

THE INTEGRATED RURAL ART AND INDUSTRY PROGRAMME IN KNUST
AND ITS IMPACT ON THE ART/CRAFT INDUSTRY IN GHANA

BY

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A Thesis submitted to the school of graduate studies, Kwame Nkrumah University of
Science and Technology, Kumasi in partial fulfillment of the requirements for the degree
of

MASTER OF ARTS IN ART EDUCATION.

Faculty of Fine Arts, College of Art and Social Sciences

© July 2008

Department of General Art Studies

DECLARATION

I hereby declare that this submission is my own work towards the M .A. in Art Education and that to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the university except where due acknowledgment has been made in the text.

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ABSTRACT

In any form of education, there is the need to effect change to enhance and improve the human life. For the B.A. Integrated Rural Art programme to achieve its aims and objectives and also to affect the modern society, there should be an assessment of its impact so as to know the extent of change and improvement the department has made on the art/ craft industry.

The main aim of this thesis was to assess the impact of the programme on the local craft industry in terms of transfer of knowledge and technology from the department to the craft industry and to make recommendations where necessary.

The population was made up of graduates and diploma holders of the IRAI programme, local Artists who are non-products of the IRAI programme, clients and customers who receive products and services from the graduates. The study also included the Head and Staff of the IRAI Department, continuing students presently at the department, other lecturers and students from the College of ART and Social Science, KNUST. Qualitative method of research, employing descriptive survey method was used.

The study showed that the Department has made much impact in terms of providing manpower for the education sector as more than half of the population indicated they were in the teaching field.

The study further revealed that although there is some impact from the IRAI Department to the local art/craft industry the impact is not strongly felt in terms of innovation, invention and improvement of tools, material, and techniques.

It was recommended that the link between the department and the art/craft industry should be strengthened by organizing seminars, workshop, and exhibitions to share experiences, innovations and technology.

ACKNOWLEDGEMENTS

I owe a number of individuals a lot of gratitude for the assistance they gave me in completing this study; I wish to express my sincere thanks to Dr E. C. Nyarkoh, my supervisor, for this encouragement. This has contributed immensely in getting this work completed.

My sincere thanks go to Mr.Osei Bobbie, Head of Department of Integrated Rural Art and Industry, faculty of Industrial Art, College of Art and Social Science, K.N.U.S.T for really giving out the most relevant information about the IRAI programme and to all the lecturers of the IRAI Department for their co-operation.

Mention should be made of Mr. Baah for providing me with information on the history of the IRAI Department. I wish also to express special thanks to Mrs. Gloria Gamba for also providing me with all the information that I needed about the IRAI Department.

To my parents and sisters, I say thank you for giving me the moral support. Last but not the least, I wish to register my profound thanks to my one and only sweetheart Mr. Emmanuel Appiah-Kubi for the support and encouragement given me.

July 2008

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CHAPTER ONE

INTRODUCTION

1.1 Overview

The Integrated Rural Art and Industry programme in Kwame Nkrumah University of Science and Technology started as a section in the then College of Art under the Painting and Sculpture department as a two year diploma course.

The programme aims primarily at equipping students with requisite skills to identify and promote the indigenous Art and craft of the traditional Ghanaian heritage.

It also aims at training students to acquire professional skills in designing, production and marketing of Ghanaian artistic products that combine practical functions with contemporary aesthetics and the use of local raw materials. Students are also equipped with professional entrepreneurial skills.

This thesis seeks to assess the impact of the programme on the local craft industry in terms of transfer of knowledge and technology from the department to the craft industry.

1.2 Statement of the Problem

The Integrated Rural Art and Industry programme in KNUST is one of the versatile programmes in the College of Art. It started as a diploma awarding programme and later changed to a degree awarding programme. The main aim of the programme is to equip students with the needed skills to identify and promote the indigenous art and craft of the traditional Ghanaian heritage. The department offers courses including rattan and bamboo processing, metal products and fabrication, fiber and fabrics, wood and furniture,

skins and leather ware, clay and earthenware. Since the IRAI Department has as part of its aims and objectives, to train personnel to salvage and promote the dying indigenous Art/crafts of the traditional Ghanaian heritage, it is necessary to gain feedback from the art and craft industries to ascertain the impact of the products.

There is also an ineffective linkage between the department and the past graduates which has resulted in inadequate knowledge and technological transfer from the graduates to the department and vice versa.

It has therefore become necessary to assess the Rural Art programme on the following basis:

- Its effect on the local Art/craft industry
- Technological and innovation transfer in terms of tools, materials, methods, etc.
- Future directions and planning, in the areas of product innovation, marketing and employment.

1.3 Hypothesis

Integrated Rural Art and Industry programme is crucial to the growth and survival of indigenous Art/craft industry.

1.4 Objectives of the study

- To identify and select past graduates of the Rural Art programme, who are involved in the local Art/craft industry.
- To assess the impact and contributions of the Rural Art programme to the local Art/craft industry from the selected products (graduates) point of view.
- To appraise the effectiveness of the linkage between the local craft industry and the department.

1.5 Delimitation

The project area is limited to the Ashanti Region of Ghana. Interviews and views from the Department of Integrated rural Art and Industry, the Graduates of the Department, NGOs, Lecturers and the general public will be confined within the Ashanti Region.

1.6 Definition of Terms

Adhesives: A substance such as glue that provide or promote adhesion.

Appliqué: Is a needlework technique in which pieces of fabric, embroidery or other materials are sewn onto a foundation fabric to create designs.

Casting: Is a manufacturing process by which molten metal or plastic is introduced into a mould, allowed to solidify within the mould and then broken out to make a fabricated part.

Course: An individual subject for study under a programme.

Course name: The word(s) by which a course is known and spoken of.

Embossing: Is the process of creating a three dimensional image or design in paper and other ductile materials.

Entrepreneur: Is a person who is willing and able to convert a new idea or invention into a successful innovation.

Entrepreneurship: Is the practice of starting new organisation or revitalizing mature organizations, particularly new businesses generally in response to identified opportunities.

1.7 Abbreviations

IRAI	-	Integrated Rural Art and Industry
ATAG	-	Aid To Artisans Ghana
NGO	-	Non-Governmental Organizations
REDP	-	Rural Enterprise Development Programme
SPSS	-	Statistical Programme for Social Sciences
HOD	-	Head of Department

1.8 Importance of the study

- The identification and selection of past students of the Rural Art programme will bring to bear the products of the Rural Art Department who are contributing to the survival of the local craft industry.
- The assessment of the impact and contributions of Rural Art programme will bring to fore the effects of the programme on the local craft industry.
- The determination of the effectiveness of linkage between the craft industry and the department will help expand and strengthen training areas in the department and transfer of knowledge and Technology from the Department to the craft industry and vice versa.
- The documentation of the Rural Art programme will serve as a body of knowledge to the Department and other researchers.

1.9 Arrangement of the Rest of the Test

Chapter two deals with the review of related literature on the Integrated Rural Art and Industry programme.

Methodology used during the study is explained in chapter three of this thesis.

Chapter four, also deals with results and discussion.

Finally, chapter five presents the summary, conclusions and recommendations from the study.

CHAPTER TWO

REVIEW OF THE RELATED LITERATURE

There was little information available to the researcher because currently, there is not much previous work done on the subject. There are not much records or reports of similar topics in the department. Available data were little information collected from the IRAI department on its programme and courses. However, the researcher collected some information on the subject.

2.1 Introduction

At every stage of the human life or establishment, there is the need to assess performance and effectiveness from time to time in order to ascertain the impact made. In order for the BA. Integrated Rural Art and Industry Department to achieve its aims and objectives and also to affect the modern society, there should be an assessment of its impact so as to know the extent of change and improvement the department has made on the Art/craft industry.

The Encarta Encyclopedia (2007) defines impact as a strong effect or impression. An impact reveals an influence or a mark one can make on another person's life.

Impact assessment is the process of identifying the future consequences of a current or proposed action. It is used to ensure that projects, programmes and policies are economically viable, socially equitable and environmentally sustainable.

According to Wikipedia, the free encyclopedia, Impact assessment is defined as “the process of identifying the future consequences of a current or proposed action which are related to individuals, organizations and social macro-systems”.

Assessing the impact one is making, is necessary in every sphere of life, for it enables one to know the nature of progress and what to do next. The assessment of the impact of the graduates of the IRAI Department on the Art/craft industry will reveal its effect in terms of technological and innovational transfer in areas such as tools, materials, methods and the future directions and planning, in the areas of product innovation, marketing and employment.

Graduates from the department are trained to be entrepreneurs who should set up on their own. They are expected to work directly with the skills they acquired during their course of study. They are supposed to be in Managerial positions in the Art related local industries and non-governmental organizations. There is the need to coordinate, monitor and bring together these professionals who graduated from the IRAI department to assess their performance and the impact they are making in the local Art/craft industry.

The IRAI Department (both Diploma and Degree) has been running for about 28 years, therefore there is the need to examine whether the department and its graduates are adequately being prepared to face the challenges of affecting the Art/craft industries.

Ottaway (1962) states that: “An abundant and increasing supply of highly educated people has become the absolute prerequisite of social and economic development in our world.”

The fast changing global technological environment requires manpower that can satisfy its needs. There is the need to assess the impact of the IRAI graduates to ascertain their performance in promoting the dying indigenous Art/craft industry.

2.2 Integrated Rural Art and Industry Department

The Integrated Rural Art and Industry Department is one of the Departments under the Faculty of Industrial Art of the College of Art and Social Sciences. The College of Art and social sciences is made up of the following faculties:

- Faculty of Social Sciences,
- Faculty of Law,
- Faculty of Industrial Art,
- Faculty of Fine Art,
- School of Business Studies
- Centre for Cultural and African Studies.

According to D.W.Olson(1963), Industrial Art is one of the practical arts, a form of general or non-vocational education which provides learners with experiences, understanding and appreciations of materials, tools, processes, products and of the vocational conditions and requirements incident generally to the manufacturing and mechanical industries.

He maintains that, the whole idea of industrial Art is the designing and construction of useful products in the workshop, appropriately staffed and equipped, supplemented by readings, investigations, discussions, visits, reports and similar activities characteristic of youthful interests and aptitudes in things industrial.

