A comparative study of the national cultural history museum, pretoria (S. Africa)

and KNUST Museum, Kumasi.

BY

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DECLARATION

I here by declare that this submission is my own work towards the MA degree (African art and Culture) and that, to the best of my knowledge, it contains no material previously published by another person or material which has been accepted for the award of any other degree of the University, except, where due acknowledgement has been made in the text.

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Student's name & ID   Signature   Date

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Supervisor(s) name   Signature   Date

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Head of Dept. Name   Signature   Date

DEDICATION

I dedicate this study to my late father Togbe Zavu Komla IV , my dear mother Dr. (Mrs.) Olivia Aku Glime. My children Claude Nana Gyawu Asare, Ninona Akua Afriyie Asare and Weslyn Nana Ama Asare.

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ABSTRACT

The quest of the researcher to help upgrade the KNUST Museum to a world – class standard museum, urged the researcher to embark on the study of a series of previously researched topics on museums. The researcher through the study identified many world-class standard museums, but out of the lot, the National Cultural History Museum, Pretoria, was chosen to serve as a yard stick, by which the KNUST Museum was compared. The comparative study was to unearth the short-comings of the KNUST Museum and if the suggestions and recommendations by the researcher are adopted, they will help upgrade the KNUST museum to a world-class standard museum. The researcher delved into the areas of the scope and activities of the National Cultural History Museum, Pretoria and KNUST Museum in disciplines such as; education, research, and extracts of the policies of the two museums. In addition the researcher also studied the mode of acquiring collections, documentation, collections management, exhibitions and displays, storage, logistics and funding of the two museums.The researcher employed the qualitative method for research approach; case study historical, descriptive, and observer-participant. The instruments used for data collection were questionnaire, validated interview and questionnaire.The researcher's primary source of information was that of observation participation due to the fact that, the researcher was engaged at NCHM during the research period in Pretoria, and as a volunteer prior at KNUST Museum. The secondary source of information was accessed at, NCHM's library, Balme library, Museums and Monuments Board's archives. National Archives, University library - KNUST, Ashanti library, Museums Association (UK) journals, publications and internet sources.The research found out the following shortcomings in the KNUST Museum: the KNUST has no documented policies on collections, education, research, etc. There is a shortfall in the scope and activities of KNUSTM in terms of educational programs, research and funding. Mode of operation was also identified as a challenge such as trained staff for the KNUSTM; there are no curators for the various collection disciplines, educators, documentation staff, and janitorial staff. Improper documentations on collections was noticed, inappropriate showcases and mode of display, improper facilities for storage, inadequate collections, etc. There are no shops, cafeteria, exhibition and conference halls to generate internal funds, as existing in other world class standard museums. KNUSTM has low level of publicity in the print and electronic media.

KNUSTM has inadequate logistics and it has no collaboration with international organisations. The researcher recommends that the KNUSTM should formulate policies, improve upon the mode of operation, scope and activities of the KNUSTM to conform to international standards i.e. ICOM.

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ABBREVIATIONS

a) KNUST – Kwame Nkrumah University of Science and Technology

b) NCHM – National Cultural History Museum

c) ICOM - International Council Of Museum

d) KNUSTM - Kwame Nkrumah University of Science and Technology Museum.

e) MA – Museums Association

CHAPTER ONE

INTRODUCTION

Background Study of Work

Museums are the life blood of a nation, and it is one of the major forms for a people's heritage to be preserved and conserved for posterity. They are institutions, housing collected objects of artistic, historic or scientific interest, conserved and displayed for the edification, education and enjoyment of the public. According the ICOM STATUES, article 2 pg.13 1987, a museum as 'a non-profit making permanent institution in the service of the society and its development, and open to the public which acquires, conserves, researches, communicates and exhibits for purposes of study, education and enjoyment, material evidence of people and their environment'. For these reasons institutions and centres of higher learning, research and dissemination of knowledge found it necessary to establish their own museums to compliment fulfillment of their missions and visions, the Kwame Nkrumah University of Science and Technology in Kumasi has set up its own museum.

Since its inception in 2005 the Kwame Nkrumah University of Science and Technology Museum (KNUST Museum) seems to have some setbacks and apparently not performing according to standard of International Council of Museums ICOM). It is therefore expedient to identify the shortfalls and find solutions to them. In so doing this research compared two museums, namely the National Cultural History Museum (NCHM) in Pretoria, South Africa and the KNUST Museum, in order to unearth the shortcomings of the KNUST Museum. The NCHM was chosen because it is a world class rated museum whose policies and practices if adopted will help upgrade the KNUST Museum to a world class standard museum. The researcher's intention was to identify and discuss the internationally accepted museum practices in accordance with the laid down policies of

ICOM. A number of world class standard museums were identified, among which the NCHM was chosen as the yardstick, to which the KNUST Museum was measured.

KNUST Museum

The KNUST Museum was established on 7th January 2005 by the Kwame Nkrumah University of Science and Technology, under the tenure of Prof. Kwasi Andam as the Vice –Chancellor of the University. The museum is multi-disciplinary in terms of its collections to serve as a repository for the University's history documents and meaningful collections as well as a general overview of the history of its geographical location. The objectives of setting up the museum are to educate, inform, and in diverse ways seek innovative means to contribute to the development of the tourism sub-sector. As a multi–facet leading University museum in Ghana, it seeks to pursue high standards of museological practice by generating, preserving and using museum collections in Ghana and Africa to promote knowledge.

The collections at the KNUST Museum range from framed University documents, photographs, paintings, sculptural works, pottery, ceramics, metal works by the academic staff and students. In addition to the museum's acquired collections, are collections lent to the museum by individuals and organizations. The museum also has collections of the Asante Kingdom.

Ethnographic Background

The KNUST Museum is sited on the KNUST campus in Kumasi, Ashanti Region of Ghana. The campus is located on the boundaries of Ahinsan, Ayeduase, Ayigya, Boadi, and Bomso stool lands. It is mainly populated by lecturers, students and non-academic staff. The community is predominantly an academic society. This encourages patronage of the museum for research purposes by students studying museology, archeology, social sciences, history, fine art, industrial art and others disciplines. The museum also serves as a research point for scholars and professionals.

NCHM

As stated in S.A. Museums directory (1981,p3 and p71) the NCHM was established in 1892 in the 'Staatsmuseum' of the 'Zuid Afrikaansche Republic'. It was called Pretoria Museum but was changed to Transvaal Museum to reflect its wider mandate. In essence the history facet of the Transvaal Museum remained dormant until 1950 when it saw a rapid growth. In 1960 it became an autonomous museum and the name was changed to National Cultural History Museum (NCHM).

The vision of the museum is to preserve the cultural history items in its possession as collections and to document the cultural history of the land (Pretoria). The NCHM is set out with a solid infrastructure to provide guidelines to active collecting policy, detailed documentation of objects and pro-active restoration and preservation of materials in their collections. The museum houses large collections of historical documents and paper based items such as works of art and paper patterns. It is currently divided into four major departments. These are Administration Liaison, Auxiliary Services, Collections Management and Professional Services.

The museum boasts of various public facilities, visitors can park inside the premises where the parking is safe and pedestrians can walk to and from the museum in a controlled environment. Wheel chairs and prams have easy access to the building and public facilities such as the exhibition areas, multi –functional space, toilets, the restaurant, museum shop and conference room. An outdoor amphitheatre is located near the entrance of the building set in the garden outside, and children can be entertained in the garden. An internet café is available and visitors can also use the fax facility. The museum has a shop that sells copies of originals in the museum collection, that are easy to carry either by hand or in a travel bag, and it is open during museum visiting hours.

Ethnographic Background of Pretoria

Pretoria is the administrative capital of the Republic of South Africa. The climate in general is moderate with day temperatures ranging from 15 – 30 degrees Celsius in summer and 6- 23 degree Celsius in winter. Evidence has shown that homo–sapiens, modern man, and his predecessors had lived in the area of the present city since the latter part of early Stone –age. Although the jacaranda tree is not indigenous to South Africa, it has become synonymous with Pretoria so that the city is often referred to as the Jacaranda City. Pretoria was founded on 16th November 1855; the population based on the 1992 census is 849,230 the municipal geographical area is 632 sq. km.

Similarities and Differences between NCHM and KNUSTM

The researcher studied the similarities and differences in the scope and activities of the NCHM and the KNUST Museum. This was to help improve the KNUST Museum and elevate it to a world class standard. The areas in museum practices covered by the research are Mode of collection, Maintenance techniques, Restoration and Preservation, the staff, Daily itinerary (programs), Structure (set-up), and Resources (funds)

In the KNUST Museum the following problems were identified:

1. Short fall in the scope of activities - educational, entertainment, exhibition, research among others.

2. Unqualified and limited staff such as curators, archeologists, research team, collection managers, educators, restorers, museum technicians among other museum professionals.

3. Poor documentations and labeling of collections;   manual and computerized (ICT).

4. Inadequate collections.

5. Inappropriate showcases and mode of display.

6. No storage facility.

7. Inadequate funds.

The standard, scope and activities of the KNUST Museum are found to be below the standards of ICOM because there are no scheduled programs for the year's activities; the museum does not have an outline of activities to keep it running   workshops, organizing conferences, and programs for educational institutions, and exchange programs

It was realized that the museum lacked qualified staff such as curators for the various art disciplines like ceramics and sculpture, textiles, photographs and metals; archeologists for excavations and archeological finds research team who can conduct research on collections donated, lent and acquired by the museum for documentation and display purposes. Managers for collections have also not been engaged at the museum. The KNUST Museum does not have an educator to organize programs for schools to visit the museum, workshops and seminars to fit into the curriculum of educational institutions. The museum lacks restorers; these are professionals who restore damaged collections in museum for them to be preserved for exhibition or storage. The museum does not have technicians, who set–up exhibition halls, fix lighting to suit themes of display.

Records on the collections in the museum was not accurate, thus accessioning was wrongly done and in some cases not done at all. Collections in the showcases and inventory records were wrongly labeled thus made tracking of collections difficult to locate. The collections at the KNUST Museum do not befit its status as the biggest museum in Ghana and belonging to a prestigious University. The collections are not enough for display in the exhibition area, thus the museum looks virtually bare. It was also observed that the museum is not into active collecting, and even a larger part of its collections are lent to it.

The showcases were infected by wood borers thus had adverse effects on the collections in the showcases. The researcher identified wrong mode of display in the museum's exhibition area and bad lighting effects. The museum lacked themes for display and this made it very difficult for visitors to the museum to understand the reason and vision of the museums exhibited collections. Storage facilities at the KNUST Museum were identified as a big challenge. There are no shelves for storing (maps, photographs, and letters, etc.). Wooden art works were stored alongside brass and bronze, leather and textiles and it created a lot of problems in terms of preservation. Due to the wrong storage grouping patina formed on some of the metal collections and wood sculptures and some were out of use for display due to the bad state of some of the collections.

Inadequate funding for the KNUST Museum was realized to be a major problem. It is operated by the resources made available to it by the university, thus a lot of items needed for the running of the museum had to be channeled through an acquisition process. The needs of the museum seemed to be remotely controlled by a chain of administrators who do not appreciate the importance of a museum on the university campus.

Statement of the Problem

The KNUST Museum which was established by the university to promote excellent academic work and to project the university as an institution which is aspiring to be a centre of excellence is not fulfilling its purposes because it has no documented policies and there are shortfalls in its mode of operation and its scope and activities.

Therefore it is important to study a world class standard museum and compare it with the KNUST Museum in order to bring out the shortfalls and suggest ways of raising it to a world class standard.

Objective

The objective of this study is:

To study and compare the policies, mode of operations and the scope and activities of the National Cultural History Museum, in Pretoria with that of KNUST Museum in Kumasi.

Hypothesis

The study of the National Cultural History Museum's scope and activities may help elevate the KNUST Museum to a world class standard, if its policies, mode of operations, scope and activities are adopted by the KNUST upon recommendations made in this research.

Scope of Study

The study was limited to comparison of the policies, mode of operations, scope and activities of the KNUST Museum and the National Cultural History Museum.

- The National Cultural History Museum, is located in Pretoria, South Africa and the KNUST Museum is located in Kumasi, Ghana.

Importance of Research

The research will benefit researchers in African art could use it as a source of reference, students studying museology and African studies could use it as a source for academic research. Anthropologists, ethnologists, archaeologists could use it for data collection. Tourists, scientists, collectors, curators, artists, historians may have access to information on collections and history associated with collections at the KNUST Museum.

KNUSTM, museums in the sub-region will benefit from the research, since NCHM will serve as a role model.

Research Methodology

The study employed qualitative research approach (case study, descriptive and historical)

Statement of Assumption

The researcher assumes that if the recommendations of the research are adopted by KNUSTM will help elevate the KNUST Museum to a world class standard.

Organisation of the Thesis

The thesis is divided into six chapters; Chapter 1 – 4 serves as introductory chapters. The comparative study is presented in Chapter 5. The findings, conclusions and recommendations are in Chapter 6.

Chapter 1 has presented the history nature and scope of the research.

Chapter 2 examines existing literature related to world class standards for museums.

Chapter 3 is a presentation of the research methodology.

Chapter 4 gives background information on the extracts of the vision and mission statements of KNUST Museum and NCHM, the policies, mode of collection, documenting, accessioning, collections management, restoration, preservation and conservation.

Chapter 5 provides a comparative study of KNUST and NCHM in order to underscore the rationale for the research.

Finally the findings conclusions and recommendations are presented in **Chapter 6**.

