machine is to engrave the table/ side stool disk into any level of your choice base on the setting. It also serve the purpose of perforating the table/ chair disk where necessary.



5. Miter saw: This machine is use to cut wood into different shapes and angle base on the seeting.
6. lectric jack plane: This machine serve the purpose of leveling of the table/ chair or side stool disk (the top) to maintain equal surface.



7. Electric Gun spraying machine: This machine is use to spray wood finish to tables, side stools chairs. It spray faster and maintain equal speed.
8. Brush: It is used to stain the curve linear utility wood work which include application of top bond mix with water for the purpose of gaining softness. It is also use top apply wood finish manually.

9. Hammer:- This is use to drive in nails into different sizes, shapes and partners. It is very easy to assess and use manually.
10. Chisel: This is use to remove unwanted areas in the wood (the negative parts). It varies in sizes from the range of quainter inch to inch etc.
11. Mallet: This serve as a witting force to chisel.
12. Gass burner: This use to burn areas necessary which you want to change the colour of the wood to black or darker colour.



13. Jik saw: Machine is use to cut wood of different sizes, shapes and curve partner.



14. Axe: This is use to cut off the unwanted areas in the wood.

3.6 EXPERIENCES IN BUILDING CURVE LINEAR UTILITY WOOD WORK

- i. It is mechanical
- ii. It need skill, not what any body can start and achieve his/her go.
- iii. Cost of the machine use to build curve linear utility wood work is high.
- iv. Source of material is limited to a particular area.

- i. It possess aesthetic nature
- ii. Source of materials is easier at the rural areas.
- iii. It depth culture
- iv. It contribute to economic growth of the society
- v. It create job opportunity to the society



CHAPTER FOUR

4.0 EXPLORATION

Exploration is the out of searching an unfamiliar area in other to learn about it. It involves the discovery of new information. It involve the capability to generate new ideas in the organization that depart from previous experiences.

It is the activities of searching and experiencing with new alternatives and entails a shift away from the current knowledge including new market expertise, or external relationship.

4.1 EXPLORATION MATERIALS

We exploration with various material such as:

1. Charcoal
2. Printing plate
3. Jute fibre

4.2 PROCESSES OF EXPLORING WITH CHARCOAL

1. Cutting the charcoal into sizes, small, medium and big sizes
2. Tying with different types of wires of various colours such as copper and aluminum, with colours like white, black, red, oxblood, black and white effect.
3. Tying of cross and carpet: this include cross with single wire, double and triple wire carpet of single wire, double wire and triple wire. Each colour of the wire create colour effect on the charcoal.

The closeness of the wire base on the multiple number or arrangement bring out more brightness of the colour.



4. Arrangement of the charcoal on the floor: This arrangement involves colours, size and tying pattern to create balance, harmony and dominant when necessary.



The designs and rhythm on it is base on the type of tying which include cross and carpet of various sizes and numbers

5. Tying of the already tied charcoal on the wire guards. The wire guards is like a net, after standing it on stand made iron rod as reinforcement. The typing goes according to the arrangement on the floor to replicate the same form you have achieve while arranging it on the floor.

Some time you left some places open and black it with coloured printing plate to create emphasis on the arrangement.



4.4 MATERIAL USE IN CHARCOAL EXPLORATION

1. Wire of different sizes colours and types this colours can be achieve by burning the wire with fire. Example red can be burnt to get black, white or dark red colour.



2. Cutter: This is use to cut the wire.
3. Plyer: This is use to pull or drag the wire to make it strong and fame.
4. Needle: This is use to raise the wire up from the charcoal in order to pass another line across

5. Wire guard: This serve as platform where the were being bound together to form a unit. It can be vary in colours which can be achieve by spraying colours on it.



6. Charcoal: This is the major medium for the exploration.



7. Knife: This is use to cut the charcoal into sizes.

4.5 PROCESSES OF EXPLORING WITH PRINTING PLATE

1. Burning of the printing plate with fire.
2. Cutting the printing plate into pieces in a straight line form with scissor.
3. Perforation the printing plate with nails six or more places.
4. You bend the already perforated printing plate to achieve varieties of shapes such as square, triangle and star forms.
5. You join the printing plate to each other with wire through the perforated holes to form one work.

The type of bending creates pattern and designs needed to achieve in a particular work.

4.6 MATERIALS USE IN PRINTING PLATE EXPLORATION

1. Scissor: it is use to cut the printing plate in line-like form.
2. Nail: it is use to perforate the printing plate.
3. Wine: it is use to bound the perforated printing plate together to achieve a needed pattern in a particular work.
4. Printing plate: this is the major medium for the exploration.



4.7 JUTE FIBRE EXPLORATION

Processes of exploring with jute fibre

1. Washing of the jute fibre



Cutting the jute fibre into piece in line-like forms

2. Sewing the already cut jute fibre with needle and thread: this involve folding the jute fibre to have line-like form, and you put flexible rod inside to enable you bend it into any shape.



3. You cover some part with coloured pieces of cloth or dye some part with dye stuff to create colour effect on it.



4. You arrange the already sewed jute fibre to form lines of different colours, movement and curve in a platform. This involves using thread to sew the already sewed jute fibre to form a single work.



4.8 MATERIALS USE IN JUTE FIBRE EXPLORATION

1. Scissor: It is used to cut both the jute fibre and the sewing thread.
2. Needle: this is use in sewing the jute fibre.
3. Thread: this is use to bind jute fibre.

4. Dye stuff: this is use to colour some part of the already folded jute fibre to create colour effect.



4.9 MY EXPERIENCES IN EXPLORING WITH DIFFERENT MATERIALS

1. Seek: To try to find
2. Examine: To observe or inspect carefully or critically
3. Investigate fact or information
4. Systematically: in organized manner
5. Discovery: the discovering of new things.
6. Aim: the point intended to be hit.
7. It is non-conversional art material

4.10 CHALLENGE IN EXPLORING WITH DIFFERENT MATERIALS

1. It is allege to injury
2. It consume time
3. It is painful
4. It involve sitting in particular place for a long time
5. Higher cost of the material
6. It is a dirty material
7. It is not reliable and it can break at any time
8. It is not weather friendly

ITF-industrial Training fund is a grade (A) parastatal operating under the federal ministry of industry, trade and investment.

ITF was established in the year 1971, and its aim is to be the foremost skills training development organization in Nigeria and one of the best in the world.

The objective for which ITF was established has been pursued vigorously and efficaciously. ITF has not only raised training consciousness in the generating a corps of skilled indigenous manpower which has been managing various sectors of the national economy ITF has expanded its structures, developed training programmes, revolved its strategies, operations and services in order to meet the expanding, and changing demands for skilled manpower in the economy.

As part of its responsibilities, the ITF provided direct Training vocational and apprentice training, research and consultancy service reimbursement of up to 5 levy paid by employers of labour registered with it, and administers the students industrial work experience scheme (SIWES).

The main thrust of ITF programmes and service is to stimulate human performance, improve productivity, and induce value-added production in industry and commerce

Through its SIWES programmes, the ITF also builds capacity for graduates and youth self employment, in the context of small scale industrialization, in the economy.

REFERENCES

1. English Dictionary.
2. Wikipedia Online.
3. Dr. Eva Obodo (Director Mascot Studio).
4. Mr. Sabastine Ugwuoke (Director Sab Studio).