USING TEACHING AIDS IN LEARNING: A Case Study of Nursery Schools in Samaru, Zaria

BY

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A thesis submitted to the Postgraduate School, Ahmadu Bello University, Zaria, in partial fulfillment of the requirements for the award of the degree of Masters of Arts in Art Education

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DECLARATION

I hereby declare that this thesis has been prepared by me, and that it is a record of my own research work. It has not been presented in any previous application for a higher degree. All quotations are indicated and the sources of information are specifically acknowledged by means of reference.

HUSSEINI, A. Kande (Mrs.)
November 1996

CERTIFICATION

This thesis titled "USING TEACHING AIDS IN LEARNING: A Case Study of Nursery Schools in Samaru - Zaria By Kande A. HUSSEINI (Mrs) meets the regulations governing the award of the degree of Master of Arts in Art Education, of Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This work is dedicated to:

My husband, Dr. A.A. Hussaìnì,

our children Zaìnab, Abìdah, Rabìatu and

other members of my family.

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The highest appreciation and gratitude is due to the Almighty who created me and gave me the chance to exercise the abilities He endowed me in several ways, including the production of this work.

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K. A. Husseini (Mrs.)

ABSTRACT

Using Teaching Aids in Learning, is a case study concerning Samaru area only, is a research carried out to find out the influence and usage of Teaching Aids in nursery schools in and around samaru village.

The types of visual aids provided,how they are manipulated and cared for among others were all investigated. To achieve this aim some questionnaires were distributed to some proprietors and teachers from selected schools. Other teachers were also nterviewed. The children involved were interviewed and tested.

Related literature concerning the study has been reviewed under the following sub-headings;

i) the importance of Visual Teaching Aids in general education
ii) types of Visual Aids;
iii) provision of appropriate Visual Aids and;
iv) factors affecting Visual Aids.

The research method employed was the survey method. A total of ten (10) schools were selected from the population of about twenty (20) to thirty (30) nursery schools. Six (6) pupils were also selected from each the two (2) chosen classes in every school. The two classes chosen were nursery II and nursery III eception) classes.

The outcome of this investigations explained a lot about visual aids utilisation in terms of how they are used and misus concerning children's Iearning. lt also indicated the ways the teachers used them in teaching and how well the children understand with or without them. Results were discussed and interpreted by means of simple tables and some statistical tables.

Some recommendations and suggestions were given at the en

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CHAPTER - ONE

INTRODUCTION

1.1 BACKGROUND

Education could be referred to as a means of acquiring knowledge. Its traditional aim is to prepare the individual physically, morally, intellectually, socially and vocationally. Basically, education can be classified into two categories: 'formal education' and 'informal education', which represent schooling system and non-schooling system respectively.

Education in Nigeria dates back to the pre-colonial era when most of the activities were of informal nature. The situation then was as in any traditional African society, with its own philosophy which often generally emphasize social responsibility, job orientation, political participation, spiritual and moral values, as an embodiment of the cultural and aesthetic values of the society (Fafunwa, 1974). Over the years, Nigeria's educational system has undergone several trans-formations in accordance with the policies of successive governments.

The present educational set up in the country is based on the 6-3-3-4 system which operates at four levels: pre-primary, primary, secondary and tertiary. The revised National Policy on Education (1981), defines pre-primary education as the education given to children aged 3 to 5 prior to their entering the primary school.

One of the characteristics of children at this stage is playfulness and the fact that, they are difficult to handle. In order to ensure effective teaching-learning, therefore, it is essential to adopt methods which will suit their characteristics. One of the methods generally considered to be useful in achieving this objective is the use of Visual Aids. Visual Aids not only facilitate learning but also serve as play items. Their greater educational advantage lie in the fact that they enable children to learn new experiences faster. As the level of literacy and numeracy increase among Nigerians, so is the corresponding increase in the proportion of the working-class group. Most working-class parents enlist their children in Nursery schools primarily to enable them acquire and develop some basic knowledge

and skills while they attend to the various activities of their work-a-day life. Informal visits and interviews seem to support the fact that Visual Aids, which are basic resources that can be utilized in the classroom to support learning and teaching are hardly used. Most Nursery schools do not seem to give adequate attention to the provision and use of Visual Aids. This study is undertaken to investigate the performances of Nursery schools, within Samaru environment, in the acquisition and utilization of Visual Aids.

1.2 STATEMENT OF THE PROBLEM

Education at pre-primary level has gained acceptance in the National Education System. The training of children at this level serves as foundation for their future education, and the experiences gained have a strong influence throughout their later lives. Unfortunately, the prevailing situation tends to indicate that most pre-primary schools are privately owned and operated as commercial ventures. Most Nursery school proprietors are more concerned with collecting fees than providing the necessary teaching (Visual) aids which are vital to children's learning.

This study sought to provide answers to the following questions among others:

i. Are Visual Aids provided in Nursery schools within Samaru area?

ii. What is the appropriateness (if any) of the Visual Aids provided?

iii. How effective is the display and use of these aids particularly in the teaching at the Nursery school level?

iv. What is the effect of Visual Aids on the teaching/learning situation of children in the Nursery schools?

v. Do Nursery school teachers consider the use of Visual Aids essential for teaching children?