Definition of Terms

Museum – The etymology relating to the word museum is that it is a Greek word and was developed out of the word 'mousei'. It is believed that 'muse' is the propelling force or enthusiasm and determination that drive artists, poets, musicians among others to create something artistic. It is also documented that one of the nine Greek and Roman goddesses who was in-charge of collections of a particular art and sciences was also called 'muse', the word then came into existence to describe a building where many valuables and important objects are kept so that people can go and see them and know about the various works of collections. Museums are categorized into science, folk art, history, and many more.

Curator - A curator is a professional trained to acquire specific collections for a museum, such as wood sculpture, textiles, metals, paintings among others. A curator in a museum also looks after the collections to make sure the objects stay in the condition they are collected and makes suggestions for restoration to be done as and when necessary.

Collections - Collections in a museum are objects acquired, bequeathed or lent to a museum. The objects could be displayed in the exhibition area or kept in storage.

Collections Management - The procedure of documentation of museum collections, which facilitates the tracking of collections either by manual or electronic means.

Restoration - The process of putting something such as a piece of art or collections in a museum back to its original condition so that it looks cleaner and better examples are ceramic pieces, pictures, sculpture among others.

Preservation- Preservation is the process of working in a museum to protect collections so that it is not damaged or destroyed, and it is achieved by delaying the natural laws of deterioration.

Documenting - The process of record taking on museum collections during the entering process to storage, it is considered as official information on every particular object.

Conservation - The protection of objects of historical importance in museums.

Accessioning - Information or data collected on an object in a museum.

Cataloguing -A process of listing and grouping collections in a museum for data purposes.

Code   -   A set of numbers, letters or color that gives information on collections in a museum, for example by showing what it is, when it was made and the type of collection such as textiles, metals or ceramics among others.

Ethnography - The study and description of different human societies for documentation and research purposes.

Repository - A place where large quantities of valuables are stored and kept safe for information and knowledge.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

INTRODUCTION

Museums are the window to the natural and cultural heritage of a country. Museums range from geology, history, biological sciences, arts, mining, agriculture, culture, forestry and many other disciplines. Museum is a Latin word, derived from the Greek 'mouseion', which originally means a temple dedicated to the nine muses. Not until the Renaissance period, was the term applied to a collection of objects of beauty and worth. Museums are institutions, housing collected objects of artistic, historic or scientific interest, conserved and displayed for the edification, education and enjoyment of the public.

Standards for documentation in museums

According to Heal (2007) it is stated that museums are the life blood of a nation, and they are the major forms for a people's heritage to be preserved and conserved for posterity. Most of the world class museums have a criterion to meet and thus excellence is the yardstick. The mode of acquisitions, documenting, collections management, and storage, among others are governed by laid down procedures. Exhibitions, display of collections, educational programs, seminars, symposia, workshops and conferences of museums should conform to the standards of ICOM. In the Handbook of Standards (ICOM), it is stressed that there is the need for all museums to have well documented policies, and well coordinated mode of operations, scope and activities based on ICOM standards to be rated a world class standard museum.

Portes (1993, p 21) encourages museums to update their inventories and to fulfill their common missions; to implement standard professional practices in response to the major concern of ICOM. Museum institutions involve numerous activities such as research and

organizing exhibitions. It is only possible to carry out these activities in a worthwhile way. The possibility of exchanging information on museum collections and their documentation is therefore absolutely vital for the development of museums. They are to satisfy two main concerns: a). Protecting cultural heritage and b). Exchanging information. It's therefore imperative to standardize inventories in museums.

The report on the Ghana's Workshop on "Conservation, Repose, Exchanges of the Heritage within and outside Africa" and "Museums and Research", stressed the urgent need for systematic standardized inventories for collections in museums. Inventories should serve as the basis for the computerization of museographic documentation. According to Romdhane (1991, p67) lack of inventories, temporary exhibitions, activities relating to research and collecting as well as documenting have inhibited the development of most museums in Africa. Lack of communication among museums in Africa and the rest of the world is also a major problem. Moreover the causes of deterioration and disappearance of objects in museums due to extreme climatic conditions as well as a lack of specialized personnel were discussed. In order to remedy these lapses, participants at the workshop consequently proposed recommendations, programs and projects. They stressed that museums should protect their locality by documenting, producing systematic inventories and developing activities in the areas of research, collecting, exhibitions, educational programs among others, by facilitating the exchange of information on collections and sharing of professional practices.

Holm (1998, p32)The standards of International Council of Museums(ICOM) are meant to develop museums to: a). facilitate collections management in museums; and b). ensure the security of objects by documentation of collections. These measures permit the easy identification of each object or specimen. The standards of ICOM facilitate the exchange between museums and development of common projects (research, exhibitions and

training). These could be achieved by the preparation of computerized inventories and documentation of collections by a standardized and rigorous organization of information.

Museums catalogue their collection in order to manage, conserve and exploit them. This consists of creating a group of documentation records (manual or computerized) of the objects in the museum. The international standards consist of a list of fields (distinct type of information on an object or collection).

Portes (1993, p43) suggests that selected fields in the area of collections should be grouped according to their customary use in museums.

1. **Object management:** groups data necessary for the identification of the collections, their inventory (registering) their localization and their control.

2. **Object description**: It is a detailed physical identification of the object.

3. **History of the object**: It groups all the information to enable the object to be placed in its socio-cultural, geographical and chronological context.

4. **Documentation:** It contains the references to the bibliographic or other sources, contributing to a greater knowledge of the object.

Based on these categories Portes (1993, p45) suggests it is best for museums to employ the same terms to designate the same type of objects, hence the usefulness of creating a standard vocabulary based on the terminology commonly used by museum experts. A museum today can justify its status and ensure its conservation, security and the cataloguing of information by documenting the objects in its possession to be able to exploit it in its activities (research, educational programs, etc). For the humanities, documentations on collections in museums must consider the following fields:

I	Country	Vi	Image
ii	Institution where object is located	Vii	Object name
Iii	Owner / Institution name	Viii	Material
Iv	Accession number	ix	Dimensions
v	Acquisition or accession method	x	Physical description
VI	Acquisition or accession date	XII	Condition

For the natural sciences, documentations on collections in museums must consider the following fields:

I	Country	VII	Specimen form
II	Institution where object is located	VIII	Body part
III	Institution/ Owner	IX	Classified name
IV	Acquisition or accession method	X	Dimensions
V	Acquisition or accession date	XI	Physical description
VI	Image	X11	Condition

In world-class standard museums, a catalogue on collections comprise all the fields outlined above to make documentation complete. Depending on the size of the museum collections and if the collections are previously existing collections or new acquisitions, the standards can be adopted in different ways. For previously existing collections it is necessary to adopt the ICOM standards. The information registered on the former records will be transferred to the new records in the proper field. This work of adapting the former records will also permit an updating of the information and its integration in the global organizational policy of the museum through a unified and structured classification.

For new collections it is important that each object or group of objects acquired should have information on the object/objects documented to guarantee its security. This enables

control and identification, and engages responsibility of the museum by making the acquisition legal and official. This is inventory data or documentation. Bakwill(1993,p64)states emphatically that even newly acquired object must be given an inventory number which will be placed on the object itself, Bakwill(1993, p65) further on emphasizes that one or several images (pictures) of the object must be made available. Afterwards the documentation can be developed according to the fields retained and existing information. Bakwill(1993, p66) again states that ideally for previous, as well as for new collections, the documentary analysis should therefore be filled as soon as the object enters the museum; those which require preliminary study could be completed in a second phase. Each record must be written and controlled by one person only, preferably a specialist in documentation.

In the area of computerization of collection documents, it is the desire of ICOM to advise museums to use the computer system for collection documentation. According to Edward (1995, p21) the main elements of a computer based documentation system include:

1. A software package, used to process information about the collection

2. A database made up of records about the collection, corresponding to the manual records held by the museum and compatible with the standard defined by ICOM.

3. One or more computers, printers etc. and which are linked together.

The objective of computer based documentation, as well explained by Heal (2007, p14) is as follows:

It supports an archive of the collection in a form that can be readily maintained and developed. It also supports the management of collection in a museum, by maintaining current and historic information about ownership, location, valuation, condition, etc., of an object. The computer based documentation supports the security of the collection, by maintaining duplicate copies of information and enabling information to be made to

researchers, students, tourists and the general public. It also provides easy access to information about collections in publications, periodicals etc.

The most important factor in computerization of information on collections in a museum is the enabling platform for which information is transferred from one museum to another and external organizations .The management of computerization, in organizational terms, is important to make a clear distinction between the management of the information in the computer system itself. The information should be the responsibility of a member of the curatorial staff such as a collection specialist or documentation specialist. In contrast David Dean (1996, p 43) suggests that the computer system should be the responsibility of someone with computer expertise. The system is likely to be used for many functions other than collection documentation, such as word processing, financial and personnel management, the preparation of reports and publications, among others. In museums with limited resources, both these sets of skills may be held by the same person, but it is important to remember the distinct aspects of the computers usage. Depending on the needs and resources of a museum, a suitable computer configuration could range from a single user installation to a complex museum –wide net work.

A single user facility includes a personal computer with a processor, memory, screen and keyboard, together with a printer and software. A multi–user facility includes one or more central computers (servers) and a series of work stations linked together by a network of cables which can be within a single building or between buildings. At this point the museum is likely to need internal computer expertise, either through an existing member of staff, building up computer skills or by employing or contracting a computer specialist. This method has the advantage that users can search across all the information and consistent standards can be applied to the information. It is recommended by ICOM and stated by Harris (1983, p88) that high performance software for documentation purposes should have a number of features such as one or more screens for data entry, editing, and searching. The software should also have a data structure which stores

information on collections and outputting information on the screen of the computer as well as printed reports.

Heywood (2001, p93) emphasizes the need for each museum to have well documented and establish clear policies on collections and its management that conform with ICOM standards. Although information on the collections of each museum should be made available to the greatest extent possible, both to museum professionals and the general public, certain fields of information could be designated as strictly confidential or even have several levels of access to information (general public, researchers, other museums, museum staff, among others). The standard ICOM code system pertains to the different types of collections identified by color:

1. Grey color for Natural Science collections.

2. Blue for Humanities collections

3. Blue and Grey for both Humanities and Natural Science collections.

Potter (2007,pg 66)states ICOM standard for documentation on humanities and it is tabulated as follows:

Object Management

I	Country of Origin.	V	Acquisition or Accession method
II	Institution where the object is located	VI	Acquisition /accession date.
III	Owner /Institution name.	VII	Acquisition source
IV	Accession number	VIII	Permanent location of object.

Object Description

I	Image of Object.	VIII	.Material
II	Object category by form or function	IX	Technique
III	Object category by production technique	X	Dimensions
IV	Object name.	XI	Physical description
V	Local name.	XII	Content
VI	Name in another language (preferably in French and German)	XIII	Inscription
VII	Title	XIV	Condition

History of the Object

   I.   Producer

  II.   Place of production

 III.   Group of production

 IV.   Period of production

  V.   Date of production

Use

     i.   Function

    ii.   Use

   iii.   User

   iv.   Place of use

    v.   Group of use

   vi.   Date of use

Collection

I	Collection or excavation (locality)	VIII	Group from which the object was collected
II	Geographical site	IX	Collector
III	Coordination of the object within the site	X	Expedition
IV	Site reference or name	XI	Collection or excavation date
V	Age	XII	Collection or excavation method
VI	Geological period of the feature from which the object was collected.	XIII	Collection field number
VII	Environmental details	XIV	Historical comments

List of fields for collections of Natural Science:

Object Management

I	Country	V	Acquisition or accession method
II	Institution where object is located	VI	Acquisition or accession date
III	Owner / Institution name	VII	Acquisition source
IV	Accession number	VIII	Permanent location of object

Object Description

I	Image	VIII	Local name
II	Type of Specimen	IX	Name in another language
III	Body part	X	Title
IV	Sex	XI	Dimensions
V	Age or phase	XII	Physical description

| VI | Classified name | XIII | Condition |
| VII | Common name | | |

History of the Object

I	Collection or excavation locality	IX	Group from which the object was collected
II	Geographical site	X	Collector
III	Coordination of the object within the site	XI	Expedition
IV	Site reference name	XII	Collection or excavation date
V	The type of site	XIII	Collection or excavation method
VI	Age	XIV	Collection field number
VII	Geographical period of the feature from which the object was collected	XI	Historical comments
VIII	Environmental details		

Object Management

As stated by Potter (2007, pg69) fields allow museum experts to specify the status and location of an object.

Country:

- The name of the country where the object is located

- The institution where the object is located, the full name has to be entered and not the abbreviation.

- Name of the owner of object

Accession Number:

The unique identification number of the object or specimen assigned by the owner and marked on or attached to the object or specimen.

Acquisition or Accession Date:

The date of acquisition or the date of accession of the object within the institution in the form of year / month /day should be recorded.

Acquisition or Accession Method:

The method by which the object entered the museum: whether as a permanent acquisition, or as a long term loan.

Acquisition Source:

The name of the previous owner (person or institution), or from whom the object was acquired. In the case of a person, include a family name (serving to establish alphabetical classification in accordance with cultural traditions), followed by one or more given names. In the case of an institution, enter the complete name not an abbreviation.

Permanent Location of Object:

The precise location of an object inside and outside the museum, and it is normally located: on a shelf in a storeroom, or a showroom within a gallery. To facilitate research, documentation of information on an object, is done in a sequence, from a general designation to the specific.

Roles of Museums

A French anthropologist, Ganepp (1982, p32) asserts that the transmission of a people's culture is an aspect of education which is preserved through the ages, and museums are repositories for keeping documents and objects as regards to a people's culture and heritage. These concepts re-evaluate and redefine the notions of what role museums play in the educational research and for pleasure purposes. Museums impart knowledge, be it educational or for pleasure, to present –day generation and for posterity, who may lack knowledge about cultural values of its predecessors. Museums for recreation is a confirming statement, at the moment museums seem to be the darlings of the cultural miles, since they come into contact with the public.