The Department of IRAI, has as its sole aim to train students to serve in the Art related industries in Ghana. Students are provided with knowledge in understanding and appreciation of the various raw materials around and how to process these

materials to get a finished product. They also learn the technology involved with Art and gain experience concerning new materials, new processes, new products and all these results from the exploitation of the student's power of reasoning, problem solving, creativity, and constructivity.

Students who have been train under the faculty of Industrial Art are supposed to have the ability of creativity, imagination, inventiveness, scientific curiosity and knowledge in the technology involve in their field.

The Vice-Chancellor's report (2006) holds the view that, the Integrated Rural Art and Industry Department, is one of the three academic departments of the newly created Faculty of Industrial Art. The Department in pursuance of its vision continues to carve a niche in the Visual Art and in the integration of the various areas of the crafts.

The activities of the department are bringing new dimensions into the craft industries, both in the indigenous as well as contemporary crafts by churning out skilled designers at the end of every academic year.

The IRAI Department is gradually bringing new developments in terms of technology, skills, tools and materials from the contemporary side into the indigenous art/craft industry.

Morphet (1945) notes that vocational education aims at the development of human abilities in terms of knowledge, skills and understanding so that the individual may serve happily and efficiently in carrying on the activities in the pursuits of his choice.

Perkins (1998) is of the view that vocational education offers a sequence of courses that provides individuals with academic and technical knowledge and skills the individuals need to prepare for further education and for careers.

David (1976) is also of the view that education is vocational when it is designed, specifically to improve the efficiency of an individual in a specific occupation. In other words, vocational education is an education for employment.

This brings out the fact that, vocational education prepares an individual for an employment in the future. One can say that the IRAI programme is a vocational programme that trains the individual to acquire academic knowledge and technical skills and its aims at preparing the individual for employment in the future.

According to the Wikipedia, the free encyclopedia, Vocational education is a form of education in which people are provided with practical skills which will allow them to engage in careers which involve manual or practical abilities.

Vocational education has a specific and practical focus, rather than an academic one, and it is designed to provide people with the skills needed to start a career in an area of interest.

Integrated Rural Art and Industry programme is providing vocational training to their students so that students can graduate with [job skills](#) which is to be applied after school in the Art/craft industry. While other programmes at the university are preparing students to get employment in already established institutions or organizations, IRAI programme is equipping students to set up on their own in the Art/craft industry.

2.3 History of the IRAI Department

According to the History of the Department of Integrated Rural and Industry (2007), the Integrated Rural Art and Industry programme was the brainchild of Mr. Lionel Kow Amoesi Idan (1922-1982), its first Sectional Head. Mr. Idan had observed that when foreign tourists looked for articles of Ghanaian rural art to buy, they were disappointed that they could not find them in our universities but had to travel to our villages to get them, often over difficult access roads. When these tourists eventually obtained the handicrafts, they complained of monotony of design and poor aesthetic finishes. These weaknesses notwithstanding, the tourists would buy the rural articles at cheap prices in substantial quantities and sell them at extremely high prices overseas. This was the main brain behind the origin of the department.

It started on an experimental basis as a two-year diploma programme in what was termed “Rural Art and Industry”, leading to the award of a Diploma in Rural Art and Industry (Dip RAI). The mandate to run the Diploma programme in the University was therefore granted in 1976. The Department of Painting and Sculpture offered to provide motherly care to the new programme. The name of the Department was subsequently modified to Department of Painting, Sculpture, Rural Art and Industry.

In 1998, in compliance with a Government directive to reform university programmes, the diploma program was phased out. However, in 1999, as a result of the success of the 22-year diploma experiment, the programme was proposed to be upgraded from diploma programme to a 4-year Bachelor of Arts Degree programme.

The University eventually granted the College of Art a new mandate to run a 4-year Bachelor of Arts Degree Program in Integrated Rural Art and Industry, and the Rural Art and Industry Section was upgraded to the status of a full Department under the name: Department of Integrated Rural Art And Industry. The new Department adopted for a corporate image the Ghanaian traditional icon of *Sankofa*, literally meaning “*Go back for it*”, to symbolize the need to revert to past useful time-tested values.

The pioneer batch of students was enrolled in October 1999; they completed the programme in June 2003 and were graduated in February 2004.

This points out that, the main brain behind the creation of the IRAI Department was to improve upon the local art/craft industries in terms of design, finishing, technological and innovation transfer in the areas of tools, materials, methods etc. through the products of the Department to these local artists. But as to whether there is this transfer of knowledge and technology, one cannot tell. This research aims at finding out if there is the transfer of knowledge and technology and the level of that impact.

2.4 Aims and Objectives of the IRAI Department

Mackenzie (1974) is of the view that, the role of the university was to produce manpower required of the country and in the process, attempt to solve some of the problems besetting the country. The training and expertise acquired by the graduates in the university would equip them to solve the numerous technological problems in the country.

In education, the main aim is to modify the learners behaviour in one way or the other, this becomes the end product of all forms of education.

From the proposal submitted to the University for the upgrading of the Integrated Rural Art and Industry programme by the IRAI Department (1997), the following aims and objectives were outlined:

- The Integrated Rural Art and Industry programme aims primarily at equipping students with requisite skills to identify and promote the indigenous art and crafts of the traditional Ghanaian heritage.
- The Department trains students to acquire professional skills in designing, production and marketing of Ghanaian artistic products (i.e. products that combine practical functions with contemporary aesthetics). The use of local raw materials is emphasized.
- The IRAI programme at the department aims also to equip students with professional entrepreneurial skills.

According to the proposal, by the end of the undergraduate programme, the students should be able to:

- Identify local raw materials for art in the Ghanaian environment;
- Process local raw materials for the execution of work of art;
- Design and produce functional and aesthetic artistic products with professional competence;
- Market artistic products;
- Initiate, supervise or manage a medium to large-scale art and craft industry;

- Teach art to students up to the SSSCE level;

The aims and objectives all balls down to the fact that the indigenous Art and craft of Ghana needs to be maintained and improve and the IRAI Department has this as its vision.

2.5 The IRAI Programme and Courses

According to the Department of Integrated Rural Art and Industry course description (2005), the Department offers a whole range of courses which lead to the acquisition of skills and the appropriate technologies needed by industry and also to improve the local craft industry. Courses offered under the programme include:

- Rattan and bamboo
- Wood and furniture
- Clay and Earthenware
- Skins and Leather
- Fiber and fabric
- Metal fabrication.

A breakdown of the course content is as follows:

- **Rattan and Bamboo**

Introduction to rattan and bamboo; History of rattan and bamboo, their traditional uses, taxonomy, morphology, types, growth characteristics, distribution in Ghana and

other parts of the world; Introduction to rattan and bamboo working tools and equipment are the topics treated in the first year of study.

In the second year, topics treated include; Protection and preservation of Rattan and Bamboo; Seasoning and curing of Rattan and Bamboo; Conservation methods; Defects of Rattan and Bamboo and their control; Air and Chemical seasoning; indigenous methods, processes and agents for seasoning rattan and bamboo; Introduction to basic rattan and bamboo processing techniques; Mechanical and chemical methods for processing rattan and bamboo; Recently developed bamboo processing techniques (e.g. laminated and ply bamboo). Effect of age and maturity on colour and surface appearance.

Topics treated under this course in the programme in the third year are; Natural regeneration of rattan; Rattan cultivation and management; Rattan nursery development; Rattan plantation development and management; Economics of Rattan cultivation; Finishing of rattan products; Marketing of rattan products; Development of rattan industries in Ghana; Profile of the Rattan industries; Contribution of Rattan products to household income: case study of the Rattan industries in Oriental countries such as China, Malaysia, Indonesia, The Philippines, Thailand, and Japan.

Final year topics include; Natural regeneration of bamboo; Bamboo cultivation and management; Bamboo nursery development; Bamboo plantation development and management; Economics of Bamboo cultivation; Finishing of bamboo products; Marketing of bamboo products; Development of bamboo industries in Ghana;

Developing linkages with stakeholders in the rattan and bamboo industry. Profile of the Bamboo industries; Contribution of Bamboo products to household income: case study of the Bamboo industries in Oriental countries such as China, Malaysia, Indonesia, The Philippines, Thailand, and Japan.

- **Wood and Furniture**

First year topics treated under this course include; History of wood, woodcarving and furniture; Description and handling of hand-held woodworking tools; Shapes made with the aid of cutting tools; Safety measures in the use of tools; Types of timber wood, their working properties and uses; Methods of seasoning; Common wood defects. Relief carvings and textured panels; Decorative and communicative carvings for interior use; Finishing a woodcarving; The woodcarving industry in Ghana; Introduction to Furniture – Furniture fittings; Adhesives; Two-dimensional concepts of furniture design, furniture prototypes.

In the second year, topics studied include; Classification of woodwork joints and uses – widening joints, angle or corner joints, framing joints, lengthening; Knocked down fittings, tongue and groove, mitre, loose tongue etc.; Determination of mechanical strength joints and adhesive strength joints; Enforcement of rigidity in joints; Carving and ornamentation of furniture; Basic assembly techniques for sample furniture (prototype).

Upholstery in furniture – upholstery frames; loose seats, show wood, stuffed over; Method of making shaped assemblies in plywood, laminates and moulded rigid plastics; Methods of fitting metal springs to timber frames, metal frames and webbing types – English, Jute, Flax, Polypropylene, etc. Upholstery and bedding fillings – the use of latex plastic foams and natural fibres: the effect of their density, hardness and compression strength on their use.

Cutting of upholstery fabrics; Equipment for multiple cutting – tables, clamps, jigs, circular bladed fabric cutters, straight bladed fabric cutter; Cutting terms; Adhesives used in upholstery; Basic hand tools, woodwork and furniture finishing – physical finishing and chemical treatment; Sanding, sealing and sealants, varnishing, etc; Methods of finishing and types of finishes are the topics treated under the course in the third year of study.

Final year topics under the course include; Advanced design, drawing and construction of simple first angle, third angle and orthographic drawings to conform with relevant sections; Construction of simple isometric and oblique projections; scale drawings; importance of colour and texture as elements of furniture design; preparation of working drawings – cutting list, specification of materials, joints, types of wood, finishes, etc.

- **Clay and Earthenware**

Year one topics are; History of pottery; Existing indigenous process in pottery making; Types of local clay; Production development; Fundamental investigation into

raw materials and basic testing; Forming techniques – hand modelling, coiling, slab making and mould building.