1.3 PURPOSE OF THE STUDY

The purpose of this study is to investigate the extent to which Visual Aids are used to promote better understanding of Creative Arts activities in Nursery schools within Samaru area. Factors affecting the provision of the Aids and their effective usage were also identified and investigated.

1.4 THE NEED FOR THE STUDY

As stated earlier, children of pre-primary school age are characterized by playfulness and are generally difficult to handle. To get this category of children learn, methods that suit their characteristics must be employed. Since in the process of play, children discover and master experiences, the use of Visual Aids which will make for effective teaching, is therefore, essential. This study is therefore, intended to explore the use of Visual Aids and their impact on children's learning in Nursery schools within Samaru. A study of this nature is considered desirable because it will serve as a documentation of facts on Visual Aids utilization in Samaru Nursery schools. The findings will enable proprietors to understand the need for these aids as well as the type(s), quality and quantity considered appropriate for teaching/learning purposes at this level. It will also help to identify the problems of handling, storage and effective usage.

It is also hoped that the findings will identify the usefulness of visual aids in teaching at the pre-primary level, as well as highlight their advantages and disadvantages.

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1.5 AIM AND OBJECTIVES

This study was undertaken with the aim of helping the proprietors, parents, teachers and educational planners to understand the usefulness of Visual Aids in children's learning at the pre-primary school level.

To achieve this aim, the following objectives were derived:

i. To determine the types of Visual Aids used in Nursery schools and their relevance.

ii. To determine the impact of Visual Aids on children's learning.

iii. To identify the factors, affecting the provision and utilization of visual aids in Nursery schools.

1.6 SCOPE AND LIMITATIONS

There seems to be a greater awareness among parents to give their children sound education. This is particularly true among the working and business classes of the society. The growth and development of various Nursery schools, particularly in most urban areas is not surprising.

For the purpose of this study, only Nursery schools within Samaru (including the Ahmadu Bello University) are used. The choice of the area was informed by the relative homogeneity of the community. Time constraints and the limitation of other resources do not permit consideration of a wider area.

1.7 HYPOTHESES

The following hypotheses which were formulated from the problem statement were tested:

i. Provision of appropriate Visual Aids in Nursery schools are desirable in promoting children's learning capacity.

ii. Children gain effective understanding when these aids are well manipulated.

iii. Nursery school teachers who use effective Visual Aids consider them essential for the benefit of children's understanding.

1.8 DEFINITION OF TERMS

The following terms are defined as used in this study:

Nursery School: An educational institution usually attended by children of ages three to six (3 to 6) years, where they are encouraged to acquire the basic educational experiences (usually through play) outside the home prior to entering primary school.

Visual Aids: Those items used in teaching which facilitate easy understanding in a learning situation. They serve as pupils' aids. Also abbreviated as V. A.(s)

Display: The art of sequential arrangement of teaching (Visual Aids) with the view to stimulating or promoting teaching/learning situation.

Ability: The capacity of the child to learn in accordance to his stage of development.

Awareness: An awakening which occurs when a child is using Visual Aids, either inside or outside the classroom.

Creativity: The ability of a child to use his imagination through present or past experiences, or a synthesis of these ideas (experiences) to produce something new and original.

Exploration: the act of discovering and mastering new ideas through investigating and analyzing concepts and other man-made products.

Environment: The surroundings of a school premises which presents a conducive atmosphere for learning and exploring experiences.

1.9 ORGANIZATION OF THE STUDY

This study is divided into five (5) chapters. Chapter one contains the background, problem statement, need of the study, aim and objectives, scope and limitation, definition of terms and organization of the study.

Literature review is presented in chapter two, while Chapter three contains the explanation of methodology of the research. This include population, sampling, description of the research methods, instruments, data collection, method of analysis of the data including the statistical method used. In Chapter four, the data collected during the field work, questionnaire administration and interviews are presented. Chapter five contains the summary of the findings as well as conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter, related literature concerning this study has been reviewed under the following sub-headings:

i. The Importance of Visual Aids in General Education

ii. Types of visual Aids

iii. Provision of Appropriate Visual Aids

iv. Factors Affecting Visual Aids

2.2 THE IMPORTANCE OF VISUAL AIDS IN GENERAL EDUCATION

Investigations have shown that Visual Aids, when used properly make learning more effective. Farrant (1964), states that it is more effective to get children understand and remember if what they hear is changed into visual impressions. He considers the saying; "I see and I understand" to be synonymous with "we understand when we have visualized". He is of the view that Visual Aids are not teachers' aids but pupils' aids. They are aids to learning rather than aids to teaching.

According to Gyorgy (1959), visual communication is a universal language which knows no limit of tongue, vocabulary or grammar. It could be perceived without difficulty by both the illiterate as well as literate persons. It is likely to convey facts and ideas in a wider and deeper range than almost any other means. Visual communication could also substantiate the verbal concept with the sensory vitality of imagery. Arnheim (1954), agrees with Gyorgy, when he stated that those materials and techniques that help to keep the attention of children alive should help them use their visual organization at their own level of conception.