Craig (1976, p35) states that in the desire to make museum visits fun, interactive and accessible, the integral aspect is the location of the museum. The location of the KNUST Museum is ideal for all the requirements for a good located museum. Documents of objects/collections in museums permit the retrieval of information concerning the object (bibliography on the object or linked to the object, photographs, audiovisuals document, field note book, conservation files among others). Each museum should organize its documentation according to its needs, but references for its documentation should be standardized to facilitate research.

According to Harries (2008, p86) the importance of activities of museums should be emphasized. The book cited the need for research work in museums to be intensified, because without research very few of the other activities of museums can be brought to fruition and this also stated in the NCHM's memo (2003, p6), academic disciplines in which research is undertaken in museums include: History, Cultural history, Anthropology, Archeology, History of art, Numismatics, Philately.

Although research is discipline oriented, in the various research departments, it is wide-ranging; these include subjects such as photography, textiles, ceramics, glass, silver among others. Research and the activities related to the collection in museums, provide impetus to stay abreast with new local and international developments in museum industry.

Formal exhibitions are probably one of the most familiar features of a museum. Another form of exhibition that has proved to be popular is temporary exhibitions. Museum's events serve to highlight the objectives of its set-up. The head curator of NCHM states in their annual report (2007, p15) that collection policies adopted by the museums require not only the acquisition of the object but also documentation of objects (collections). Further more he stressed categorically and emphatically on the commitment to have a comprehensive documentation that has often been significant in the interpretation and re-

construction of a variety of settings. Most museums collections are donated, but field trips remain a very important way of adding to the museums collections. Periodically important cultural objects have to be purchased. Although formal exhibitions are probably one of the most familiar features of a museum yet there is a shift in emphasis away from row upon row of formal exhibition.

The education of the youth has always been one of the priorities of museums; most world-class standard museums enthusiastically embark on youth education programs. Another facet of the youth programs or regular courses is most of the time fully subscribed. Holiday courses have developed to include a wide variety of activities and are structured around the play and learn concept. Special courses for toddlers at some museums have been instant success and have been a regular fixture. The education department at NCHM has recently embarked on a project to promote the services and facilities at the museum to the community. Guided tours for primary and high schools are acknowledged, and had been highly patronized and this demonstrates the museums activities, and has since developed into regular visits. Formal lectures and illustrated talks to the public or at technical meetings are also part of the duties of the education department.

Wistinghausen (2008, p75) emphasizes the need for museums to be human-oriented in all its activities, as a public institution, the perseverance of peoples cultural heritage is entrusted to museums. Its continued existence though depends greatly on the goodwill and cooperation of the country that it serves. Museums involvement in festivities goes a long way to showcase what the museum has to offer the public and the community in which they are situated. The head curator of NCHM is of the view that, the museum's participation in national festivities by way of special exhibitions, lectures, publications and organized festivities at its satellite museums had indeed exemplified NCHM's involvement in the community.

Types of Museums

(Culled from The international African Institute Journal,1995,p18)

Cultural history museum: collections related to the history of a people's culture. Natural history museum: natural world collection, specimen of birds, mammals, insects, fossils, rocks, bones, minerals, etc. Natural science museum: zoological, wildlife, conservation and sanctuaries. Science and Technology museums: developed and applied scientific ideas and instrumented objects (inventions and machines). Specialized museums: open-air, botanical gardens, Military museums, Forts and Castles. Art museum: art aesthetics such as paintings, sculpture, decorative art, and examples are gallery works. Ethnographic museum: collections related to ethnic groups. Historical museums: collections that have sequential and chronological history, an example is the gun of The Pitt Rivers museum.Temples and Palace museums: Manhyia , Shaolin and Buddhists. Monuments: Kwame Nkrumah mausoleum

In recent times, museums have developed into multi-dimensional organizations, displaying, preserving and collecting objects which are of increasing interest to the global community. They have adapted to a consumer oriented world and now compete for our attention with other 'leisure time' activities. People are the only reason for museums to exist, it may appear simplistic and obvious, but that fact is sometimes overlooked in the day–to–day process of operations in museums. Everything museological revolves around the human race. According to Dean (1994, p33) museums are an understanding of human learning or at least the basis for educated guessing and it is useful for developing exhibitions that serve audience needs. Dean's favorite statement in his book is, "know your audience and market accordingly". This statement might well be the watchword of museums today, though some might not view it in material and commercial terms.

Gannep (1982, p41) states that human beings have managed to amass some information about how we function physically, physiological and emotionally. Museum planners

should therefore attract and hold an audience by providing meaningful experiences. Much of the knowledge now available to museums flows naturally from the art and science for education. They also derive many of their understanding from the fields of medicine and psychology. It is therefore reasonable to apply such knowledge to museums because they are the core, educational experiences that have proven to be of great help to museum exhibitors. Often such information assists in explaining observed, but puzzling human behaviours in museums (i.e., the need to touch some objects on display)

Edson (1994, p38) emphasizes the need of addressing exhibitions to suit target audiences. Museums should always be open to identifying and attracting new audiences, especially those beyond their existing visitorship. Awareness of community attitudes and expectations should be an ongoing process. Museum staff needs to evaluate its visitor attendance periodically. Edson (1994, p41) states that self examination to decide upon future audience development is a healthy process for museums. It is through careful study that responsible decisions about committing precious museum resources to reaching any new group are made.

Museums are, or should be, one of the most democratic of institutions within any society, showing no preference or prejudice toward anyone and serving the good of all. However, it is imperative to make practical judgments about the allocation of limited resources, therefore using objective criteria and recognizing the possibility of classifying people. Heywood (2008, p90) discloses that what a person sees, feels, hears, touches, smells or tastes has an effect on their worldview, even if those influences are subconscious, they have very real effects on conscious thoughts. Gray (2001, p17) observes that one's worldview forms the filter through which incoming information is evaluated (value judgment); anticipated (pre-judgments and prejudices); and interpreted (processed for meaning)

Every visitor enters a museum with a personalized set of preconceived data and expectations. If what they encounter is unfamiliar or cannot be readily filtered into their worldview, they will be diffident and uncomfortable. Such reactions may effectively close the door on further communication. When visitors are confronted with an object with little interpretation, that is seemingly arbitrarily controversial, or one presented in a scholarly, technical manner most visitors will avoid that particular object and will move on. Recognizable activities (life cycles, everyday functions or objects) and human relationships (family, sibling rivalries, children, home activities, and pets) are the kinds with which people immediately identify and feel comfortable, Stephen (2006, p74). This leads to a great extent recognition, interest, curiosity and subsequently learning. Therefore museums have objects on display which are memories stored as frameworks, patterns and associations. Facts are not remembered as isolated units, when they are fitted into a framework of references, they form lasting impressions.

Benefits of Museums

Museums loan objects to school classrooms; creating a teacher–training course at local colleges and by these means increase the usefulness of museums to the community they serve. Edson (1994, p21) indicates that the measure of museums is not their wealth and collections but the values they disseminate, activities like loaning materials to schools, sponsoring programs for the community among others are the few areas museums could be beneficial to the people they intend to serve.

With tourism invariably linked to museums, communities in which it is situated benefits a great deal and this boosts the country's income, it is therefore no exaggeration to state that museums have a material impact on the life of a people, to whom the museum serves. By recognizing the legitimate perspectives of a people's cultural background, history and heritage, museum exhibitions find an appropriate voice for today's world. The United Kingdom Museums Association's definition was revised in 1998. The crucial first sentence reads: "Museums enable people to explore collections for inspiration, learning

and enjoyment" Heal (2008, p63), states that learning is certainly part of the core purpose for displays and exhibitions in museums. Museum objects communicate information and ideas to a wide audience; in the form of formal and informal learning programs.

CHAPTER THREE

METHODOLOGY

Research design

The researcher used the qualitative research approach to collate information on the two selected museums, the case study method employed examined the two selected museums these are the NCHM, Pretoria, and KNUST Museum. The ethnographic background of Pretoria, some suburbs of Kumasi, and KNUST were derived by the historical research method. By this method the researcher made an effort to get information about the history of museums, and this was largely based on literary sources and the internet.

The researcher collated data by using the historical method which is an aspect of qualitative research approach based on the history of museums. The historical method helped the researcher to assemble, analyze and conclusions were drawn, for the purpose of discovering things that help to extend the future of museums.

Qualitative research assumes that human experience takes its meaning from social, historical, and cultural influences. The researcher gathered data in the form of oral history these were achieved through interviews

The descriptive method also described and interpreted the research findings. This method helped in the researcher's quest to know about what pertains in world class museums, by focusing on prevailing practices and functions at the National Cultural History Museum, Pretoria. The researcher observed, participated, recorded, and analyzed the prevailing conditions in museums at the time of data collection. This involved comparison and contrasting of phenomena and between non-manipulative variables.

The researcher used the evaluation method of research by the application of the research findings on the effectiveness, durability and desirability of museums in terms of the defined objectives or values; to make recommendations for action to improve upon the existing situation at KNUST Museum.

Instruments for data collection

Participation-observation as a method was used, to enable the researcher to participate fully in the activities of the two museums namely NCHM and KNUST Museum. The intention of the researcher was made known to the staff of the two museums and data was recorded by the use of audio tape recorders for interviews and a digital camera was used for photographs. Through the use of this tool, the researcher had the opportunity to witness events, people and things personally at the museums as they occurred in their natural setting and also obtained first-hand information about the two museums.

Instruments for data collection consisted of structured interviews and these were used for data collection. Data was collected through personal interaction between the researcher and the respondent/interviewee. Through this important means, the researcher checked accuracy of impressions gained through observation. The purpose for the interviews was to find out the perceptions of the senior staff members of the museums they were in-charge of, and by these the researcher gained more data. The structured interviews consisted of series of questions designed and structured to elicit specific responses from the respondents. The researcher used the information obtained to compare and contrast answers obtained from the two museums NCHM and KNUST. Advantages in this form of research tool are that the researcher had the opportunity to observe the people interviewed and how they responded to the questions. Some of the questions were repeated and some were further explained to some of the respondents for clarification the researcher also had the opportunity to ask further questions for additional information in the situation where the answers seemed incomplete, or not entirely relevant.

The researcher administered questionnaires and the format used was response-to-key questions, fact and opinions. The response mode was unstructured and scaled; this was done to achieve maximum efficiency and minimum bias data. The questionnaires were

administered by the researcher and were also assisted by others to save time. The questionnaires combined the closed and open question technique, to demand free response from the respondents. The advantages the researcher realized were that, a large number of people were reached for data to be collected as compared to interviews. The questionnaire guaranteed more confidentiality than personal interviews in Pretoria (S. Africa) due to the affirmative action by the black settlers as against the white settlers after the apartheid regime.

Population for the Study:

The target population for research comprised all workers, visitors and directors of the NCHM and KNUST museum.

Accessible Population for the Study:

Senior staff of the KNUSTM and the NCHM

Sampling:

The sample used in this research consists of the following from the two museums: Curators-5, Restorers-2, Conservators-3, Head of janitorial department-1, Visitors-23, totaling 34.

CHAPTER FOUR
PRESENTATION AND DISCUSSION OF FINDINGS

THE STUDY OF NCHM AND KNUSTM

The researcher in this chapter has outlined the mission statements (KNUSTM handbook 2004, p 12) and (NCHM handbook 1890, p66) extracts from policies of the two museums, namely NCHM and KNUST for a comparative study of which the research was intended. This comparison unearthed the major lapses at the KNUST Museum. A policy is the activity preceding a goal to be pursued, making known the formal articulation and declaration of intent. The extracts of the policies that the researcher studied are collection, language, documentation, research, inventory, collections management, storage, library, archive, and financial policies

Museum collections grow through donation, acquisition, expeditions and other field collections, informal collecting, by the staff (such as at second hand stores), and by transfer, exchange gift and permanent loan from other institutions. It is important that a museum should have an active, and not a passive collecting program. Active collecting is determining what the collection ought to contain, in order to do the possible job of presenting the complete story. Passive collecting is sitting back and accepting or rejecting what is offered the museum.

KNUST Museum (ref. fig 1, pg 79 and fig 2, pg 80)

As stated in (KNUSTM handbook, 2004, p5) The KNUST Museum is a multi disciplinary and intercollegiate academic unit with a two tier management structure, i.e. KNUST Museum's board and KNUST Museum Management Committee. The board is responsible for policy formulation and strategic direction for the museum whiles the management committee is in charge of the day to day administration and technical

dimensions. The museum is headed by a director who coordinates the activities of all the sections of the museum. The sections are to be headed by senior assistant curators/ conservator who would be assisted by assistant curators. The sections are art, science and technology, natural history, archeology, education and administration.

KNUST Museum's Vision Statement

As documented in (KNUSTM Handbook 2004, p4) the KNUSTM is a multi-facet leading University museum, pursuing highest standards of museological practice and generating, and preserving and using museum collections in Ghana and Africa to advance and promote knowledge.

KNUST Museum's Mission Statement

The (KNUSTM handbook 2004, p6)KNUST museum collects, preserves, interprets researches and disseminates information about the natural and cultural heritage of the Ashanti region, Ghana and other geographic regions and serves as an educational resource to engender knowledge for diverse audiences.

Core Values of KNUSTM:

The (KNUSTM handbook 2004, p20) KNUSTM's values are to have mutual respect for humanity, active public service, pursuit of excellence in museum practices, cooperation and communication within the community in which it operates , creativity and innovation of ideas for the museum, to achieve academic and intellectual freedom, professional leadership and public accountability.

Policies of KNUSTM

There are no documented policies for KNUST Museum, in the following areas of collection, language, and documentation of collections, research, collections management, and storage, recruitment of staff, library, inventory, archives, and financial policies.