The earth's crust; Forces of geologic changes; Advanced study of clay composition; The physical nature of clays – clay properties, plasticity; Primary and secondary clays; Decoration crockery and utility crockery.

In year two, topics treated include; Kinds of clay – sager clays, stoneware clay and miscellaneous kinds; Altering clay bodies for use; Methods of materials blending; Product development – beads, tiles, mosaic, murals etc.

Composing stoneware bodies; Throwing, modelling and construction; Casting – jiggering and pressing methods; Drying and firing processes; Indigenous firing and smoking of clay ware.

Year three topics include; Colour and texture in clay bodies and earthenware; Indigenous use of red earth and clay as paints; Investigation of red earth and clay processing for colouring matter (paint); Oven-proof bodies, flame-proof bodies, re-enforced clay and earthenware bodies; Clay and earthenware firing processes; Hardening without firing; Drying of clay; Smoking, oxidation and reduction; Verification, warping and cracking in clay.

The topics treated in the fourth year under this course include; Technological development of pottery making; Principles of pottery design – design and function,

classification and uses of pottery, materials for designing, methods of manufacturing clay products, decoration, ornamentation; Clay studio practices.

- **Skins and Leather**

Topics in the first year include; History of Leather craft; Preparation of Leather – Abattoir practices and skinning; Storage of pelt; Storage of skinned and cleaned carcass; Curing - saltation and putrefaction; Tanning, tannery equipment and processes; Unhairing, fleshing and picking; Oiling and drying; Variation of fibre structure; Physical and chemical properties of pelt; Uses of leather; Leatherwork as a vocation; Tools and equipment.

The Tannery – Tanning agents, types of skins or hide; Mineral tanning, vegetable tanning; Tannins from wood bark, leaves, seed pods, etc. Advantages, characteristics and uses for mineral and vegetable tanning agents; Tanning with oils and fats – e.g. Chamois leather; Indigenous tanning methods.

Second year topics under the course are; Post-tanning processes: splitting or shaving to desired thickness, dyeing, restoration of natural oils lost in tanning: Fat liquoring, smoothing, stretching, flexing and rolling; Buffing and application of films to impart resistance to stain and scuff; Plaiting or ironing; Embossing, grading, measuring and bundling. Structure of leather – Natural properties of leather, porosity, flexibility, plasticity; Thermal conductivity of leather; Grain layer, fibre layer, flesh layer; Tools and equipment for processing and use. Technical terms – hides and skins, grain

leather, full-grain leather, frizzing or buffing, grain or top split, middle split and bottom splits; Tooling hide, bridle leather, harness leather, core hide, bag hide, coach hide, etc.

In the third year, topics treated are; Kinds of leather and their uses – cattle hide, cowhide, vegetable-tanned cowhide; Tooling cowhide, Latigo cowhide, upholstery cowhide, buck or buckskin, sole leather, sheep leather Nappa, Cabretta, cape, skiver, chamois, doeskin, goat leather – Morocco, Niger, kid, pig leather – hog skin, peccary, pig splits or pig suede; Tools for designing on Leather; Joining, edge colouring and finishes.

Adding to leather – appliqué, beadwork, embroidery, metal embossing, patch work, plaiting, quilting, moulding, weaving, pattern making, etc are the topics studied under this course in the final year.

- **Fibres and Fabrics**

Year one topics under this course are; History of Clothing and Textiles; Composition of Fabrics – Fibres, Yarns and Construction; Yarn characteristics; Natural fibres, man-made fibres; Spinning; Non-yarn fibres and their adaptation for use; Consumer tastes; Fibre tests and identification; Basic studio skills; Introduction to Macramé.

Fibrous Yarns - manufacture and uses; Yarn classification and utility; Yarn making, Traditional and conventional spinning; Identification of Yarns; Threads, non-clothing

and clothing fabrics; Methods of fabric production; Imparting effects on fabric; Rudiments of weaving using paper.

Topics in the second year include; The loom and basic weaves; History and development of weaving; Classification of weaves; The conventional loom, the local 4-shaft broadloom other types of traditional looms; Parts and functions of the broadloom; Preparation of yarns for weaving on the broadloom – the warp frame, the winding process, beaming, tensioning, etc.

Broadloom weaving; Weaving calculations; Basic weaves – plain, twill, satin / sateen weaves; Traditional weaves – Kente, etc.; Introduction to dyeing and printing – traditional methods, the Adinkra, local dyes and stains, extraction of dyes and pigment from natural sources.

In the third year, topics treated are; Case study of fibres -- cotton, jute, sisal, banana and plantain fibres and non-yarn fibres and their adaptation for off-loom work; Loom design and manufacture - problem solving on the four-shaft broadloom, mechanisms and scope of design capabilities; Uses for fibre waste and non-yarn yielding fibres like banana and plantain; Incorporating miscellaneous materials like sawdust, etc.

Topics in the final year include; Selection of weaves – identification of warp and filling yarn; Woven fabric inspection, Patterned weaves; The consumer and the selection of woven fabrics. Tapestry weaves; Off-loom weaving techniques – Hand knitting, history and types; Net and lace making, braiding, tufting, macramé.

Conventional methods of dyeing and printing – block prints, screen-printing, tie-and-dye, batiks, spraying, etc.

Selection of appropriate fabrics for production – practical studio work in weaving, dyeing and printing; Pictorial fabrics – tapestry, batiks, tie-and-dyes, calendars, wall hangings; Furnishing – upholstery fabrics, curtains, draperies, chair backs, carpets, coverings, etc.; Clothing – full length Kente and other hand-loom woven cloth, stoles and strips, shirting, khaki, scarves; Fashion Fabrics – tie-and-dye, batik, fancy prints, modelling prints, nightwear, occasional wear and fabrics for miscellaneous uses.

- **Metal Fabrication**

In the first year, topics studied under the course are; Introduction to Metals – History of metal discovery and early uses; Basic Metallurgy; Derivation of metal from the ores, extraction, refining and usage; Some common metals, their properties and qualities – Copper, Silver, Gold, Iron, Bronze; Alloys – common alloys and their economic importance; Basic metal working tools and equipment – the rolling mill, saw frames, soldering torches etc. Basic metal working principles, procedures and processes – Annealing Pickling, Sawing, Filing etc.

Introduction to Jewellery; Designing and construction of jewellery; Chain weaving without soldering. Making of jewellery using odds and ends such as fish bone, seeds, beads etc. Sheet metal work – sinking, hollowing, embossing, repose and etching.

Second year topics include; Foundry processes and practice; Casting and types of casting – sand casting, lost wax method, centrifugal casting, cuttlefish bone casting,

etc.; Experimental casting using wax, lead and bronze to produce paper weights, key holders, pendants, belt hooks and buckles; Forging – methods and tools for forging – bending, flattening, etc.; Studio practices. Workshop practice – designing simple tools and objects for casting and forging e.g. brass hammers, statuettes, spring locks, hinges and clips; Heat treatment of metals – annealing, hardening, tempering and normalizing. Use of scrap and recycled materials; casting of non-ferrous metals – aluminium, copper, brass and silver. Experimentation with alloying scraps for hybrid alloys; Casting, shaping and forging plastic.

Topics treated in the third year are; Alloy calculation, alloying of metals, making metallic solders; Hard and medium solders; Non-metallic materials in complementary use with metals.

In the final year topics treated under this course are; Syndicate work in metals – identifying problems and concepts in the core areas, discussion and preparation of individual practical proposals for executing projects to solve key problems; Application of materials and appropriate technology in designing and constructing equipment for embossing metal sheet, wood or leather using available local materials. Surface Protection Techniques – plating, galvanizing, tinning, oiling, oxidizing, brightening, painting and lacquering; Protection and preservation of tools and materials; Storage and care of tools and equipment.

There are other courses offered under the programme in the department. These courses include; African art and culture, History of European Art, Communication

Skills and Literature in English, Seminar in Rural Art and Industry, Product design and Entrepreneurial Skills, Quality Product Development, Management Concepts in Rural Art and Industry, Rural Sociology, Research Methodology, Manufacturing and Packaging, Basic Design and Drawing, Computer-Integrated Product Design and Advanced Computer-Integrated Product Design.

During the second semester in the third year of study under the programme, students undertake practical industrial work for twelve (12) weeks at various places of Industrial Attachment. Written reports covering details of the twelve (12) weeks of Industrial Attachment are submitted by the students to the Supervisors in the department. Within this same period, students are tasked to identify a problem of the rural art and craft industry at the place of industrial attachment and propose or attempt to provide solutions to the problems they identify.

By going through all these courses, assignments, practical works, industrial attachment etc for the period of four years, the product of this department is fully equip to go out and help improve and impart into the local art/craft industry.

2.6 Recent Innovations at IRAI

Concerning innovation, the Vice-Chancellor's report (2006), states that research activities are carried out into the locally obtainable raw materials as well as the fabrication of improved tools and equipment used in the indigenous craft industry, these are always demand driven technologies.

The Department is committed to providing the best possible conditions for research, studio practice, teaching of design as well as technology as related to the visual arts.

Students and staff in the department came up with innovative simple technology for the production of simple tools and equipments, which are now being used by the students and staff of the department.

Some of the projects undertaken by the department are as follows:

- Leather stretching and drying equipment,
- Leather embossing machine,
- Metal coiling and drawing device,
- Hand operated clay blunger,
- Huge screen developer for fibbers and fabrics,
- Bamboo and rattan printing machine,
- Gas bead kiln.

2.7 Teaching Staff and Student Population

According to the Department of Integrated Rural Art and Industry staff records (2008), the total number of staff stands at 20. Out of the total number, 8 are lecturing whiles the

remaining 12 are supporting staff. Out of the 12 supporting staff, 7 are senior staff and 5 are junior staff.

The student population keeps growing making the ratio of Lecturers to students even worse. The population for the 2007/2008 academic year stands at 696 students and the student to lecturer ratio is currently 87 (i.e. 87 students to 1 lecturer). This has called for new and innovative ways of teaching large classes. This notwithstanding, 5 of the academic staff are pursuing further degree programmes in their related fields and are still handling these large numbers.

Academic staff of the department had the opportunity to attend several workshops and seminars all in an effort to enhance staff development and effective teaching.

The average number of students who graduate from the department every year are about 165. Currently, there are 165 final year students and the table below shows the distribution of the areas of specialization of the IRAI courses among the students:

Area of Specialization	Number of Students
Rattan and Bamboo	28
Wood and Furniture	46
Clay and Earthenware	22
Leather Work	107
Fibers and Fabrics	51
Metal Fabrication	77

According to the table above, leather work is the course with the highest number of students specializing in it. It also shows that clay and earthenware is the least patronized area of specialization in the department.

2.8 Collaboration with Governmental Institutions and NGOs

There are a number of governmental institutions including ministries which are related to the IRAI programme and are sourced with products from the IRAI Department. Two of the ministries in government whose aims and objectives have direct influence or bearing on the programme and its products and vice versa are the Ministry of Trade and Industry and the Ministry of Tourism and Modernization of the Capital City.

The IRAI Department has collaboration with some Non-Governmental Organisations (NGOs) who offer various form support for both students and graduates of the programme. One of such Organisations is Aid To Artisans Ghana (ATAG).

2.8.1 Ministry of Trade and Industry

Under the Mission Statement of the Ministry of Trade and Industry (2006), the Ministry has as part of its objectives to:

- Formulate and harmonize trade and industrial policies to ensure intersectoral collaboration in implementation
- Facilitate the development of the production base and promote non traditional export
- Improve entrepreneurial skills and facilitate access to credit and market

- Create an effective institutional support structure for improved productivity at the district level
- Develop standards and quality systems to meet production requirement for local and international markets

Under craft development, the Ministry's craft section has the potential to contribute significantly to the country's foreign exchange earnings. A Craft Development programme has been set up by the Ministry. The Craft Development programme is therefore meant to modernize and guide the development of the sector to enable it realizes this potential.

According to the Trade Sector Support Programme (2006), under the ministry of Trade and Industry, the ministry is involved in activities geared towards production, commerce and creation of gainful employment.

Through these activities, it contributes towards poverty reduction and wealth creation, which are considered critical to the attainment of the goal of Ghana becoming a major agro-industrial and middle income country by the year 2015.

The ministry's vision is to establish Ghana as a major manufacturing, financial and commercial centre in West Africa by the year 2015.

The Ministry also has a Technology Improvement Programme and is aimed at conducting technology audit and retooling local industries to improve their productivity and enhance their competitiveness.

The Ministry is embarking on a Rural Enterprise Development Programme (REDP). Under the programme, the Ministry is assisting each of the 138 Districts in Ghana to establish at least three commercially viable flagship enterprises. These involve the use of

local resources to facilitate the development of the production base in the districts to ensure sustained wealth creation. According to the Ministry, projects under the REDP are mostly medium-scaled that:

- are domestic resourced-based
- have a strong potential for employment creation involving mass mobilization of rural communities and other vulnerable groups
- Are focused on manufactured products with strong and growing export potential
- have a multiplying effect on the economy with forward and backward linkages and
- involve the application of modern technologies

The IRAI programme and its impact on the graduates from the Department are considered vital to the realization of the Ministry of Trade and Industry's goals and vision of contributing towards poverty reduction and wealth creation, which are considered critical to the attainment of the goal of Ghana becoming a major agro-industrial and middle income country by the year 2015. The graduates from the IRAI department of KNUST are equipped with the necessary skills and technology needed by the local craft industry before completing their programme of study. Some of the Graduates have set up on their own as entrepreneurs helping to train local people to improve on their indigenous art works. Others are occupying key managerial positions in the craft industry, with NGOs and in the various Ministries including the Ministry of Trade and Industry.

2.8.2 Ministry of Tourism and Modernization of the Capital City

According to the Mission Statement of the Ministry of Tourism & Modernization of the Capital City (2006), it has it as part of its objectives, seeking to improve institutional and human resource capacity for quality service delivery, to collaborate with the private sector for the provision of adequate tourism infrastructure and superstructure to increase tourism investment by promoting public and private sector participation; to increase public understanding of tourism and encourage greater support and participation in the tourism sector, particularly to the urban and rural poor.

The IRAI programme at KNUST trains graduates with the human resource capacity needed at all levels (managerial, technical, etc.) of the institutions associated with the tourism industry for quality service delivery. Some of the graduates from the programme have set up on their own as entrepreneurs producing various art and craft forms and objects for art galleries, shops and tourist centres across the country. Artifacts in most of the Art centers and tourist sites are works of the products of the IRAI programme. Most artisans and local artists receive training from these graduate entrepreneurs thereby improving the quality of technology in their works. The activities of the products from the programme contribute considerably to the realization of the objectives of the Ministry of Tourism and Modernization of the Capital City.

2.8.3 Aid To Artisans Ghana (ATAG)

Aid To Artisans Ghana (ATAG) founded in 1988, is a Ghanaian U.S.-based Non-Governmental Organization that seeks to assist local art/craft artisans in terms of product innovation, designing, finishing, marketing to international level. It provides holistic

assistance in product design and development/production, marketing and business development to producers, exporters and other stakeholders in the craft industry. ATAG seems to have a lot in common with the IRAI Department in terms of similar aims and objectives; this is why it has collaborated with the Department in the teaching of Product Design and Entrepreneurial Skills to 3rd and 4th year students of the Department, using high calibre resource persons drawn from industry. ATAG also has provided a number of logistics and books to furnish a digital product design laboratory to facilitate the teaching of 3D digital designing in Rhinoceros and Flamingo plug-in. The laboratory was inaugurated on 20th November 2002. Under this collaboration, the Department has benefited from the visits of foreign resource personnel.

The link between the IRAI Department and ATAG has paved the way for students to build and improve their designing and finishing skills. Through this collaboration students are given the chance of meeting the local art/craft artisans through workshops and seminars to learn from each others activity. ATAG also collaborate with the Department to organise internship programmes for the students. Through this, students undertake practical industrial attachments at various industries for about 12 weeks during their third year of study.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Overview

Every successful research requires an appropriate research methodology for the gathering of data and the analysis of information.

This chapter discusses the research methods used, the nature of population studied, the sample technique and the instrument used in data collection, data analysis plan and gives a chronological order of how the whole project was done.

3.2 Research Design

The study uses qualitative method and employs descriptive survey method, which specified the nature of a phenomenon. It determines and report the way things are. Descriptive research is concerned with the collection of data for the purpose of describing and interpreting existing conditions, prevailing practices, beliefs, attitudes, on-going process Ndagi, (1997). Descriptive research thus, involves collecting data in order to test hypotheses or answer research questions concerning the current status of the subject under study Gay, (1992). Amedahe (2002) reports that the purpose of descriptive research is to observe describe and document aspects of a situation as it naturally occurs.

In describing the environment, the IRAI department is a four year programme under the College of Art and Social Science in K.N.U.S.T. Currently the department has a population of about 696 students thus from first year to final year. The department offers about 10 different courses. The graduates from these departments are under two different phases, the diploma phase which was run for about 28 years and the degree phase which has been running since

1999. Out of total number of thousand graduates both from the diploma and degree, about fifty percent (50%) are located in various sectors of the education service (Senior High Schools, Teacher Training Colleges, Polytechnics, District and Regional Education offices and Ministry of Education). About twenty percent (20%) are into their own private industry. Twenty percent (20%) of the graduates are serving in the various section of the economy and the remaining are pursuing their postgraduate degree in various universities.

The local art industry located in and around the Ashanti region are into Kente weaving, wood carving, brass casting, leather work, rattan and basket making, etc. The local craftsmen or artisans are trained locally through apprenticeship or handing down from their fathers from generation to generation and these artisans also have apprentices who are also learning the trade under them.

In descriptive survey the events or conditions either already exist or have occurred and the researcher merely selects the relevant variables for an analysis.

The researcher used closed-ended questionnaire which facilitated quick responses from respondents. This was done to obtain accurate and precise responses due to the educational background of some of the respondents. This removes ambiguity and makes analysis accurate.

The survey method was used to trace and study the history, aims and objectives, course structure, facilities and products of the IRAI programme in KNUST. The aims and objectives of the IRAI programme were reviewed, assessing the degree to which they have been met. This method helped in evaluating the impact of the programme on the graduates and their impact on the local art industries and national development.

3.3 Library research

The library research was carried out in the KNUST's main Library, the College of Art library, the Department of General Art Studies library, which are all in KNUST in Kumasi. Some library research was conducted outside KNUST. These libraries are the University of Education Winneba (Kumasi campus) library and the British Council library, Kumasi. All these visits to the library were made between January 2007 and March 2008. In all, there was not much literature connected to the IRAI programme at K.N.U.S.T. Only a few vital information and materials were found at the IRAI Department and from the internet.

3.4 Population for the study

The population of the study included the graduates and diploma holders of the IRAI programme, local Artists who are non-products of the IRAI programme, clients and customers who receive products or services from the graduates of the IRAI programme these customers includes individuals such as tourist, Art collectors, gallery operators, second cycle and tertiary students, home owners etc. and also institutions such as schools, banks ,hospitals, hotels. The population also include the Head and staff of the IRAI department, continuing students presently at the IRAI department, other lecturers and students from the College of Art and Social Science, KNUST and NGOs related to the IRAI Department. The population is a heterogeneous type of population; this is because the characteristics of population are not similar.

Table of population for the study

POPULATION	NUMBER	PERCENTAGE
Diploma Holders	300	12.7
Degree Holders	600	25.3
Clients / Customers	500	21.1
Non-Graduates of IRAI	350	14.8
Students	600	25.3
Lecturers & Staff	20	0.8
TOTAL	2370	100

3.5 Sampling

The purposive sampling technique is used to get the sample size. These are mainly:

- graduates of the IRAI programme
- the head and staff of the IRAI department
- continuing students in the IRAI department
- local artist who are non-product of the IRAI programme
- Clients and customers of the IRAI graduates.

Table of Sampled population for the study

Class of Respondents	Population	Sampled Population (50% of Total population)	Percentage
Diploma Holders	300	150	13.2
Degree Holders	600	300	26.4
Clients/Customers	500	250	22.0
Non-products	250	125	11.1
Students	600	300	26.4
Lecturers/staff	20	10	0.9
Total	2370	1135	100

From the stratified table above, the researcher was limited to half of the total population thus the total target population was stratified to 50% to get the total accessible sample population. This was due to lack of time and finance.