NCHM (ref. Plate 3 pg.81)

Vision, Mission Statements and Policies

As documented (NCHM handbook 1890, p 101) the primary function in terms of the legislation governing Northern Flagship Institution (NFI), the Natural Cultural History Museum must collect and disseminate information relating to South Africa's cultural heritage in particular the cultural heritage in the country's northern regions. Research is fundamental to the performance of this function. It ensures not only that museum products such as exhibition and publications are based on high standards of scholarship but also that the associated collections management process of acquisitions, documentation, conservation, interpretation and use of the collection are equally the subject of well developed research skills.

The head curator for NCHM stated in the museums annual publication(NCHM Journal 2001,vol.3 p2)that, NCHM aims to reach diverse audiences that include the general public, Government, academic and museum communities, special interest groups, the media and sponsors. The interest and needs of these audiences will be met through a variety of programs. These include exhibitions, publications of an academic and popular character, programs and features in the electronic and print, presentations to conferences and seminars, contributions to relevant issues of national interest or concern, particularly those relating to cultural and environmental matters.

NCHM Collection Policy

In the area of collecting (NCHM handbook 1890, p 79) NCHM is to endeavor to acquire collections within its financial budget and logistic resources made available to it by Northern Flagship Institution (NFI). NCHM is to collect, conserve and store collections according to international standards, the focus is essentially on research, educational and

display purposes. The collections should reflect a representative view of all South Africa's heritage. No objects should be accepted if the NCHM cannot provide adequate documentation, storage, and conservation for which the NCHM cannot be satisfactorily accountable.

The NCHM will also exercise due diligence that new acquisitions are done in an ethically responsible manner taking into consideration respecting the laws, customs and values of countries and communities where such objects are acquired and that all international conventions to which South Africa is a signatory are complied with.

All objects donated to and accepted by the NCHM as permanent collections are acquisitioned and are processed in such a way that they become the legal property of NCHM. The NCHM will not accept donations with restrictive conditions placed on them. It may also accept objects which are intended for educational, exhibition and restoration purposes and which do not become part of the permanent collection but for which it is still accountable. The collection policy of NCHM states that all objects shall have permanency in the collections of the museum as long as they retain physical, integrity, identity and authenticity. All records on the collections should be permanently retained in the archives of NCHM.

NCHM Language Policy

All correspondence and documentation concerning the collection (NCHM handbook 1890, p54) should be conducted in English, the official language to replace Afrikaans language.

NCHM Documentation Policy

This policy is to ensure that a record of information on every object in NCHM's collection is documented (revised NCHM handbook 1960, p43) by accessioning, registering and cataloguing to meet international standards of ICOM. The museum's documentation on an object should cover the primary information; describing and

identifying the objects in the collections. Documenting makes provision for access to collection management documentation in areas of loans, conservation, acquisition, information among others. Documenting of information based on the assessment and research into an object and its contexts. The documentation should also cover the classification and placement of an object within a systematic arrangement, based on its physical characteristics, origin or function, among others. Taxonomy should be used to classify objects in the museum. The museum's policy is to establish and maintain a documentation system which will allow the museum to manage track and audit its collections. The system must ensure that the museum gains ownership of its collections and keeps track of the utilization of its objects.

NCHM Research Policy

The purpose of this policy is to provide the framework within which an active and on going research program may be continued and for further development (NCHM handbook 1890, p82). The NCHM's most precious resources consist of its research and creative capabilities. The purpose of this handbook is to lay down in one reference, the policies and procedures relating to research. It is important for all relevant staff members to be aware of the contents of this handbook and to ensure the timely management of their projects and proposals, and to allow the NCHM management to efficiently coordinate its commitments and resources.

 The general objective of the museum's research policy is to support the delivery of programs of this kind, which disseminate the results of its research. The aims of the policy are to: Establish the museum as a centre for scholarship, link the museum closely with educational and heritage institutions and to provide a national database of information relating to aspects of South Africa's cultural heritage. The NCHM research policy is to develop innovative approaches to the study of cultural heritage, its conservation and use. The research policy will lead to publication and other forms of

dissemination of the results of staff research, which contribute to a wider understanding and appreciation of South African cultural history and contemporary society. The aim of the policy is to make provision for the development and management of internal research related database of museum objects, written and audiovisual information as well as provision for the development of research programs.

Research at the NCHM should lead to the creation, conservation and management of database containing raw (unprocessed) research material (photos, photocopies, maps, diagrams, articles, reports among others), which will be used for exhibitions, publications, education programs and other more tangible deliverables. The museum's field of study is designated by its legislation as South Africa's cultural heritage. This covers subject areas in the field of the humanities. The general field of research in the museum is the tangible and intangible cultural heritage of South Africa's peoples (in particular in the northern regions of the country).

NCHM Inventory Policy

NCHM by this policy is to observe a scheduled program to check the locality of every object in the collection and preparing and maintaining an active guide to its physical location of an object in the museum (revised NCHM handbook 1960, p 75). This is to be achieved by processing, manipulating and organizing data in a way that adds to the knowledge of the person receiving it.

NCHM Collection Management Policy

The (NCHM handbook 1890, p.37) NCHM is the legal custodian of about six million objects and their associated information, records of tangible and intangible heritage and collections. The collection constitutes a reasonable expression of South African cultural heritage. It is clear the S/A Cultural Institutions Act states (Act no. 119, 1998) that the collection, preparation, curation and management of the various heritage assets under the control of the NCHM constitute its core responsibility. For this reason proper practices

for aspects of collections management such as acquisitioning, inventorying, auditing, loan management, conservation and usage of its collections should be in accordance with the policies of International Council of Museums (ICOM). The duty of NCHM is to take responsibility for and to control objects in its collections, by meeting basic documentation requirements such as an accession register, and a formal inventory which is an overall process of maintaining and managing the collections.

NCHM Storage Policy

The policy on storage in NCHM comprises the method of storage and its procedures. The head of stores is to ensure every item received at the stores should have a label attached stating the name, usage, method of acquisition and date and this has to be registered in the stores record book. Collections entering and leaving the stores should sign in and out by the approval of the authorized person. Storage areas should be cleaned routinely and thoroughly, at least every 6 months. The storage area should be checked for signs of pest infestations at least once a month. Collections should be checked for moulds, stains and signs of insect grazing at least once a month. Collections in storage should be cleaned annually, if possible at least once every three years. Windowsill should be checked, bookcases and radiators and the inside of boxes and drawers for signs of insect activity such as dead insect bodies, frass, insect egg cases because some insects feed on the bodies of other insects. There should be a lookout for rodents (dead or alive) and their droppings. Insect debris should be cleaned, because pests are attracted by debris from human and other animal activities. Trash should be evacuated daily from the museum, used packaging material should be removed from the building as soon as possible, and this should form an integral part of the museum's staff routine duty. Museum collections can be threatened by a variety of pest that damage organic and inorganic materials, if infestation does occur, treatment must be for the specific species and for the type of material infested.

NCHM Library Policy The NCHM museum (Revised NCHM handbook 1960 p71) shall maintain a specialist library, the contents of which reflect its themes. The NCHM library's prime function is to offer a bibliographic support service to its own staff with regard to these themes. It will also offer this service to colleagues from other institutions and members of the public without allowing this to interfere with its prime function.

NCHM Archive Policy

This policy (Revised NCHM handbook 1960, p 85) covers both current and archival museum records. The museum's policy concerning current records is that all original documents must be taken up into the filing system, and filed centrally at the registration system. Closed files are kept in the registration section for three years before being transferred to the museum archives. Files may be consulted and borrowed by staff if cleared and noted by the registration clerk. External request for use of current records must be cleared by the director or the relevant official with delegated authority.

NCHM Financial Policy

NCHM financial policy states (Revised NCHM handbook 1960, p 112) that fees are payable by the public for the use of NCHM museum objects, photographs, slides and facilities. The NCHM charges for the use of NCHM and its sites in films and videos, the use of NCHM photographs, slides, paintings, drawings, and other objects in films, videos, books, covers, posters, and other commercial products (in other words, in for profit projects), historic photographic material produced by the museum staff and collections lent to other institutions. The fees are structured under various categories, these are: Royalties, use of museum, individual images of its collections in publications, films and out- going collections on loan.

The researcher after studying the vision and mission statements as well as policies of KNUST Museum and NCHM, Pretoria, the policies, scope and activities as well as the mode of operations of both museums were compared to unearth the shortfalls of the

KNUST Museum. In the cause of the research, the researcher interviewed directors, curators, restorers, conservators, head of janitorial department etc. in order to come out with findings

KNUST'S Policy
The KNUST Museum has no policies on the recruitment of staff, funding, collection, documentation, research, inventory, collections management, storage, library, archive and financial policy this was made known to the researcher by the Head Curator Mrs. Sarpong of KNUSTM.

NCHM'S policies

The documented policies of NCHM in the area of recruitment of staff, collections, documentation, research, inventory, collections management, storage, library, archive and financial policy were made available to the researcher by the Director Ms. Neo Maleo of NCHM .

Scope and Activities

KNUSTM'S Staff

The KNUST Museum does not have qualified or trained staff for its operations as done in world-class standard museums. There are no curators to take care of objects in the various disciplines of its collections. There are no educators, no documentation staff, restorers, museum technicians, conservators, photographers, preservation experts and janitorial staff but rather the museum relies on National Service Personnel who are posted on the request to the museum. This practice of using service personnel has partially accounted for the museum not being able to operate effectively. Although recruitment of staff for the museum has been stated in the museum's mission statement yet nothing has been done about it. Due to the absence of the above mentioned staff, the museum has lost the image that befits University museums.

NCMH'S staff
The staff structure of NCHM is well laid out, and this encourages the smooth–run of the museum. The museum is headed by a Director, to whom the Head Curator reports

directly, the Head Curator who is an archaeologist is assisted by curators for textiles, wood, sculpture, metal, photographs and painting, and the Curators are assisted by Conservators and Restorers. The Head of Collections Management reports directly to the Director, and is assisted by registrars, documenting staff, library staff, stores manager, security and janitorial staff. The well structured staff at NCHM makes the contents of its mission statement meaningful.

Funding

KNUSTM'S Funding

The researcher found out that the KNUST Museum has no financial policy thus apart from the subvention from the central government the museum has not got any other source of income. And has no measures in place to generate income internally, as done in NCHM and other world class standard museums.

NCHM'S Funding

The financial policy of NCHM makes it possible for a meaningful budget to be made; internal funding is released if it has been budgeted for within the year, by the Financial Controller, with the approval of the Director of NCHM. External funding is most times solicited and unsolicited, by the use of internet based resources, reference manuals, annual reports, regular publications (example, Government Gazette), brochures and personal contacts by museum staff. Unsolicited funding takes the form of rendering external consultancy services (usually upon request), provided the researcher and the NCHM derive benefits. This is usually the accrual of artifacts and information, publicity, display and publishing opportunities.

KNUSTM'S Documentation

The research through observation-participation improper documentation at the KNUSTM is attributed to the absence of documentation policy, thus there is no guide line for its documentations on the museum's collection. The head curator of KNUSTM could not give the researcher any well documented register of objects in the museums

possession, thus proved the researcher's point of the museum's improper documentation practices. The list of objects on the museum's inventory report was wrongly done; objects documented to be in a particular showcase could not be located. There is no database developed for the KNUST Museum for its collection, this day and age, where ICT is the tool used to capture data in most world-class museums.

NCHM'S Documentation

The NCHM museum, as found out by the researcher through observation, has a policy on the documentation of its collections thus serves as a guide for the documenting staff and this conforms to the international standards of ICOM. The documentation on the museum's collection starts as soon as an object enters the museum through acquisition, long and short term loans, and bequeathed means and it is the sum total information about specimens and of artifacts in the museum's collection. Registering is the first step in processing an object, accessioning is then done, followed by cataloguing which is the compilation and maintenance of primary information describing, formally identifying objects in its collections. Classification is then done for identification and placement of the object within a systematic arrangement whiles in storage and this is based on its origin or function and material of which it is made.

Collections Management at KNUSTM

The researcher observed that collections at KNUSTM are not managed properly at the museum since there is no policy to serve as a guide. The overall process of documenting, maintaining, and tracking of objects both in and out of the collections in the KNUST Museum is in a total chaotic state. The collections were in very bad state due to poor storage facilities, some showed signs of deterioration, whiles some of the museums lent collections were on exhibition at the College of Art and Social Sciences gallery.

Collections Management at NCHM

The Head curator, Anna Bossman made it known to researcher that collections Management at NCHM is bound by the museum's policy on collections management, which is based upon the International standards of ICOM. The policy covers areas of accessioning, registering, and cataloguing. This aspect of museum practice is governed by a policy and this constitute the collection, preparation, curation and the management of the various objects in its collection and it's the core responsibility of the Collections Management Department. The department sees to proper practices in the management of acquisitioning, inventorying, auditing, loan management, conservation, storage and usage of its collections and this conforms to standards set by ICOM and this includes acquisitioning, alienation and use of collections (including the library collection) inventorying and cataloguing language.

By this laid down policy the researcher realized through observatory-participation that the staff at the collections management department of NCHM was in absolute control of objects in its possession, by managing, tracking and auditing its collections and tracks the utilization of its collections. Collections at NCHM are managed in a systematic order thus gains ownership of its collections. Despite a backlog of objects to be accessioned due to the change in cataloguing language, from Afrikaans to English language the collections management staff seem to be in control of their job.

KNUST'S mode of Display

The KNUST Museum has no policy on how displays, permanent and temporary exhibitions are to be carried out. The researcher is of the view through active participation at KNUSTM that the displays e at the old KNUST museum was done, without any theme. Through interviews conducted by the researcher it was realized that displays that had no themes as practiced at KNUSTM made it very difficult for visitors to

appreciate and understand the various groupings in showcases and the other displays in the room. Temporary exhibitions are not held by the museum as done at NCHM and other world-class standard museums. Some of showcases had been attacked by woodborers thus had very negative effects on the objects it housed for display.