3.6 Research Instruments

Three separate sets of questionnaire were prepared and they were designed to question the segments of the sampling units selected for the study, in order to assess the impact of the products of the IRAI programme on the local craft industry.

One type of questionnaire was meant for the graduates or products of the IRAI programme that are on field of work. The second type of questionnaire was meant for artists who are non-products of the IRAI programme. The third questionnaire was meant for clients or customers of the IRAI graduates.

Also interviews were granted by people who are linked to the IRAI Department and to the thesis.

3.7 Validation of instruments

The questionnaire and interviews guide were given to a cross-section of academicians to read through to determine their validity. The final validation was done by the supervisor.

3.8 Administration of instrument

The questionnaire was administered by the researcher to the selected respondents after the researcher had personally contacted them and explained the aim and nature of the research to them. The respondents were shown what to do and after three days the questionnaires were collected.

The total number of questionnaire for the graduates of the IRAI programme and all the other respondents was nine hundred and fifty copies.

All copies of questionnaires were distributed by the researcher and most were answered by the respondents.

Population	Number of Questionnaires	Number retrieved	Percentage*
Diploma Holders	150	90	60
Degree Holders	300	209	69.7
Clients/customers	250	138	55.2
Non-products	125	70	56
Total	950	507	

** This is the percentage of questionnaire retrieved out of the total given out to the respondents*

From the table, 60% of the questionnaires sent to diploma holders were retrieved, 69.7% of those sent to degree holders were retrieved, and 55.2% were retrieved from those given to clients/customers. It is therefore obvious that the respondents who are degree holders patronized the exercise by responding well to the questionnaires.

Interviews

An introductory letter from the department of General Art studies was obtained by the researcher to aid in carrying out interviews.

The Head of Department, Lecturers and staff of the IRAI Department were consulted and briefed on the purpose and nature of the research and what it seeks to find. Before the interview, a date and time was booked and a copy of the interview guide for the interview was given to the respondents to glance through and prepare for the interview.

The researcher was granted personal interview by the head of IRAI department on 5th may 2008 at his office at about 1:00pm GMT and it lasted for about an hour and half.

All the interviews granted took the same procedure and all these interviews were conducted between January 2007 and March 2008.

The researcher was granted interviews by the following:

- Head of IRAI Department - K.N.U.S.T
- Four(4) IRAI Lecturers - K.N.U.S.T.
- Five(5) Technicians at IRAI Department - K.N.U.S.T
- Seventy (70) Continuing Students at IRAI Department - K.N.U.S.T.

- Five (5) ATAG Staff, Kumasi
- Eighty –Five(85) Customers/Clients of IRAI Graduates, Ashanti Region

3.9 Primary / secondary sources of data

The information given to the researcher by graduates, students, customers/clients, lecturers, staff of IRAI Department, etc through interviews and questions constitutes the primary data.

Secondary data consists of the information collected from books, journals, internet and other secondary sources.

3.10 Data collection procedure

Since this thesis is limited to the Ashanti Region, most of the respondents are within the environs of Kumasi.

Retrieving the completed questionnaire was not difficult because the researcher knew most of the respondents and where to locate them, so the researcher did not find any problem in retrieving most of the questionnaires.

3.11 Data Analysis Plan

The responses in the questionnaire that were collected from the respondents were edited, coded and scored before it was fed into the computer. Data analysis was done using the Statistical Programmed for Social Sciences (SPSS). To make issues clear without having to read long sentences, tables with percentages were used to support the analysis. This enhanced the presentation and discussion of findings of the data collected.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Overview

This chapter deals with the presentation of data collected through the questionnaire and interviews administered and also discussion of findings from the analysis. The study was to assess the impact of IRAI programme on the Art/craft industry. Respondents of the questionnaire were in three categories. The first category was made up of graduates of the IRAI programme. The second category was made up of artists who are non-products of the IRAI programme. The last category was made up of customers or clients of the IRAI graduates.

Characteristics of Respondents

It was considered relevant to include the analysis of the background of the respondents. The year of completion and the sort of certificates obtained by the graduates are analyzed and presented in the following tables:

Table 1: Year of completion

Year	Frequency	Percentage
2003	56	18.6
2004	63	20.9
2005	70	23.3
2006	28	9.3
2007	28	9.3
others	56	18.6
Total	301	100

The above table shows that most of the graduates who responded to the questionnaire are from the 2005 year group, they form 70 which constitute 23.3 % of the total population with graduates from 2006 and 2007 forming the least percentages of 9.3 for each. This is because most of the graduates of 2006 and 2007 are now thinking about what to do and even which area to establish.

Tables 2: Certificate obtained by respondents

Certificate	Frequency	Percentage
Diploma	60	19.9
Degree	201	66.8
Diploma and Degree	40	13.3
Total	301	100

The degree certificate holders constitute 66.8 % which makes up the highest of the population. The degree programme began running only since 1999 and has about 5 batches of graduates, their intake is much more as compared to the diploma programme. Diploma holders constitute 19.9 % of the total population and although the diploma programme was for about 22 years the intake of students was very low as compared to the degree programme.

There is a category of graduates who are both diploma and degree holders. Most of the graduates of the diploma programme have upgraded themselves to obtain degree certificate. This category of graduates who possess both diploma and degree certificates constitute 13.3 % of the total population.

4.2 Table of Results

4.2.1 Responses from Graduates of the IRAI programme

Table3: Table of respondents areas of specialisation

Specialisation	Frequency	Percentage
Metal fabrication	45	14.9
Wood and furniture	40	13.3
Rattan and Bamboo	35	11.6
Skins and Leather	90	30
Clay and earthenware	25	8.3
Fibres and fabrics	66	21.9
Total	301	100

The table above indicates the area of specialisation of respondents while in school. Skins and leather work is the area of specialisation with the highest number of patronage and it constitutes 30% of the total population, followed by fibre and fabrics with 21.9%, and Rattan and bamboo fabrication has 11.6%. Clay and earthenware is the area of specialisation with the least patronage, which is 8.3% of the total population of respondents. Students patronise skins and leather because of the availability of materials and easy access to tools for their processing. Students are able to undertake practical works and assignments with ease and it is inexpensive compared to most of the other options. Students are not limited by work location since working with leather can be done at practically any comfortable place e.g. in their rooms at the halls of residence and

hostels unlike the other options where you can only work in the studio. In much same way, setting up after school to work in this area is easier and it is believed to be very lucrative.

Clay and earthenware for instance is the least patronised by students in school because they see it to be very much involving and a ‘dirty’ work. Working with clay can only be done in the studio which compels students to work even throughout the night which creates a lot of inconvenience and discomfort for them.

This indicates that most of the students do not choose their courses based on their interest and capabilities but rather on their convenience and comfort. By this, students do not take the challenge to learn what is of interest to them in order to impact on the Art industry after school.

Table 4: Table of respondents working in the Art industry

Responses	Frequency	Percentage
Yes	120	39.9
No	181	60.1
Total	301	100

According to the table, respondents who indicated that they are not working in the Art industry are 181 out of the total 301 respondents. They make up 60.1% of the total percentage. This category of graduates are not into anything Art or are not into production of any Art work, but they are located in various sectors of the education service (Senior High Schools, Teacher Training Colleges, Polytechnics, District and Regional Education offices and Ministry of

Education). Some are serving in the various sectors of the economy and others are pursuing their postgraduate degree programmes in various universities. This was confirmed by the Head of Department of the IRAI Department during an interview he granted, that about 70 percent of the graduates are in the teaching service and also serving various NGO's and banks across the country. 120 respondents indicated that they are into the Art industry and they constitute 39.9%. Some of the graduates are self employed while others are working under people in the various Art industries. Most of the graduates in this category indicated that they work in Art industry as part time or as and when they get contracts, but they have their own full-time jobs in other sectors. The graduates indicated that they lack the entrepreneurial and managerial skills to able them set up on their own in the Art/craft industry. They therefore prefer to work for an already established institutions or organisations. Most of the graduates express the view that although they can acquire funds from the bank and other financial agencies to set up on their own, they lack the skills to set up and how to manage, maintain and survive in the growing Art/craft industry. Most express the interest of establishing in the Art/craft industry but don't know how to go about it.

Although the IRAI department has as part of its aim to equip students with professional entrepreneurial skills to aid graduates set up in the Art/craft industry, it seems that students are not getting much of the skills and this in turns makes them handicap in the field and this is affecting the level of impact they are making in the industry.

David (1976), states that education is vocational when it is designed, specifically to improve the efficiency of an individual in a specific occupation. In other words, vocational education is an education for employment. IRAI programme is a vocational

programme but it seems it is not equipping the individuals with the needed skills to set up in their area of occupation.

Table 5: Table of respondents indicating which industry they are working in.

Industry	Frequency	Percentage
Fibres and fabrics	24	8
Wood and furniture	14	4.6
Leatherwork	22	7.3
Clay and earthenware	6	2
Metal fabrication	12	4
Rattan and bamboo	2	0.7
Design and printing	40	13.3
Non-Art Industry	181	60.1
Total	301	100

From the above table, 60.1% indicated that they are not into the Art industry, they are in the Educational Service, NGOs', Banks and many others but they added that work in the Art industry as part timers not into full time industry. Most graduates indicated that they are into the design and printing industry, they constitute 13.3% which is the second highest of the total percentage.

This was confirmed by the head of department and some of the lecturers of the IRAI Department during an interview granted, that about 40 percent of the graduates who are working in the Art/craft industry are into the design and printing industry. This is because the students are taught

product design (COREL Draw, 3D digital designing in Rhinoceros and Flamingo plug-in). Also during personal interviews with some of graduates, they revealed that the design and printing is more lucrative.

24 graduates indicated that fibres and fabrics is their area of industry and this constitutes 8% of the total percentage. Most students choose to specialise in leather work while in school but most turn on to fibres and fabrics after school as their area of industry on the field. They find fibres and fabrics (tie and dye, printing, weaving, batik making etc.) more profitable than the leather work. Clay work is the least patronised in terms of percentage; this might be due to the fact that clay work is more technical in terms of setting up the kiln for firing and getting the right kind of clay to mine. Some graduates are also of the view that there is no ready market for ceramic products in this country.

Table 6: Table of respondents indicating whether their work is mechanical or manually based.

Methods of Operation	Frequency	Percentage
Mechanically based	70	23.3
Manually based	119	39.5
Both	112	37.2
Total	301	100

According to table 6, 119 of the respondents who make up 39.5% indicated that their work is generally manual based, that is, they use simple hand tools such as chisels,

hammers, mallets, hand saw, scrappers, and the use of the hand in most of their working process. This is also evident in table 7, where 181 respondents who constitute 60.1% use simple hand tools.

Those who indicated that their work is mechanically based are made up of 23.3% which constitute the least of the total population. The mechanically based techniques are mostly machines operated tools and equipments and these machines make production quicker and faster, but these machines are not common and are costly to acquire them especially for young people who are setting up on their own. Table 7 again illustrates this where 70 respondents who make 23.3% use machine operated tools.

Table 7: Table of respondents indicating the kind of equipments and tools used

Equipments and tools	Frequency	Percentage
Simple hand tools	181	60.1
Machine operated tools	70	23.3
High technology machinery	50	16.6
Total	301	100

Table 8: Table of respondents indicating the methods and techniques used

Methods and Techniques	Frequency	Percentage
Conventional	184	61.1
Improved technology	117	38.9
Total	301	100

Out of the total number of 301 respondents, 184 indicated that they use conventional methods and techniques in their production example are hand kneading of clay, hand carving, hand sewing, among others. This shows that most of the graduates are still using the old indigenous methods and techniques used by our local artist.

117 respondents indicated they use improve technology like computers, sanding machines etc.

The IRAI programme which is vocational education trains the individual to acquire academic knowledge, technical skills and technology which includes the innovation and use of equipments and machines. This finding indicates that graduates of IRAI are not making the innovative and technological impact being felt in the Art industry.

Table 9: Table of respondent's years in the Art industry

Years	Frequency	Percentage
2years	1	3
3years	97	32.2
4years	65	21.6
5years	82	27.2
10years	56	18.6
Total	301	100

From the table indicating the number of years in the art industry, out of the total of 301 respondents only 1 indicated working for 2years. This is because most of the graduates who finished about 2-3 years are still finding their feet on where and what to do after

school. 97 respondents have been in the Art industry for 3years and this is the highest in terms of percentage. This shows that, of all the challenges in the Art industry and the fact that many of the graduates are focusing on other sectors for employment, most are still interested in the Art industry.

Table 10: Table of respondent's improvement in product design

Response	Frequency	Percentage
Yes	273	90.7
No	28	9.3
Total	301	100

One of the objectives of this thesis is to assess the impact of graduates of IRAI in terms of product design, and from this table, 273 which is 90.7% of the respondents indicated that there is improvement in the Art industry in terms of product design. This was referring to idea development, functionality of Art works, aesthetic nature of products and packaging. Only 9.3% thought otherwise.

Table 11: Table of respondent's improvement in Methods or techniques

Response	Frequency	Percentage
Yes	157	52.2
No	144	47.8
Total	301	100

157 respondents indicated there has been improvement in the methods and techniques and 144 responded that there has not been much improvement in terms of methods and techniques. Most of the respondents are of the view that although there are new methods and techniques available now such as digital printing, electronic embossing, kiln drying etc, they do not have advanced machinery or equipments to execute these methods and techniques.

Table 12: Table of respondent's improvement in Tools and equipments

Response	Frequency	Percentage
Yes	116	38.5
No	185	61.5
Total	301	100

Out of the total number of 301 respondents 185 responded that there is no improvement in terms of tools and equipments forming 61.5%. Most of the graduates in the Art industry complained that they are still using the old and sometimes the primitive equipments used in the olden days. 116 indicated that there is an improvement in terms of tools and materials.

Table 13: Table of respondent's improvement in studio practice

Response	Frequency	Percentage
Yes	163	54.2
No	138	45.8
Total	301	100

163 of the respondents indicated that there has been improvement in terms of studio practice. This refers to the care and maintenance of tools and materials, safety and good precautions at workplace etc. This frequency represents 54.2 % of the total population. This indicates that the good studio practices studied in school is put to use at the workplace. 138 out of the total number of 301 think there has not been any improvement in terms of studio practice.

Table 14: Table of respondent's ways of marketing of products

Marketing	Frequency	Percentage
Advertisement	100	33.2
Door-door sales	142	47.2
Display in showrooms	16	5.3
Exhibitions	43	14.3
Total	301	100

From the table above, 142 respondents making 47.2% of the total indicated that they market their products by the door-to-door sales. This they do by taking the products to the customers wherever they are. 100 respondents indicated they market their products by advertising through posters, bill boards, signposts, radio announcements and sometimes television announcements. In terms of exhibitions as a channel for marketing, only 43 responded. This is because, it is quite expensive to organise exhibitions and most artists can not afford exhibition as a channel of marketing likewise displaying in showrooms which was the least patronised channel of marketing. This means that most graduates in

the Art industry are not able to reach more customers at a time and this means they are not making enough sales.

According to the Trade Sector Support Programme (2006), under the ministry of Trade and Industry, the ministry seeks to promote activities geared towards production, commerce and creation of gainful employment. Through these activities, it contributes towards poverty reduction and wealth creation, which are considered critical to the attainment of the goal of Ghana becoming a major agro-industrial and middle income country by the year 2015. Since most graduates of IRAI programme are not making enough sales it also means they are not producing much and they are not employing much people into the Art industry. Therefore one can say that most graduates of IRAI programme are not contributing positively to the poverty reduction and wealth creation in Ghana.

Table 15: Table of respondent's sort of customers/clients

Customers/clients	Frequency	Percentage
Individual customers	177	58.8
Institutions	124	41.2
Total	301	100

Out of the total number of 301 respondents, 58.8% indicated they have individuals as their customers or clients and these includes tourist, Art collectors, gallery operators, second cycle and tertiary students, home owners and 41.2% indicated that they have institutions such as schools, banks ,hospitals as their clients. Majority of the graduates

maintained that, it is easier to do business with individuals and they are easy to reach as compared to institutions.

Table 16: Table indicating the kind of services and products the respondents offer

Products and services	Frequency	Percentage
Fibres and fabrics	68	22.6
Wood and furniture	6	1.9
Leatherwork	54	17.9
Clay and earthenware	4	1.3
Metal fabrication	8	2.6
Rattan and bamboo	6	1.9
Design and printing	76	25.2
Others	80	26.6
Total	301	100

The information provided in the table above indicates that, majority of the respondents which makes up to 26.6% are into other forms of services like teaching, banking, NGO's etc. About 25.2% are also into designing and printing where they design and products, souvenirs, posters, bill boards, packages and covers of products, printing and binding of publications, etc. 22.6% of the respondents offer products in fibres and fabrics in the form of tie and dye, batik, macramé, cloth printing, fabric designing, etc. The least of all the services provided is clay and earthenware products which had 1.3%, this shows that the ceramic art is not of much interest and profit for most graduates.

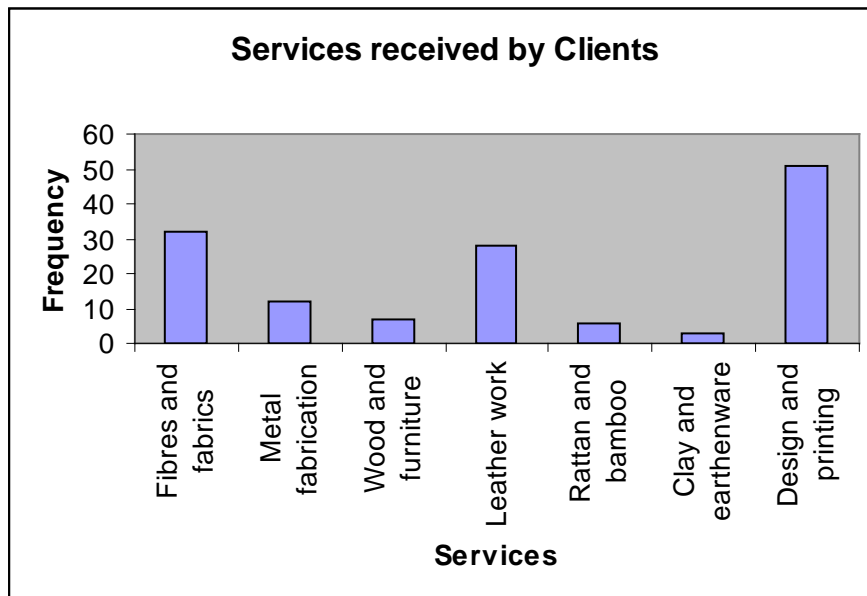
Table 1 above indicated that leather work is the most liked course by students but when they leave school most of these graduates don't work with leather but rather most work with fibre and fabrics. This might be because there is already market for textiles products as compared to leather work.

4.2.2 Responses from Clients / customers who receive services or products from IRAI graduates

Table 17: Table of Services and products Clients and customers receive from graduates

Products / Services	Frequency	Percentage
Fibres and fabrics	32	23.2
Metal fabrication	12	8.6
Wood and furniture	7	5.0
Leather work	28	20.2
Rattan and bamboo	6	4.3
Clay and earthenware	3	2.2
Design and printing	51	36.5
Total	138	100

Chart 2: A graph showing services received by clients from IRAI graduates



From the above table, majority of the customers or clients who make up 36.5% of the total are receiving products and services from designing and printing, where they design and produce souvenirs, posters, bill boards, packages and covers of products, printing and binding of publications, etc. 23.2% of the respondents receive products from fibres and fabrics such as tie and dye, batik, macramé, cloth printing, fabric designing, etc. The least service clients receive from graduates or the industry is clay and earthenware products which constitute 2.2%. This shows that the ceramic art is not of much interest and profit for most graduates.