NCHM'S Mode of Displays (ref. fig. 7, pg. 85)

The researcher studied the policy of NCHM on displays during exhibitions at the museum and outside its premises if need be, which is based on researched themes with confirmed information, and the researcher realised this makes museum visits very interesting to visitors at NCHM. Displays are based on research and established credibility which provides more meaningful experiences in the NCHM's special events, educational programs and the interpretation of festivals and historical incidences. Through the techniques of exhibition design, exhibitions and programs related to theme displays are evaluated, and these meet the required standards of ICOM, that displays in museums should be based on themed and well researched topics.

KNUSTM'S Storage

The researcher whiles conducting this research discovered through participatory-observation that the KNUST Museum has no policy on storage and does not own a storeroom for its collections. Some of the collections are in the University's Registrar's office; some at the College of Art and Social Science's gallery and the rest of the collections are stored at the old museum.

NCHM'S Storage (ref. fig. 12, pg. 89)

The NCHM's storeroom is of a very high standard, and conforms to the standards of ICOM which are the ideal temperature for storerooms should be s 18 degrees Celsius, but this can be too cold for the staff working in the storerooms all day, thus the temperature is increased to 21 degrees Celsius at NCHM, and not higher (since the optimum temperature for insects is between 22 degrees and 30 degrees Celsius). The relative

humidity of 55 degrees is allowed for the storerooms because relative humidity higher than 68 degrees will encourage moulds to thrive on the objects and if it's below 55 degrees objects will become brittle.

As per ICOM standards the stores are cleaned routinely and thoroughly every 6 months, areas are checked for signs of pest once a month, check for moulds on objects is carried out once a month. Objects are inspected for stains and signs of insect grazing, for example in small holes in paper, small piles of dust under wooden objects, loss of hair on leather objects on leather objects among others. The head of stores, Mr. Nkemba of NCHM informed the researcher that it is incumbent on the head janitor to make sure the janitorial staff cleans all objects in the collections annually. Collections in museum stores provide food and breeding places for insects and mould, if not controlled can severely damage, many organic materials.

KNUSTM'S Mode of Collecting

The KNUST Museum has no policy to guide the staff on its mode of collecting objects, thus the museum collects haphazardly. A copy of the museum's inventory register reveals that most of the objects are lent to the museum, and there are just a few bequeathed objects in its collections.   It is quite clear the museum has not been into active collecting and this accounts for the in-adequate collections to fill up the newly built museum. Due to improper contractual agreements on collections, lent objects to the museum were once collected without proper deaccessioning procedures.

NCHM'S Mode of Collecting

There is a well documented policy on how collections in NCHM are acquired as objects into the collections of the museum (NCHM handbook 1890). Objects acquired for the NCHM are relevant to its strategic objectives outlined in its mission statement; this is done in accordance to international standards. NCHM's collections constitute objects and

the data and information associated with them. Copyrights and intellectual property rights with respect to all data and information remains the property of NCHM.

Ownership of data and information generated by external parties on objects made available to NCHM will be negotiated. The museum exercises due diligence in ensuring that new acquisitions are done in an ethically responsible manner taking into consideration and respecting the laws, customs and values of countries and communities where such objects are acquired.

All objects donated to and accepted by NCHM are processed that they become legal property of NCHM. The museum does not accept donations with restrictive conditions. The museum sometimes accepts objects intended for educational and restoration purposes, although it may not be considered a permanent collection, the museum is accountable for it. The policy states that all objects have permanency in the collections of NCHM provided they retain physical, identity, and authenticity. Records on collections are permanently stored in the archives of NCHM. Collections or objects are alienated or disposed provided they become irrelevant to the strategic objectives of NCHM, or have become irredeemably damaged, stolen, destroyed or have been proved not to belong to the museum. Where possible, consent must be obtained from the original benefactor before the object is disposed. The method of disposal used at NCHM; are donations to other museums, sale and destruction, among others. Stolen objects are written out of its holdings after five years, since there is a possibility it could be recovered.

NCHM welcomes exchanges which are formal reciprocal transfers of objects or collections between involving legal transfer of ownership. Exchanges should be mutually beneficial and advanced in the cause of scientific research, educational and exhibition objectives of the NCHM.

Use of data and information on collection for commercial and research purposes is governed by an agreement drawn up by NCHM. Loan–outs transactions are subject to

administrative loan fee and this is reviewed and determined by the Director of NCHM and the Financial Controller. Loans are granted only to approved institutions but in the case of specimens of natural history, recognized authorities who lack an institutional affiliation may be considered. Loans requested from NCHM for research purposes should be made to recognized institutions, provided the following conditions are met; the institution has a recognized professional staff member in appropriate field, the reputation of the professional staff and institution are such as to ensure adequate care of the objects while on loan.

Incoming loans are accepted with the following arrangements: the lender agrees that in the event of loss or damage to its lent property recovery, if any, should be limited to such amount paid by the insurer as per prior written understanding. The lender releases the NCHM and employees from liability for any and all claims arising out of such loss or damage. Objects due for return to its rightful owner should be returned via the same method of shipment as they were sent to NCHM.

KNUSTM's Facilities.

The newly built museum of KNUST which is bigger than the old structure but lacks exhibition halls for temporary exhibitions, and lecture halls where visitors are briefed about the museums exhibitions. The KNUST Museum lacks a cafeteria, where visitors to the museum could spend their leisure time and the University community could patronize the service and invariably increase patronage to the museum. The museum has no conference room that could be rented to the general public for seminars, lectures and conferences to be held for a fee. The museum lacks a video theatre where related documentaries on objects could be shown to visitors as a side attraction.

The museum did not make provision for restrooms and lodges for visitors who travel from afar these could be both local and foreign tourists. The researcher also identified that the museum had been operating without a gift shop as done in world–class museums.

The museums shop if stocked with replicas of the originals of their collections could generate income to the museum but unfortunately KNUST Museum does not operate a gift shop.

NCHM's Facilities (ref. fig. 6 pg.84)

The NCHM has facilities such as exhibition areas where temporary exhibitions are held, multi-functional space which is normally used for school educational functions and lectures, symposia and seminars. The museum also has a conference room where local and International conferences are held. There is a restaurant where local and foreign cuisine is served, and it's opened even when the museum is closed. There is an outdoor amphitheatre which is used for stage dramas, musical shows and for the celebration of programs related to festivals and this facility most of the times keeps the museum busy due to the influx of people during such functions. Places of convenience and toilets are located at vantage areas inside and some designed for the physically challenged. There is a garden where children are entertained and this space is usually rented out for birthday parties and other child-related programs.

The museum's shop is well stocked with many a colourful item and these are easy to carry about; copies of the museum's original collections are also for sale. There is an internet café open to the general public and it is very good attraction for the museum visitors who can also use the fax facility and buy stamps for postage purposes. The museum has a safe and spacious car park, and pedestrians can walk to and fro the museum in a controlled environment. Physically challenged people who use wheel chairs and babies in prams have easy access to the building and its facilities mentioned in the preceding paragraphs. The museum generates a lot of income about 120,000 Rand every month from these facilities and patronage to the museum is also increased.

KNUSTM's Laboratory

The museum lacks a laboratory where conservation and preservation procedures are carried out, as in place at world-class museums. Without this facility the researcher realized that most of the collections at the museum have shown signs of deterioration.

NCHM's Laboratory (ref. fig. 11,pg. 88)

The NCHM's laboratory is well equipped with state of the art equipment, for conservation and preservation procedures to be carried out. The conservators and preservation experts work in a very conducive environment, and this facility meets the international standards of ICOM. The researcher realized that because of the timely interventions given to deteriorating objects, the museum's collections are in good condition.

KNUSTM's Logistics

The museum lacks very vital logistics for the smooth running of its duties; there are not enough computers to capture data for documentation purposes, the museum according to the researcher hasn't got video- projectors to help the education department in illustrations during lectures, seminars and forums as done in world- class museums. The KNUST Museum lacks a vehicle for administrative, research and educational purposes.

NCHM's Logistics

The researcher was educated, on how important it is for data on collections to be computerized due to this form of capturing data the NCHM is fully computerized alongside the manual form of registering, accessioning and cataloguing, which aids the collections management department, at NCHM. Information on objects is captured by both manual and computerized systems which serve as a backup. The researcher after attending some lectures and seminars, organized by the education department at the museum, realized the use of projectors for illustrations, and more especially for students

and pupils from schools and colleges and was reliably informed it complies with international standards. The researcher realized NCHM has a vehicle for its administrative staff, research staff, and education staff. The administrative staff uses it for its administrative work; as this ensures efficiency in administrative duties and minimizes major lapses in its day to day activities, the research staff uses it on their research trips for information, and the education team uses it for out-reach programs to schools and colleges. The researcher realized the need for a museum to have a vehicle allotted to it, for the uses mentioned earlier as practiced in world-class museums.

KNUSTM's International Links

The museum has no links with other like-minded international institutions, and the researcher by this, realized the museum was not aware of international laws, practices, and programs outlined for museums, such as workshops, seminars and annual conferences.

NCHM's International Links

The NCHM has links with international museum institutions such as Smithsonian Institutions, Museums Association (U.K.), ICOM, Tropien Museum and a host of others, these institutions assist the museum in exchange programs in areas of exhibitions and collections. These institutions aid in funding some of NCHM's projects, journals, periodicals and publications are sent to the museum to inform it on current trends and standards in the museum industry .The staff of the museum are most times invited to attend workshops seminars and local and international conferences.

Mode of Operations

KNUSTM's Publicity

The museum has not put any policy or measures in place for publicity, as done in other world-class museums.

NCHM's Publicity This museum places so much importance on information hence its policy on information, and thus emphasis is placed on communication. The museum therefore develops and maintains a system of managing information about its collections, objects, audio-visual materials, buildings and sites, etc. and this allows it to manage its collections in an efficient manner. In addition the system facilitates the dissemination of information to the print and electronic media as well as the general public in the areas of publicity. The museum has been able to achieve these aims in its policy, by employing all current and emerging technologies.

The museum's documentation, library and archive policies play a major role in the mode information is disseminated. The policy on documentation ensures that the museum establishes and maintains a documentation system which allows it to manage, track, and audit its collections and by this data is collected. The library policy ensures that the museum maintains a specialist library, the contents of which reflect the themes, vision and mission of NCHM. The policy on archives which covers records on current and archival museum records and this makes information relayed within and outside the museum credible and authentic.

Education at KNUSTM

In the areas of education such as out-reach and in-house programs the KNUSTM has no policy towards educational institutions; to help educate pupils and students on what the museum has to offer as regards its collections, as practiced in NCHM and other world class standard museums, through which patronage to museums is increased.

Education at NCHM (ref. fig.5, pg. 83)

The NCHM has a policy on education, the policy states that it aims to reach diverse audiences and these include the general public, Government, academic and museum communities, special interest groups, the media and sponsors. The needs and interests of these audiences are met through a variety of programs run by NCHM. On education, the

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museum runs well structured programs for schools; educators of the museum visit these educational institutions to enlighten the pupils and students on the museums collections. The educational institutions also visit the museum at given times to familiarize with the museum's collections and also attend seminars in relation to objects on display. Educational activities of NCHM are guided by this policy and these facilitates exhibitions; publications; programs and features in the electronic and print media; presentations at conferences and seminars; contributions to relevant issues of national interest; particularly those relating to cultural and environmental issues. The policy aims to establish the museum as a centre for scholarship, link the museum closely with educational and heritage institutions, develop innovative approaches to the study of cultural heritage, its conservation and its use, makes provision for the development and management of internal related databases of museum objects, written and audiovisual information.

Research at KNUSTM

Research on existing collections has not been done, as carried out by NCHM world-class museums to meet international standards. By research, themes for displays and exhibitions are effectively done and this is lacking at the KNUST Museum.

Research at NCHM

The researcher was enlightened through an interview granted by the head of the research team at NCHM Mr. Yan Middleton, on how relevant it is to have a research on collections and themes prior displays. Based on NCHM's policy on research (revised NCHM handbook 1960, p35), researchers at NCHM are into active research in the areas of history, ethnography, archaeological sources etc., based on the collections at NCHM.

The following areas of mode of operations at KNUSTM were also studied and compared, presentation techniques, room setting, tableau, publicity through electronic and print

media and these were below international standards approved by ICOM. Whiles at NCHM presentations techniques, room setting, tableau were classic and were of international standard. Publicity through electronic and print media at NCHM is highly practiced. The researcher after comparing the two museums, namely NCHM and KNUST Museum realized that there are lots of challenges and shortfall in the scope and activities of the KNUST Museum. In the next chapter, the researcher has summarized the findings on KNUSTM has made recommendations to its effect.

CHAPTER FIVE

Summary of   Findings on KNUSTM

The researcher identified that the KNUSTM has no documented policies, shortfalls in the mode of operation, scope and activities of KNUSTM in the area of trained staff for the museum, there are no curators for various collection disciplines, no educators, no documentation staff, no conservators, preservation experts, janitorial etc. Funding at KNUSTM

support the running of the museum efficiently. Documentation on collections at KNUSTM is not properly done and it is not abreast with modern technological advancements and the museum has inappropriate showcases. In the area of collections management there is no database developed for the museum's collections. The mode of displays at the KNUSTM had no themes and there are no proper storage facilities for collections. In the area of the KNUSTM's mode of collecting, the museum is not into active collecting. The KNUSTM lacks a laboratory for conservation and restoration procedures. From a commercial point of view there are no shops, cafeteria, exhibition and conference hall as existing in other world-class museums to generate income. The researcher through participation observation realized that KNUSTM has no means of reaching out to the public, through the electronic and print media. The researcher also identified inadequate logistics: such as vehicles for administrative, research and education purposes, internet facility and audiovisuals. The KNUST museum has no links with institutions such as the ICOM, Museums Association (UK), Smithsonian Institution and other like minded institutions in the developed world.