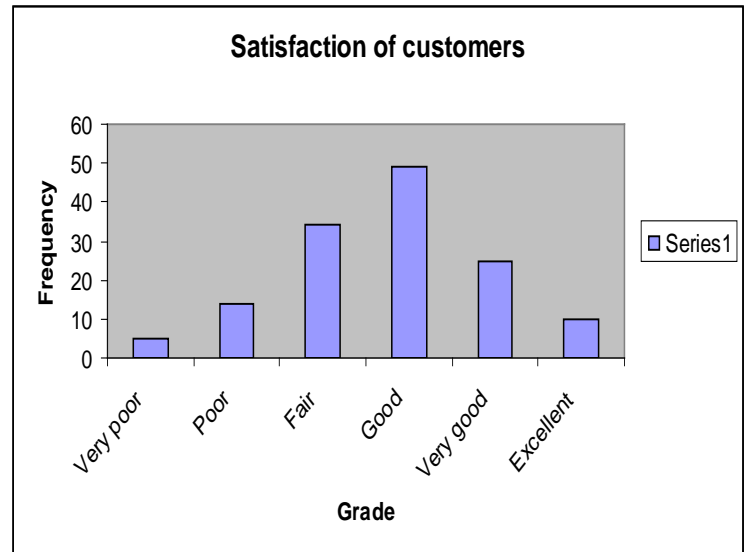
Table 18: Table of Clients' years of receiving services from graduates and industry

Years	Frequency	Percentages
1year	8	5.8
2years	10	7.2
3years	22	15.9
4years	35	25.4
5years	42	30.4
5-10years	21	15.3
Total	138	100

In table 16, respondents who are clients or customers were to indicate the number of years they have been receiving services and products. From the table, 30.4 percent indicated that they have been receiving services for 5 years which is the highest of all the percentages. This also indicates the level of satisfaction of services they are receiving for such number of years of doing business with the graduates.

Table 19: Table of Client's level of satisfaction with services provided

Satisfaction	Frequency	Percentages
Very poor	5	4.3
Poor	14	10.2
Fair	34	24.6
Good	49	35.5
Very good	25	18.2
Excellent	10	7.2
Total	138	100



Out of the total number of 138 clients 49 graded the products and service they receive as good and 34 graded the service or product as fair, 10 graded it as excellent. 5 clients were of the view that the services and product they receive are very poor.

From the interviews conducted, most of the clients complained of bad finishing of most products and the fact that this does not help to meet international standards.

4.2.3 Responses from Artists who are non-products of IRAI programme

Table 20: Table of Number of years in business of Artists who are non-products of IRAI programme

Years	Frequency	Percentages
1year	6	8.6
2years	10	14.4
3years	5	7.1
4years	8	11.4
5years	11	15.7
5-10years	30	42.8
Total	70	100

The table above indicates that 42.8% of the population have been in business for between 5-10 years. This shows that most of the non-products of the IRAI programme have been in the Art industry for a long time. 10 respondents indicated that they have been in business for 2years and this suggests that more people are getting interested in the Art industry of late.

According to the Ministry of Tourism, one of its aims is to increase institutional and human resource capacity for quality service delivery to promote tourism. This brings out the fact that if the Art industry improves with modern technology, techniques, methods, entrepreneurial skills, availability of credit, available market, it will go a long way to

attract many people and institutions into the Art industry and this will in the long round bring quality service delivery for the promotion of tourism in Ghana.

Table 21: Table of Level of training of Artists who are non-products of IRAI

Responses	Frequency	Percentages
Local apprenticeship	34	48.6
Vocational/technical education	8	11.4
Training on the job	28	40
Total	70	100

Under this questionnaire respondents were ask to indicate their level of training. Out of the 70 respondents, 30 indicated that they had their training as apprentices in local shops without any formal education. Most had their training by learning from their grandparents and parents who were into that same Art industry. Out of 70 respondents, 28 indicated that they had their training on the job, through the experience and knowledge they got through working on the same form of work for a long time. Only 8 respondents indicated they obtain their training from vocational or technical education.

According to the Ministry of Trade and Industry projects under the REDP it is aimed at ensuring sustained wealth creation by having a strong potential for employment involving mass mobilization of rural communities and other vulnerable groups. Most of the non-products are illiterates or semi illiterates who are living in rural communities with little of no resources to work with. This group of people have been working in the Art industry

for generations and if they are given some form of training or have some impact will bring about wealth creation and will help Ghana to attain middle income status by 2015.

Table 22: Table showing kind of tools and equipments used by respondents

Tools / Equipments	Frequency	Percentages
Simple hand tools	38	54.3
Machine operated tools	18	25.7
High technology machinery	14	20
Total	70	100

The use of simple hand tools constituted 54.3%, like chisels, hammer, gouges, brushes, hand saws, spatulas, while machine operated tools example sanding machine, spraying machine, porters wheel, late turning machine constituted 25.7%. The least is high technology machinery such as the wood processing machine, the solar kiln, the computer embroidery machine, which is 20% of the total percentage. The same question was asked to the IRAI graduates and their responses were similar to that of the non-graduates of IRAI. Majority indicated that they use more simple hand tools than machine operated tools and high technology machinery.

Due to the fact that IRAI graduates have gone through four or two years of formal education with training in industrial Art with the aim to produce for this fast growing and advancing world, one does not expect to see these graduates still working with the old simple hand tools the local artist have been using. The Ministry of Trade and Industry has it as its vision of making the Art/craft industry a technology base industry to improve

productivity and enhancing competitiveness and the graduates of IRAI is linked to this vision by helping impacting the technology they have acquire to the Art/craft industry.

In terms of technological improvement, more than 50% indicated that there has been some level of technological advancement in the Art industry. Some explained that there has been much improvement in product design, methods and techniques, in finishing the types and kinds of finishing they now give to their works. Some say all these advancements came about when they started marketing their works in the international market, through the feedbacks they get from their clients in the outside world. They indicated that these improvements are as a result of the feedback they get from their clients but not from the impact of the graduates.

Table 23: Table showing the sort of customers/ clients the respondents serve

Customers	Frequency	Percentages
Individuals	53	75.7
Institutions	17	24.3
Total	70	100

Out of the total percentage, 75.7% of the respondents indicated they have individuals as their clients or customers and they constitute local tourists, art collector, exporters, etc. Out of the total percentage, 24.3% indicated they do business with institutions like schools, industries, agencies, hotels etc. this indicates that most of the Art/craft produced there in Ghana do not gets to the international market and this is because most of our Art

works do not meet the international standard in terms of design, finish and material, and this is not helping us to generated much foreign exchange.

Table 24: Table showing whether respondents have worked with any graduate of IRAI

Responses	Frequency	Percentages
Yes	30	42.9
No	40	57.1
Total	70	100

The researcher wanted to know if the respondents have had any contact with the IRAI graduates, the impact they have made and the level of impact made. From the question; “Have you worked with any graduates of IRAI?” 30 responded they’ve had contact with continuing students of IRAI who come on industrial attachment while 40 out of the 70 respondents answered “No”. This indicates that the IRAI graduates have not gone far as in reaching and impacting to a lot of the Art industry. This also confirms the Head of Departments view that the continuing students are the ones who are making the impact but not the graduates.

Table 25: Table indicating whether respondents are working with graduates of IRAI?

Responses	Frequency	Percentages
Yes	21	30
No	49	70
Total	70	100

From the above table, 30% of the respondents indicated that they have graduates of IRAI in their workplace or industry, aside continuing students who go on industrial attachment. 70% indicated they do not work with any graduate of the IRAI programme.

Respondents indicating the level of contribution of IRAI graduates/students in the Art industry, in terms of technology, product design, and finishing.

From the total number of 70 respondents, only 24 indicated that there has been an impact from the graduates of IRAI to the local Art industry. They maintained that the graduates have brought new dimensions in the industry in terms of product design, they said that at first, the design for their products were for aesthetic purposes but these graduates brought the idea of designing for both aesthetic and functional purposes. Also they maintain that these graduates have educated them on the use of different methods and techniques in finishing. For example, using emulsion paints of different shades in finishing wood works instead of chewing charcoal and other substances in their mouths for finishing their works. This has helped them to export more of their works to meet international standards and also to generate foreign exchange..

This indicates that if most of the graduates were contributing to the Art/craft industry, the industry will be generating more foreign exchange for the country. This will go along way to help the Ministry of Trade and Industry to realise its aim of contributing significantly to the country's foreign exchange through Art/craft.

4.3 Findings from Students at the IRAI Department

From the number of interviews the researcher had with about 170 students, with the majority being 3rd and 4th year students on their perception of the IRAI programme, the following were revealed:

- They were of the view that, the work demand on students is high in terms of the work load on practical works being done in a semester. The students submit about 10 to 12 practical works per semester. This has had a toll on other areas of their study in terms of theory and research. The students are not given much theory and research assignments. By this students are not given much exposure and experience to do both library and field research which is a vital tool for the graduates at the end of their study. Most of the students therefore lack theoretical knowledge of the works they do and the kind of learning where students share their thoughts and express themselves is not available.
- It was also revealed that the mode or criteria of assessment of students' practical works is not standard. The students lamented that Lecturers/Instructors only look at the work and award marks without any laid down structure or criteria such as design, craftsmanship, functionality, methods and techniques used. Students therefore cannot determine where they made mistakes or where they performed well, in deserving marks awarded to them.
- The students also complained that there is not much interaction between lecturers and students. The relationship between lecturers and students in terms of counselling, tutorial classes for the students is not strong. This primarily may be due to the large class intake. At the moment, the population of students at the

IRAI department for the 2007/2008 academic year stands as follows; 159 first years, 158 second years, 214 third years and 169 final years. Currently the ratio of lectures to students at the department is about 1:50 which in effect reduces instructional time with students.

- There are inadequate tools and materials at the laboratories and workshops for study in the department. Reading materials and text book are also unavailable at the libraries. Students have to acquire most of the materials and tools by themselves before they can undertake any assignment or practical work. This has increased the financial burden on students and parents at large. This therefore, is making being part of the IRAI programme an expensive undertaking.

4.4 Findings from Lecturers at the IRAI Department

Based on the interviews granted to the researcher by some lecturers of IRAI department and other departments in the College of Art and Social Sciences, most of them were generally of the view that, the IRAI department is gradually making some impact on the local art industry through the students' industrial attachment programme to these local art industries and greatly through the graduates who are scattered around the whole country.

The HOD is of the view that, it is rather the students in school who are making the impact through their industrial attachment and their constant interaction with artists in the industry. He concluded that, for the graduates much is not known about them since the department has no system of tracing them to know what they are doing, whether they are in the industry or not.