Summary of   Findings on NCHM

The researcher through the study and comparison of KNUST with NCHM, identified the key areas in which NCHM has excelled to be rated as a world class standard museum by ICOM, the areas are the policies, mode of operation, scope and activity. The NCHM has well documented policies on recruitment of staff, education, research, collections, collections management, financial, storage, inventory, archive and language etc. Mode of operation, scope and activities at NCHM are of a world class standard as documented in the (ICOM STATUTES 1987, p.86) the museum has highly qualified and trained staff

such as curators for the various disciplines in which NCHM collects, documentation staff, educators, researchers, conservators , preservation experts among others. The researcher through the study noticed that the museum was into active collecting; their collections had well documented information on each item through a data base, NCHM's collection management was also efficient. The museum was well resourced through funding by benevolent organizations. The museums presentation techniques, room setting and tableau are classic. The facilities for storage at NCHM are of high standard and rated as world class standard. The museum operates a cafeteria, conference room, video room, shops which generates income internally. The researcher identified through the study that the museum has well stocked laboratory for conservation and restoration. NCHM is highly publicized through electronic and print media and this draws a lot of patronage from the general public to the museum. The museum has well structured educational programs and activities for educational institutions based on well researched topics by the museums research staff. Displays at exhibition halls of NCHM are not haphazardly done but are themed by the research staff through active research on collections, the showcases used for displays at NCHM are world-class standard showcases. The museum is also well endowed with logistics such as vehicles for the various departments at the museum and this facilitates efficiency at the departments through outreach programs, audio-visuals for the education department. The library at NCHM is well stocked with books which draw researchers, anthropologists, ethnographers, students, and the general public for data collection, educational purposes and general knowledge about various subject areas. The NCHM has links with international institutions such as ICOM, Museums Association (UK), Smithsonian Institution and other institutions in the developed world.

Based on the above mentioned findings the researcher has come to the conclusion that the KNUSTM has to formulate policies on recruitment of staff, education, research collections management, etc. The KNUSTM needs to improve upon its mode of operation, scope and activities since there is a shortfall in areas such as research, education, outreach programmes, and funding for the museum. Trained staff for the KNUST museum is a big challenge and this needs to be addressed. Projections of the museums activities for a period need to be carried out. There is a need for a database to be developed to improve on its collections management to curb improper documentation on its collections. The researcher identified inappropriate showcases for displays and displays at the museum were not themed, there is a need to address this issue. The researcher also identified that the KNUST museum has inadequate collections due to the fact that the museum is not into active collecting for the size of the museum. The KNUST museum has no links with international institutions which promote and support museums across the world.

Recommendations

The researcher after gathering all the necessary information as to what it takes for a museum to be classified as a world-class standard museum has come out with these recommendations.

The KNUST Museum manager should put himself in the place of visitors, and ask whether a visit to the museum as a whole can be made more enjoyable. A first time appealing experience for the visitor will encourage repeat visits, and good word-of -

mouth publicity would encourage others to visit. A poor experience on the other hand can damage the museum's reputation and standing.

Policy

The KNUSTM should formulate policies on recruitment of staff; collections, education, research, collections management, janitors etc. based upon its mission statement but should conform to ICOM standards (ICOM STATUES 1987, p74). In chapter four the researcher outlined extracts of policies of the NCHM and strategic plans of the KNUST Museum as a comparative measure. It is based on this comparative analysis that the researcher has out lined the various stages or principles under which world-class museums base their policies for collecting, and hopes if adopted will help the KNUST Museum management to draw its policy on collecting. What should the KNUST Museum collect? This is most probably the most important question the museum has to decide; every aspect of the museum's work will be affected by the museum's collecting policy. Through this research the researcher noted that every museum before operating should have a written collecting policy, and this is one of the challenges at the KNUST Museum. The written policy will probably be part of the collections management department's policy, since it sets out the museum's intentions for all aspects of its work. However, the collecting policy is the most important part, and it is indispensable. What object in terms of disciplines should the KNUST Museum collect? This should describe in detail the disciplines in which the museum intends to collect; examples of such disciplines are archaeology, anthropology, natural science, social history and technology. Collections are further classified into organic and inorganic materials and these

have different requirements in terms of collections management and preventive conservation.

Scope and Activities

Education;(ref. fig. 5, pg 83)

On education, the researcher proposes that there should be educators and an education department at the KNUST Museum. Educators are to outline programs and activities as the museum's projection for the year such as after-school programs, literacy programs, festivals, speaker series, symposia, over-night events, library collaborations, programs for parents, video productions, interactive exhibits, museum schools among others the list is endless. Educators in museums respond to changing times by improvising new programs and when this is adopted by the KNUST Museum will help promote the museum.

It is very important that the KNUST Museum employs educators to run the education department of the museum. Most museum educators work by experimentation, therefore if the services of an educator are engaged, the person will be responsive to the public and this helps to identify the barriers that keep people away from museums and their collections. KNUST Museum educators should identify problems associated with patronage and turn them into challenges and through that improvise responses.

The main focus of educators as done in world-class museums is on out-reach programs, interactive exhibits and community advisory groups among others. An educator in a museum works around audiences and about the human learning capacity for understanding the museum's information on its collections. Museum visits should not be tedious but fun and educative for the visitor is to get soaked in the ambience. The

KNUST Museum may therefore design themed   displays for exhibition programs and this should be educative. The KNUST Museum should have the capacity to stimulate meaningful learning for its visitors, meaningful learning is about making connections and this can be achieved if new information is linked with existing concepts in the visitor's system of understanding and this could be achieved if the KNUST Museum engages a competent museum educator. Research in the fields of human learning, cognition and human intelligence suggest radical shifts in museum exhibits, programs and learning experiences. For this consideration, the researcher challenges the KNUST Museum to expand the traditional role of museums through museum educators. The evolution of educational programming by museum educators provoke independent thought and this fosters active participation in museum programs by a broader audience.

The suggested Museum education programs by the researcher, when adopted by the KNUST Museum will inform people of all age groups, and will excel in the dissemination of information about art, science, history, technology, environment, cultural diversity and more. Education programs focus on sharing information and should be the first and foremost step in educating the KNUST Museum audience.

The educators at the KNUST Museum when engaged, as done in other world-class museums should organize public lectures, debates and also invite resource persons to the museum to use its collections and exhibits as stimuli for reflection and discussion. The KNUST Museum could serve as an educational community centre, fashioning its programs for instance to establish story telling, drumming and dance groups, artist alliance among others. Through exhibits, programs and community learning, the KNUST

Museum would provoke discussion and actively participate in projects that strive to achieve goals related to literacy, cultural understanding and sustaining the natural environment.

The researcher therefore projects that if this method is adopted; the KNUST Museum will emerge as a vital community learning center and will be perceived as an educator, forum, provocateur and a catalyst. Although this may seem too far a field, too ambitious, if the KNUST Museum stays committed to its convictions about its audience and educates them, then its course will be set.

Research;

The researcher identified the vital role museum collections play in research. Indeed one of the justifications of collecting material as a museum collection is that, it forms a permanent body of research material for future generations. Hence it is of critical importance that collecting is not carried out in an arbitrary or aimless way. It must be done within the framework of a carefully constructed collecting and disposal policy.

Managing collections effectively and efficiently and making the necessary investment in these collections overtime will ensure that the collections are maintained for research purposes. In the light of new scientific techniques, discoveries and methodologies for research on museum collections, researchers at the KNUSTM may assist with invaluable information on its collections to enable students studying museology, researchers, universities, colleges and other museums to use the KNUST Museum as a centre for primary data collection. It is essential that the KNUST Museum by itself be able to compare and contrast its collections in a wider perspective.

Funding;

The researcher suggests that local sources of funding should be solicited from organizations such as NGO's related to the promotion of culture, Ministry of Chieftaincy and Culture, Ministry of Tourism and Diaspora Relations, Patrons Association of the KNUST museum. Funding could also be sourced from foreign organizations such as Smithsonian Institutions (USA), Museums Association (UK) and other Museum related benevolent agencies for the KNUSTM.

Mode of Operation

Staff;

The researcher suggests that curators that have technical know-how about the various collections in its possession such as wood, paper, metals, fabrics, ceramics and pottery among others, should be employed in the KNUST museum to on research and teaching in the disciplines .

Educators should be engaged to draw out enticing educational programs for the year.

Documentation staff at the KNUST Museum should be abreast with international standards of documenting museum collection, and this calls for experts in this field, or existing staff could go on short training courses at world –class standard museums to be conversant with the changing times and mode of documentation.

The researcher suggests that the KNUST Museum needs to engage conservators and preservation experts who would be able to match knowledge of materials with understanding and meaning. The collections in the KNUST Museum are to be conserved and restored if the need arises, for existing and future people to use and enjoy it. Conservation and restoration is not undertaken just because collections are damaged but

because cultural value must be maintained. Collections require development, maintenance, documentation and curation in ways that allow them to be useful and usable. In the researcher's point of view, most poorly curated collections are those managed by people who do not understand what the collections mean and how to care for it.

Given these premises, training policies for staff at the KNUST Museum should aim at providing people with the basic skills to get actively and usefully involved in collection management, largely on a technical level. By having a team of trained staff working, the museum's interests in having its collection properly maintained and curated will be served, while the staff themselves will gain experience and knowledge. In assembling a team to staff a museum and trained to do so, other staff where possible, should be drawn from the ranks of people who have been through the curatorial ranks. In other words, professionals working in museum education, research or management are likely to do their work better if they have maximum experience working with collections, without doubt the researcher noted that these people understand the fundamental functions and assets of their museums (i.e. the collections) and they will use and treat these collections to the best advantage of the KNUST Museum. Janitors for the KNUSTM should also be considered since it is the janitorial department that cleans collections in museums.

Documentation;

Documentation systems of collections vary from one museum to the other, but the researcher has out-lined the simplest form of documenting in world-class museums and this mode is practiced at NCHM.

1. Entry**:** Every object or group of objects that come into a museum-whether as a gift, purchase, loan or enquiry-is recorded on an entry form, which is completed (clearly, in ink) in the presence of the donor or vendor who then signs it to certify that it is a correct record. If possible three copies should be made, one copy should given to the donor/ lender as a receipt and one copy stays with the object(s) until initial processing is complete, when the information is filed into a supplementary information file or into a short-term loans and enquires file, and the last copy is filed permanently in an entry file arranged in entry number order. The purpose of the entry form (sometimes called a deposit form) is both to acknowledge receipt of the object(s) and to ensure that information from it is not lost before a full record is made (if item is donated).

2. Accessioning: Accessioning is the formal acceptance of all acquisitions (whether as a gift, purchase or bequest), into the museum collection. Each object, or group of objects, to be kept by the museum (whether a gift, purchase, bequest or long loan) is entered in the accessions register. This register is the most important part of the documentation system, it has three main functions: (a) it assigns a unique number to each object, (b) it describes each object, (c) it gives the history, and origin (e.g. region or province) of each object). The register must be a bound book of good quality paper; each page should be numbered consecutively. The register must be kept preferably in a fire-proof cabinet, and a copy must be kept in another building for safe keeping. Entries must be written in permanent black ink only. Each group of objects received at the same time and from the same source is given a permanent accession number. This may consist of the year of accession; a point and the next number available in the accessions register an example is (2008. 24). Each object in the group

is then numbered separately an example is (2008. 24. 3) this number is known as the identity number and is unique to that particular object. The advantage of this two-part numbering system is that a large collection can be recorded as a group immediately, while its individual objects may have to wait for attention.

Some museums use a running number system-every object entering the collection is given a unique number in a sequential order. Most objects except coins should be marked neatly and unobtrusively in permanent black ink; paper items should be marked in pencil. Coins should be kept in coin envelopes and details of the coin, including its accession number, and this should be written in permanent black ink on the envelope. To make doubly sure the researcher recommends that each object should have a permanent label attached, bearing the permanent identity number.

The temporary label is then removed for the permanent accession number to be written on the entry form. Whenever possible or practical, the object should be photographed at this stage for record purposes. Loan-in objects should be recorded in the same way as donations using the entry form. Long-term loans are however registered, short-term loans should be recorded in a separate loans book. The researcher at this point of documentation on a particular collection (if donated) suggests that it is polite to write to every donor to thank them for their gift and to notify them that the object has been formally accepted by the KNUST Museum as it is done at NCHM.

3. Cataloguing**:** (ref. appendix C, pg. 96) the catalogue is a complete record of everything that is known about every object in the museum's collections. It can be

either held on a card catalogue or on a computer program. The researcher proposes that the catalogue information on the KNUSTM's collection should be computerized and should appear in this order: Name of the museum- Identity number-Name of object classification-Entry method (donation, find, purchase or lender)-Source of entry (donor, vendor or lender)-Date of entry-History of object. The researcher admits there are other types of information which may be useful as well but the above are usually considered essential in world-class standard museums.

4. Indexing and retrieval: Indexes would enable the KNUST Museum staff to find information in the catalogue without reading every single card. The museum must decide what questions are most often asked, and therefore why indexes are needed. The most commonly used indexes are (a) names and details of donor (b) classification (c) location (d) province or origin (e) artist. In a manual system there will be a need to separate set of cards for each index. The researcher recommends a computerized system for indexing and retrieval, though sophisticated it will easily facilitate retrieval of information on collections at the KNUSTM.

5. Collections Management: collections management means the recording of movements of objects from the collections, both within and out of the museum. The researcher identified during the study that the bigger the collections of a museum, the more important it is to have top range collections management. The researcher therefore recommends that the KNUST Museum should endeavor to have a good collections management system, the simplest system outlined for the KNUSTM by the researcher is as follows; every time an object is moved permanently or for a long period a note is made on its catalogue card or indicated on the computer, showing the date it was moved, by

whom and where to. Every time it is moved temporarily, for a short time, a proxy card should be left in its usual place, showing when it was moved, by who and where to.

6. Exit Documentation**:** Exit documentation records every movement of an object out of the museum building and this is recorded on an exit form, this form is similar to the entry form. One copy of the exit form should be kept in KNUSTM loans - out file, and the second copy should be given to the borrower or recipient of the KNUST museum's object. It is suggested by the researcher that until the object comes back to the KNUSTM, it should recorded in supplementary information file.

Computerization:

Computerizing the museum's documentation will save the KNUST Museum manager and other staff member's time for tracking collections. What computerization does is to allow the museum staff to achieve far more than they could achieve with a manual system. This system if well planned and well managed, will give the KNUST Museum much greater control over its collection and information. The first step is to ensue that the museum's basic manual document is efficient, well – designed to modern standards. Computerization will quickly show up problems in the basic system. The research suggests that as a second step the KNUST Museum should seek expert advice for computers and museum documentation. Computerizing museum documentation and classification is highly a complex field and must be done by an expert.

Showcases (ref. fig. 3, pgs. 81&82)

The research at the NCHM, Pretoria unearthed the importance of showcases in museums, both in protecting objects and in presenting them to visitors. Museum

showcases have four functions: (a) to protect the objects inside from theft and damage. (b) To provide a micro – climate in which constant levels of relative humidity, temperature and controlled light can be maintained. (c) to protect the objects inside the showcases from pollution, dust and insects. (d) to provide a 'theatre stage' on which to exhibit and interpret objects. The perfect showcase has still not been designed however; museum showcase designers have stated that designing showcases is often the most difficult job to execute. Whether they are built by museum technicians or bought, good museum showcases are very expensive. The researcher based upon the research findings has compiled a checklist of showcase standards used in world-class standard museums for the benefit of the KNUST Museum: pollutants and dust could be kept out of showcases with well-sealed joints and tight fitting doors. Too often dust settles inside museum showcases. The only way in which this is prevented is by pumping in filtered air so that any pollution or dust is pushed out. The KNUST Museum must simply ensure that there are no gaps between the sides or at the top and that the door fits as tightly as possible. The showcases should be stable to prevent vibration, showcases often have very thin legs, and this is mainly to make it cheaper or light or aesthetically pleasing, but the heavier the showcase the more solid its base or legs should be made, normally the better protected the objects inside will be from damage by vibration. The showcases must be secured with good locks but curators should be able to easily open the showcase. Lastly the researcher recommends that showcases should be made of materials which cannot damage objects placed in it for displays. The researcher through the study identified some of the materials which manufacturers use for showcases that give off

gases which can have adverse effects on objects, examples of such materials are outlined by the researcher to guide the KNUST Museum: Polyvinyl chloride (PVC) is a risk to copper, felt, wool, viscose, rubber –based adhesives and certain fabric dyes should not be used with silver. Lead, copper, paper, parchment and leather are all affected by materials releasing acetic acid, such as paints, lacquers and some woods and wood composites, examples are cardboard, plywood, chipboard, and block board. Single component silicone sealants, cellulose acetate and some poly-vinyl acetate adhesives may also present a similar risk. Formaldehyde is emitted by wood and resin binders in many wood composites and some adhesives therefore care must be taken when it is used at KNUST museum. During the research the researcher identified that not all museums will be able to avoid or even test all these materials but the KNUST Museum staff should do their maximum best to protect its objects from these risks.

Maintaining Constant Relative Humidity inside Showcases:

The showcase should help to protect the objects inside from fluctuating in relative humidity. The more solidly it is constructed, the better, sometimes it is worthwhile designing a showcase that incorporates pre- conditioned silica gel, but only if the museum is able regularly to recondition the silica gel.

Maintaining Correct Light Levels:

Light levels inside showcases are often far too high for the safety of the objects. The researcher deems it is very important that both the light level and heat given out should be carefully controlled. In the instance where a showcase has its own lighting,

the light source and all electrical equipment must be outside the showcase itself and the electrical cables must be well ventilated.

View of Objects in Showcases (ref. fig.3, pg.81)

The KNUST Museum staff should keep in mind that their audience / visitors consists of different height, and includes people who are physically challenged who may be in a push or wheel chair. Staff responsible for mounting exhibitions should bridge the scale differences between small objects, people and the building. Tiny objects in a big room can look insignificant and lost; one of the important functions of a showcase is give objects scale and importance.

Mode of Display in World-Class Museums (ref. fig. 7 &8, pg.85-86)

The researcher based on what pertains in some world-class museums in relation to mode/kinds of displays and relevant themes, the researcher outlined the following types of display which could help in setting-up permanent or temporary exhibitions at the KNUST Museum. Contemplative display: This is a form of display where beautiful or inspiring things are put on display for the visitor to contemplate. This is the most common   theme adopted by most museums, and this tells a story as well. This is achieved grouping similar paintings or sculptures of artists together. Didactic display;(ref. fig 8, pg. 86) this form of display, tells a story to teach about something. The story may, for an example be the prehistory of a country, rites of passage (*dipo* of the Krobos), wars among others, objects on display with this theme tell stories. Reconstruction display: it is a genuine or imagery scene reconstructed, open –air museums like Skansen in Sweden, where streets of historic buildings are rebuilt and refurnished. Grouped display: In this instance groups of objects are

displayed together with very little interpretation. Archaeological museums, for example, often have a room labeled 'bronze age' with many small objects, but very little to tell the visitor why they are important or what happened in the Bronze Age. This type of display is probably the common type of all displays, and is found in most museums all over the world because it is so easy to mount; it requires very little thought. But it is also the least useful or interesting form of display, except to specialists. Visible display: early museums used to put everything they owned on display. Then curators learned that people could enjoy a few things well displayed and interpreted more than hundreds of things crowded together. But now visitors ask to see things hidden in museum stores. One option is to keep the fine displays in showcases, on walls, among others but to open the stores to interested visitors, but caution must be taken to protect objects. Discovery display: This is almost the opposite of the didactic display. There is no over all order, but visitors are encouraged to make their own discoveries. The museum can of course help visitors to follow their own interests and to make their own discoveries. In one recently opened museum in Johannesburg, South Africa, the researcher was introduced to objects arranged in alphabetical order. Booklets and sound guides were available covering a wide variety of visitor interests, from subjects on history, politics, among others.

Research for Displays:

No author would consider writing a book without allowing time to do the necessary research, yet museums quite often plan new displays without planning who is going

to do the necessary research, and how much time they will need to do it, and where to find the necessary information.

The researcher during the research found out that there is an important distinction between researches on collections which is a responsibility every museum carries out and research specifically for a new display. Research on collections in the KNUST Museum should be a continuous process, carried out according to its research policy and closely tied to KNUST Museum's collecting policy. Research for displays should be connected to the particular display the museum is planning to put up.

It is therefore imperative that the KNUST Museum firstly makes it a prerogative to research on a particular display before it is mounted. An example of such is a display on *Bragoro*(puberty rites) of Akans, extensive research must be done and the right information should reflect in the display. Secondly it is important to make sure that enough time is available to carry out the research so that it will not be a hurried research that will be done haphazardly. Every display at KNUSTM either temporary or permanent should be based on the most accurate and up-to-date information possible, even if it is aimed at school children or other non-specialist, there is never any excuse for inaccurate information on museum displays.

Presentation Techniques (ref. fig. 8, pg.86) World class museums use many different techniques to present their collections to visitors and to tell their stories, some are simple and others are sophisticated. The researcher has collated the triangulation technique for the benefit of the KNUST Museum if adopted. Every visitor to a museum likes to be able to touch as well as look at objects. Touching is

an important way in which visitors experience things. For those with poor vision or no eyesight, it is of course essential though in very many cases, this for conservation reasons will not be possible. The KNUST Museum may however wish to consider creating good quality replicas for such purposes. Replicas, if used should be well made, but these should be marked clearly to show that they are replicas.

Room Setting: in world-class standard museums, room setting is an effective way not only for presentation of furniture or pictures in the settings for which they were originally created, but of making historical points, the researcher therefore recommends KNUSTM uses this mode to reach out to its visitors.

Tableau: the researcher during the study saw life-size models of people arranged in a scene from history at NCHM, the researcher found this interesting as this could be done at the KNUST Museum, life size figures of past Vice –Chancellors could be mounted with their most impressive speeches printed and displayed. Tableaux include figures in costume and often furniture.

Facilities for Storage (ref. fig. 12, pg. 89) Handling museum collections of all types and sizes should be kept to a minimum at all times. The researcher identified through this research that, apart from the damage handling does to collections, they are exposed to many more risks. Much damage to museum collections comes about through careless handling, transport and poor storage. The KNUST Museum needs a proper storage facility within the museum, with proper shelving facility, drawers, storage containers, and cabinets. Organic and inorganic materials have different requirements and it is required collections are stored by material category, even

though they may fall within different subject disciplines. The researcher through the study has outlined the following suggestions for keeping the KNUSTM museum's storage facility up to a world class standard. It is recommended that the staff of KNUSTM should keep stores uncluttered, tidy and clean to avoid accidents when an object is being carried or moved, store rooms should be well ventilated, objects should be lifted off storage racks with both hands, racks , drawers, storage boxes or containers should not be over loaded – too much weight can create difficulties in lifting or sliding, objects on racks, boxes and containers should be spaced effectively to avoid items rubbing against each other. Staff at KNUSTM should ensure collections are grouped according to their make, an example ceramics, wood carvings, metals among others. Objects should be relocated in their correct positions, following a study or display, when re-entering the stores. KNUSTM staff is advised by the researcher to carry one object, drawer or box at a time and should not carry material stacked on top of other material. When carrying a smaller material, padded container or basket should be used, appropriate equipment such as trolleys, hydraulic lifting apparatus, carrying straps, and glass –lifters should be used to assist in the movement of collections to and fro storerooms. Lighting in stores should be kept to the barest minimum to avoid damage to some collection, such as paintings.

Collections: (ref.fig.9, pg. 87) Museums lacking collections cease to be museums and those with badly kept collections have little or no right to call themselves museums. The history of collecting information and management of collections is a fascinating and complex field of study, yet the researcher was able to delve into this area to help elevate the KNUST Museum into a world –class standard museum.

Collections have been made in countries throughout the world for many centuries, and collecting as a human endeavor takes place for many reasons in and outside of museums. It is possible, however, to detect general underlying trends in collections at different periods and to analyze collecting in a variety of ways. The KNUST Museum curators should be well informed by its research team in the history of collections formation and how in this respect the museum fits into a more general context of collecting. The collecting team (curators) should examine collections in four major ways: its intellectual rational, method of acquisition, by discipline and the materials used for the object since collections are built up in museums for social, political, academic, scientific, commercial and personal reasons.

Based upon the research, the researcher brings to bare, in-adequate collections at the KNUST Museum and therefore challenges the present management to acquire objects for their collection. This can be achieved in a variety of ways, by donation, by purchase, by field collecting, by exchange and by loan. Many museums collections have been built up almost exclusively on the basis of donations. Opportunities to purchase items are constrained by available finance as in the case of KNUST Museum, normally purchases take place to compliment existing collections. The researcher advises that the KNUST Museum collects objects in line with the museums overall collecting policy. The KNUST Museum can exchange collections with other museums and the researcher strongly recommends this method, in this instance collections transferred or exchanged with other museums, should only be executed provided the appropriate resources and skills to look after the collections are assured. Loans of collections provide the public the opportunity

to see material in public or private collections, which may not otherwise be accessible to the museum's users. The KNUST Museum could use this form to add to its collections or build display themes based on such collections for temporary exhibitions. However collections are built over time, the KNUST Museum has a responsibility to collect in the context of a defined collecting policy. It is the KNUST'S collecting policy which will provide the frame work within which collections will be acquired and developed.

The KNUST Museum staff responsible for collecting should understand the nature of collecting to conform to the museum's policy, its historical development and its impact on the museums development, which is an important requirement. It provides a context within which to view the museum's collections and the history of its development. It also gives insights into the changing ways in which people have used and presented collections in world-class standard museums. Although museums can no longer claim to be the only source of knowledge, meaning or understanding about collections, they do however represent a significant body of expertise in the formation and use of collections. The KNUST Museum should help its users to explore collections in the museum in many different ways and have good understanding of types of collections and development which are valuable and a necessary basis.

Shops, Providing Services: Shops and sales areas play important roles in museums of all sizes they provide opportunities for visitors to take home a souvenir of their visit, and this will help provide more information about the collections of

the KNUST Museum and as a point of personal contact with museum staff and will serve as a means of generating income internally for the museum.

Location and Layout: The location of the shop or sales area needs to be carefully considered. Most museums site their shops at the exit/entrance, for the simple reason that most people tend to buy goods at the end of their visit. The researcher suggests that the KNUST Museum should site its shop at the museum's entrance/exit, where the reception / shop staff can give service to both incoming and outgoing visitors.

The design and layout of the shop or sales point needs careful consideration. If the approach will be a self –service, where the customers can pick up and handle goods in advance of purchase, that should be left to the KNUST Museum management to decide and in fact this mode as practiced at NCHM generates more sales than the traditional over the counter shopping. Whatever method is chosen the sales area needs to present its goods in an attractive and organized way; items should be clearly labeled and priced. The layout and presentation needs will encourage people to buy, but also security against theft should also be ensured, high value items need special protection, perhaps be in glass cases or beyond reach.