Most of the teaching staff interviewed at the Faculty of Industrial Art admitted that, the IRAI programme is really one of the best programmes in the faculty in terms of course structure and content, infrastructure and staff as compared to other departments in the faculty. But despite all these, there are some shortcomings that need to be addressed in order for the department to achieve its aims especially at equipping students with requisite skills to identify and promote the indigenous art and crafts of the traditional Ghanaian heritage. These are some of their views:

- Some lecturers admit that there is a problem with the methodologies employed in teaching at the department. The lecturers lecture the practical instead of teaching the skills. The background of most of the lecturers revealed that, most of them are not trained to teach or trained teachers.
- There is little or no linkage between the various courses at the department. This is because, the various courses are handled by different lecturers, and each lecturer focuses his/her attention on his/her particular course without coordinating with other lecturers to link their ideas in training students.
- The lecturers do not grant much individual attention to students. This again is due to the high lecturer to student ratio as result of the large class intake coupled with inadequate infrastructure and materials for teaching students.
- The lecturers again admit that, they have different areas of expertise and this makes it difficult to pull their resources together to improve the Department.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter deals with the summary and conclusions from the analysis made. The final recommendations are made based on the findings. The study was conducted to assess the impact of IRAI programme on the art/craft industry. The assessment of the impact of the IRAI programme has revealed some achievements of the programme since its inception. It could be said that the IRAI programme has made some impact; yet there is more to be done for the full realization of its intended objectives as outlined in chapter two.

5.2 Summary of Research Findings

The study revealed that about 60 percent of the graduates from the IRAI programme are serving in various sectors of the Education service. They are scattered in the various Senior High Schools, Teacher Training Colleges, Polytechnics, District and Regional Education offices and Ministry of Education. Some are also into the economic industry like the banks and NGO's. Some of the graduates have acquired postgraduate degree/diploma in Education and Art Education at various levels in Universities both in Ghana and overseas. A number of the graduates are also currently pursuing their post graduate degrees in much same way.

The study revealed that most of the IRAI graduates in the education service are performing very well in their various institutions as lecturers, teachers, administrators and managers. This is due to the fact that the IRAI programme prepares the graduate in all the six art disciplines with speciality in either three or two. This equips the graduate to fit in any art related area he/she finds himself or herself and sometimes they are able to handle two or more art subjects in the teaching field, unlike

the other programmes where students major in only one area. Almost all the graduates found in the education sector expressed the view that the IRAI programme has been of immense help to them and it has been the key to the success of their work. The IRAI department has as part of its aims to provide manpower for the education sector and this indicates that the department is on track in achieving that aim. All the IRAI graduates in the education sector are however of the view that, there is the need to improve conditions at the IRAI department, in terms of tools and equipments, teaching strategies and enough literature to fully equip graduates to meet the challenges of this growing and technological world.

The Integrated Rural Art and Industry programme aims primarily at equipping students with requisite skills to identify and promote the indigenous art and crafts of the traditional Ghanaian heritage. By achieving this, the Department trains students to acquire professional skills in designing, production and marketing of Ghanaian artistic products (i.e. products that combine practical functions with contemporary aesthetics). The use of local raw materials is emphasized. From the table of results in chapter four, it was revealed that most of the graduates are still using simple hand tools in production. This shows that there has not been much technological transfer in terms of innovation, invention and improvement of tools and materials used in production. On the other hand, it was revealed that there has been a lot of transformation in terms of studio practice, product design, methods and techniques, in finishing types and various kinds of finishing. On the marketing of products, most of the graduates resort to door-to-door sales due to financial constraints to acquire showrooms, mount exhibitions and to pay for advertisements.

The IRAI programme at the department aims also to equip students with professional entrepreneurial skills. The programme equips the students with some skills but most of them in turn do not use the skills and knowledge they acquire in school. For instance, table 1 & 3 in chapter 4 confirms that, most students opt for leather work as an area of specialization in school but after their degree they do more of design and printing.

According to tables 27 & 28, about 62.9% of the artists who are non-products of the IRAI programme indicated that they have graduates of the IRAI programme in their establishments. However, only 34.1% can recall that the graduates are making impact in the industry in their opinion. This shows that a number of the graduates are working in the industry but the impact of some of them are not being felt.

5.3 Conclusions

The findings above indicate clearly that the programme has had an influence on the Art/craft industry but for the length of time the programme has been running in KNUST, the researcher would agree with some respondents that the degree of impact is not strongly felt in the industry. It is also obvious that the IRAI programme through its graduates is making a lot of impact in various sectors in the Ghanaian economy. The findings above shows the contributions the products of the programme are making in the education service, corporate institutions like banks, and various NGOs. Some have contributed to knowledge by their further studies in research at the postgraduate level. Some have contributed immensely to the Art/craft industry by influencing production processes in terms of studio practice, product design, methods and techniques, in finishing types and various kinds of finishing. By this, the impact of the IRAI programme in the Art/craft industry cannot be understated. However, after 22 years of awarding

diploma and 8 years of degree under the programme, with about 1000 graduates in the system, the level of impact in the Art/craft industry is inadequate and needs to be improved tremendously upon.

5.4 Recommendations

In order to improve upon the collaboration between the IRAI department and the Art/craft industry in Ghana, which in effect will contribute immensely towards the development of this country, the following recommendations have been suggested by the researcher for consideration:

- The department should research further into all the Art/craft industries in Ghana and create a database of all the companies, institutions, shops (both retail and wholesale outlets), tourist centres etc. the department should then link up with these establishments so that students from the department can be attached to them officially and placement done by the department as part of their National service and subsequently employed by these agencies. This will help keep graduates from the programme focused and directed towards the goal of helping the Art/craft industry.
- The department should create a database with information of all graduates and their whereabouts (workplaces, addresses, telephone contacts, etc.). These information can be collected prior to the departure of students on completion of the programme. Information on continuing students should also be kept in a database so that there will be easy access to information on students of the IRAI programme.

- The department can organise workshops and exhibitions and invite the graduates and companies to showcase their products and innovations. Students at the department should be made to take part in the exhibitions. It could be an annual programme which will bring back graduates to the department to share their experiences and innovations with lecturers and students and vice versa. This will ensure the transfer technology from the department to the industry.
- The teaching of theory and practical at the IRAI department should be balanced to 60% practical to 40% theory. Balancing practical and theory builds up the reasoning ability of the students.
- The mode of evaluation and marking scheme of assignments should be made known to students during the working process and also at the finished state to ensure consistency. The critical thinking abilities of the students must also be assessed.
- The Department should collaborate with the local artisans, communicate and know their problems and difficulties and come back and design something to solve these problems.
- Entrepreneurial and managerial courses should be emphasized to help graduates set up on their own to improve the Art industry.

This research has brought to light the level of impact the IRAI programme has made on the Art/craft industry in Ghana since its establishment in 1976. The historical background and developments, aims and objectives, collaborations with other governmental and non-

governmental organisations were brought to light. The level of impact discussed includes product design, technological and innovation transfer in terms of tools, materials, methods and techniques. It has been noted that the IRAI programme has made an impact on the Art/craft industry in Ghana through its graduates but the level of impact is not strongly felt. Through the findings gathered from the research, recommendations have been made and it is hoped that if they are considered and effectively implemented would help improve the IRAI programme, the linkage between the IRAI department, the graduates and the Art/craft industry and the impact the graduates are making and this will go a long way to help Ghana to become a middle income country by the year 2015.

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APPENDIX A

QUESTIONNAIRE ON ARTISTS/ PRODUCTS OF THE IRAI PROGRAMME AT KNUST AND THEIR IMPACT ON THE LOCAL CRAFT/ART INDUSTRY

Respondents name:.....

Company Name.....

Year of completion of the IRAI Degree Programme.....

Kind of certificate obtained

(i) Diploma []

(ii) Degree []

Area(s) of specialization.....

(i) Fibers and Fabrics []

(ii) Metal Fabrication []

(iii) Wood and furniture []

(iv) Leather work []

(v) Rattan and bamboo []

(vi) Clay and Earthenware []

(vii) Others(Please specify).....

Are you working in the art or craft industry? (i) Yes [] (ii) No []

If Yes, specify the art or craft industry you are working.....

.....

If No, specify the organisation/ industry you are working for.....

What kind of craft or art industry are you working in?.....

Is your work mechanical or manually based?.....

What sort of equipments and tools do you use in your industry?.....

What technology do you employ in your production.....

Please state the methods and techniques you use in your industry.....

How long have you being in this industry?.....

Has there been any improvement in your company since you joined /started?

Please specify

- (i) In terms of designs of products
- (ii) In terms of methods or techniques.....
- (iii) In terms of tools /equipments.....
- (iv) In terms of studio practice.....

How do you market your products?.....
.....
.....

What sort of customers or clients do you serve?
.....
.....

Please state the products and services you offer customers/clients.....
.....
.....
.....

APPENDIX B

QUESTIONNAIRE ON ARTISTS WHO ARE NON-PRODUCTS OF THE IRAI PROGRAMME, THEIR PERCEPTION OF PRODUCTS OF THE IRAI PROGRAMME AND THEIR IMPACT ON THE LOCAL ART/CRAFT INDUSTRY

Company/Industry.....

What kind of products and services do you offer?.....

.....

.....

How long have you been working for the company?.....

Where did you train?.....

State your level of training.....

.....

What is your level of Education?.....

Is your work Mechanical or Manually based?.....

What kind of tools/ equipments do you use in your work?.....

.....

.....

.....

Has there been any technological improvement in your work? YES or NO.....

Please state how

(i) In terms of tools and equipments.....

.....
.....

(ii) In terms of studio practice.....
.....
.....

What sort of customers/clients do you provide service for?
.....

Have you worked with a product of the IRAI Programme before? YES or NO
.....

Do you have such products in your company? Yes [] No []

How have they contributed to your work in the company or industry?
.....
.....

Would you want to be part of the IRAI degree Programme and why?
.....
.....

APPENDIX C

QUESTIONNAIRE ON CLIENTS/CUSTOMERS PERCEPTION AND SATISFACTION OF PRODUCTS AND SERVICES OFFERED BY PRODUCTS OF THE IRAI PROGRAMME

1. Please indicate the company(ies) you receive services or products from.....

.....
.....

2. What kind of services or products do you receive form the company(ies) listed above?.....

.....

3. How long have you been receiving services from the company (ies)?

.....

4. Please indicate your level of satisfaction with services provided. Tick as appropriate.

Service Delivery	V. Poor	Poor	Fair	Good	V. Good	Excellent
Product design						
Tools & equipments						
Methods & techniques						
Furnishing						
Delivery (Packaging)						
Delivery (On time)						

5. Any additional comments or suggestions on the products/service delivery of company(ies).....

.....