Stock: The management of the museum should determine what the purpose of the shop is, and what range of stock can best serve that purpose. The KNUST Museum shop should stock materials which are well designed and of good quality. They should provide value for money, and relate in a general or a specific way to the collections in the museum. Materials could be bought in ready-made form from wholesalers or specially produced for the museum. It can be customized with the

name of the museum or can be accompanied with information about the item/collection it reflects. It is worthwhile to have packaging printed with the museum's name. In the field of public relations, items bought from the museum's shop should continue to promote the museum long after the purchase.

Cafeteria: The researcher suggests that an eatery should be provided at the KNUST Museum, for visitors and those in the University community. This is a way of attracting people to the museum and a means of generating income for the museum.

Video Room: The KNUST Museum should organize film shows to support exhibition themes, such as for festivals in the country, graduation ceremonies of the University among others. By this way the museum will arouse the curiosity of visitors and this will swell visitor patronage to the museum if this suggestion is adopted.

Conference Room: (**ref. fig. 6, pg. 84)** Museums provide information to their users in a wide variety of ways through exhibitions, publications telephone enquiry services, lectures, talk programs and many more. This conference room facility suggested by the researcher when explored will not be limited to only the KNUST Museum but could be open to the public, for rental purposes. NCHM operates conference room services and income is generated for the museum.

Laboratory for conservation and Restoration (ref. fig 11, pg 88) The researcher deems it necessary that a laboratory should be set up within the new or old museum, for conservation restoration procedures to be carried out.

27. **Publicity Through Electronic and Print Media (ref. fig 6, pg.84)** A museum's status and standing, perceived by the public depend on a number of factors both in and outside the museum. Managing the relationship between the museum and the public is critical to its success. In all relations with the public, it is important the KNUST Museum develops a positive image of the museum based on success and achievement in the different aspects of its duties; this is the museum's reputation. Direct contact comes in a variety of ways, some of which the researcher suggested: education and information services, displays and exhibitions, retail outlets and visitor facilities, publicity of events and activities.

Success in managing the KNUST Museums reputation with individuals/groups coming into contact with the museum depends on the care and attention it gives to detail. The KNUST Museum needs a strong, corporate identity which is reinforced through the museum's products, publication and services, for example, the staff uniforms, or name badges should reflect the museum's mission. A corporate identity is a recognition signal but the true identity of the KNUST Museum should be its personality and character. These will forge out of the quality of service the KNUST Museum provides; the quality of relationship it has with the public; the understanding and appreciation on the part of the KNUST Museums staff and the importance of first–class public relations, and what the museum's unique collections represent.

The KNUST Museum can build its reputation and this has to be worked at. Bad publicity or poor experience on the part of the museum's visitors or users can damage the museum's reputation. All KNUST staff has to be involved in building

the museum's reputation thus those responsible for the museum's recruitment must make it a point in ensuring that staff at the museum are trained to develop a good relationship with the public.

The most effective form of publicity is perhaps good word-of-mouth publicity. A satisfied user is infinitely preferable to a dissatisfied that can damage a museums reputation without its knowledge. The print and broadcasting media have an important part to play in helping KNUST Museum develop its reputation. News or feature stories about the museum will reach substantial numbers of readers. It is useful to develop good working relationships with the news/ broadcasting media so that mutual understanding of each other's requirements is created. Careful programming and scheduling of press and media information on the museum's work can be a positive help in building its reputation. The KNUST Museum's press releases, press photo calls, interviews with journalists, appearances on radio and television, should all seek to emphasis a positive success and achievement out of the museum's policies and programs.

Information Services: Information about museums is provided by other people outside the museum they include, tourist, information officers, volunteers, visitors, friends among others. It therefore follows that whatever information is provided by the museum, it is important that it is accurate, clearly presented and communicated. The KNUST Museum management must note that significant numbers of visitors may not be able to read because of factors such as poor education or visual

impairment, or because they are unfamiliar with the language in which information is given.

Based on this fact the researcher through the use of questionnaire, as a tool for this research, realized that the need for informing a visitor to the KNUST Museum adequately is paramount. The museum's reception or enquiry desk is the first point of contact with the museum thus information provided at this department should cover the following area as done at NCHM

a) Admission charges and discounts

b) Times of opening

c) General information about the museum and its collections

d) The range of services and their availability

e) Events and activities (programs)

f) Identification of collections

It is essential that the KNUST Museum staff at the front desk are fully trained to welcome visitors and respond accurately and courteously to enquires, in the languages of the principal user groups. First impressions are important, it helps visitors to have basic information about the museum; examples are admission charges, and times of opening and closing, and regulations as to how the museum is operated.

Logistics: The researcher suggests that a vehicle should be provided by the University to its museum. This is to facilitate administrative and research duties of the KNUST staff. An ICT facility should be provided to aid documentation

processes (access, storage and management of information). The KNUST Museum needs to acquire Audio-Visuals to help in its programs and activities.

Collaboration with International Agencies: The KNUST Museum needs to link–up with other international institutions in the museum industry to help it address some of its teething problems. Some of these institutions are namely; Museums Association (UK), ICOM, Tropen Museum (Netherlands), Smithsonian Institutions among others.

The researcher hereby recommends that the KNUST Museum's board should draw policies for the museum. The policies should conform to the standards set by ICOM, when these policies are drawn it will serve as a guide, in KNUST Museum's mode of operations, scope and activities, through which the museum will attain International recognition. The researcher is of the view that NCHM though rated a world class standard by ICOM, the staff should not get complacent but should build a united front to approach and settle issues in the NCHM rather than personalties, which is mainly due to the affirmative action by the government in power in South Africa.

Figure 1. Old KNUST Museum (viewed from different angles)
(photo courtesy the researcher)

Figure 2. New KNUST Museum (viewed from different angles)
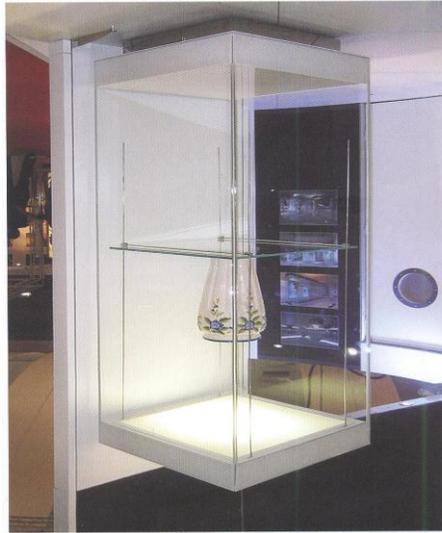(photo courtesy the researcher)

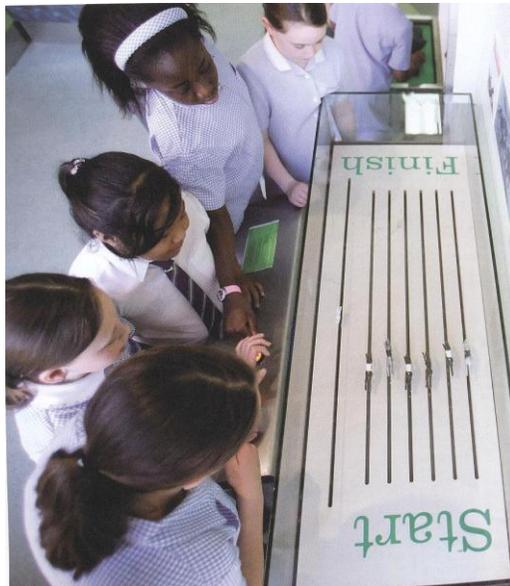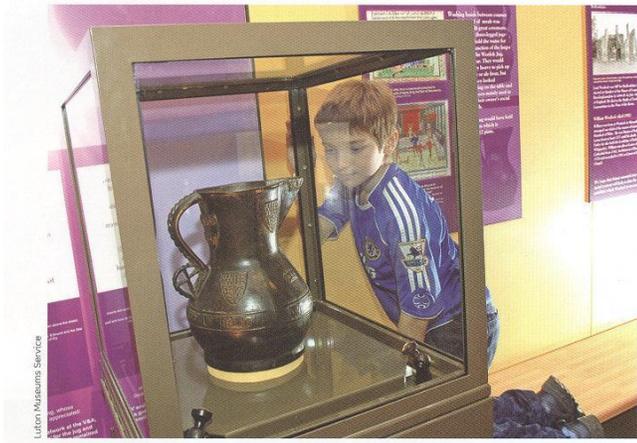**Figure 3. Front view of NCHM, Pretoria.**

(photo courtesy the researcher)

Figure 4. World class standard showcases at NCHM
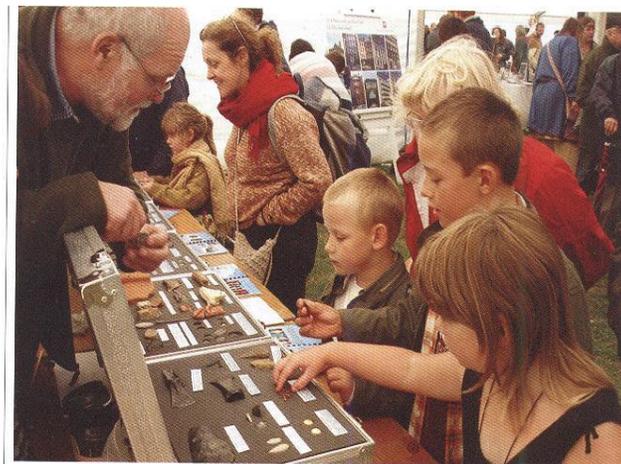(photo courtesy the researcher)

Figure 5. World class standard showcases at NCHM
(photo courtesy the researcher)

Figure 6. Educational programs at NCHM
(photo courtesy the researcher)

Figure 7. Interactive sections for visitors at NHCM
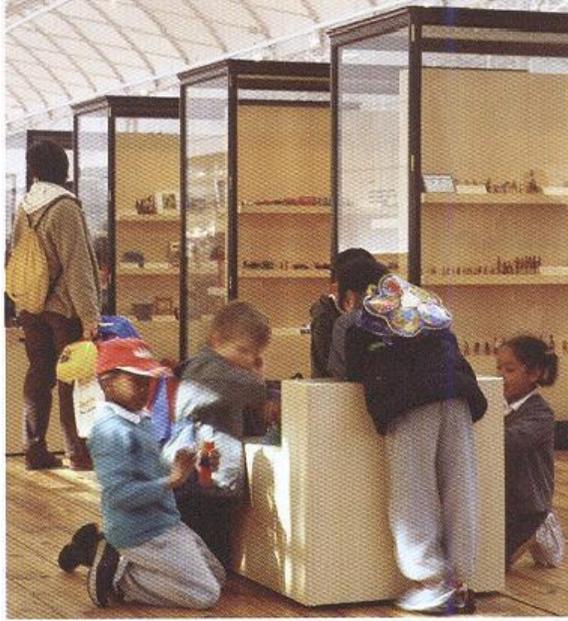(photo courtesy the researcher)

Figure 8. Themed displays at NCHM
(photo courtesy the researcher)

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Figure 9. Temporary exhibitions at NCHM
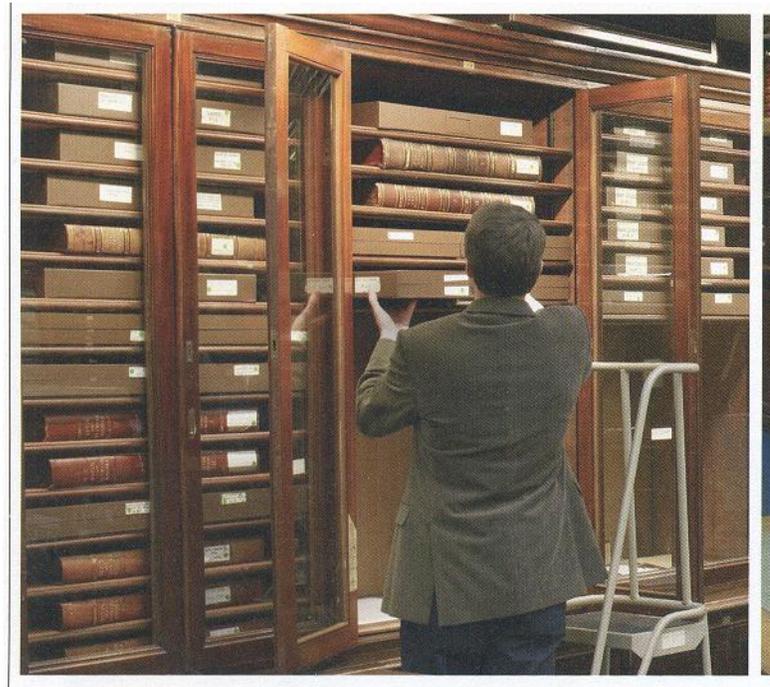(photo courtesy the researcher)

Figure 10. Museum visits at NCHM
(photo courtesy the researcher)

Figure 11. Restoration expert at work at NCHM
(photo courtesy the researcher)

Figure 12. Conservation experts examining a collection at NCHM's laboratory
(photo courtesy the researcher)

Figure13. Facilities for storage at NCM

(photo courtesy the researcher)

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APPENDIX A

AN INTERVIEW GUIDE

1. As the head curator/curators/conservation experts/restoration experts/janitor for NCHM, what is your job description?

2. What is the collecting policy of your museum, and what mode do you often use and why?

3. Is your museum still in active collecting?

4. What are your long and short term plans for the museum?

5. What are your perceptions of museums today as compared to when you joined NCHM?

6. Do you have any publications to your credit?

7. How will you relate your museum to other internationally known museums?

8. What is your advice to other curators of young museums as KNUST Museum?