Jamieson (1971) opined that all subjects taught in schools, even in Nursery schools,require the use of

Visual Aids to enhance understanding. This is because these aids contribute significantly to educating the child through awakening his awareness, stimulating his imagination and sharpening his senses. He further stated that visual materials can facilitate the repetition of an idea without it becoming monotonous; they serve as models if they cannot be brought into the classroom or when pupils cannot experience them directly like snakes. Abstract ideas can also be expressed and taught through the use of diagrams and charts which can help individual pupils learn at their own pace.

Jacinta and Regina (1981) see Visual Aids as pupils aids in learning. They are of the view that Visual Aids do not only help children in learning, but also help the teacher in his work. Since children learn through their senses, Visual Aids help in striking or arresting some of these senses effectively to make some lasting impression. As a result, the more senses used in teaching the deeper the impression created on the mind of the child and the greater will be the understanding and the longer the period of remembrance. The authors highlighted some points on the purposes of Visual Aids to pupils. They include the fact that Visual Aids:

i. are those teaching aids which help greatly in focussing attention and interest that lead pupils to ask more questions on those points that the teacher did not touch in the lesson;

ii. help to clarify simple concepts about what is being taught;

iii. are vital for bringing accurate mental pictures or concepts about what children have been learning and in developing their imagination;

iv. integrate scattered understanding into new specific ideas which children may have learnt which could only be achieved through some type of Visual Aids like film-strip;

v. turn conceptual patterns into languages through charts and diagrams which help the children in understanding concepts in subjects like pre-Science, Mathematics or Story-

telling. This can be done through the use of picture sequence, especially when another language other than the mother tongue is used in teaching;

vi. give reality to separate learning and help children to correlate other subjects as usually found during educational visits.

2.3 TYPES OF VISUAL AIDS

Books, pictures, maps, charts, films, models and practical demonstrations are some forms of Visual Aids used in helping pupils acquire knowledge. Nursery schools are not exceptions in the utilization of these aids. There are different types of Visual Aids ranging from the simple to the complex. They are used at various institutions in accordance with the level of understanding of the pupils involved. Visual Aids used in Nursery schools should essentially fulfil the cardinal principles of effective visual communication such as boldness, sharp and bright colours and simplicity if they must achieve maximum effect(Farrant, 1964).

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Read (1976), stated that teaching in Nursery schools should be done indirectly,while the stage is set for learning through provision of a variety of materials. She advocated that the teacher's role should be that of guiding the learning process of experiences. The need for young children to see, touch, taste, hear or even smell if they are to learn was emphasized. This desire is based on the premise that through these senses, children are able to discover and master experiences as well as serve in maintaining their interest.

Home, shop and book corners are some ideal places for learning in Nursery schools. They serve as models, representing a home, a shop or a book store and give the child the opportunity to practice adult life. A book corner is a model library for the small child to explore and discover different experiences at his/her own pleasure. Other types of Visual Aids could be in their natural forms. They are used to represent the outside world which the child would use throughout his life-time.

Edward (1975), classifies Visual Aids into four categories. According to him, pictures, maps, charts, and models belong to one category, while experimental items like building blocks and display specimens like plants and insects are in another category. More detailed aids like charts and pictures form the third category and are specifically referred to as "learning aids". They are displayed on classroom walls for children to study at will. The last category consists of modern (teaching) equipment like radio, television, slides, films and tapes. These are used in school programmes and planned to fit with official syllabus and school time-tables.

The writer emphasized that Visual Aids must be both visual (i.e., to be seen clearly) and aids (helpful) in learning. Pupils should be able to see them clearly from all parts of the classroom. They should be colourful and boldly labelled. The aids must be displayed so that children may get the necessary impression. He also stressed that some of them must be replaced occasionally by adding new items, because through updating them, they will be kept fresh, interesting and useful to the class.

Musaazi, et al (1981), list Visual Aids that enhance children's learning into two categories: the first consists of pictures, bulletin board, flannel board and black-board, while radio, cassette players slides and television/film constitute the other. These aids are regarded as new concepts in learning and teaching because they aim at making full use of available materials. They also contend that modern trends emphasize the use of all the senses, since understanding is essential to constructive learning. These instructional materials should therefore, provide children the opportunity to learn through some or all of the five senses. As a result, they should satisfy certain special needs for learning, as they enrich and colour the lessons, thus, enabling the attraction and retention of attention for longer period.

Regina [illegible] (1981), categorized Visual Aids into primary, secondary and tertiary groups, in terms of their nature and usefulness to children. Primary aids are regarded as the actual objects seen in their real life setting even as cattle on a farm, fish in a pond, and so on. Aids in the secondary group are in model form, such as mounted birds, pressed plants, preserved fish, authentic sounds produced on radio or tape. They are derived from the reality of the primary group. The tertiary group consists of

things like films with accompanying sounds film-strip, photographs, pictures, maps, charts and black-board drawings. Items in the last group were mostly used in schools due to their availability.

2.4 PROVIDING APPROPRIATE VISUAL AIDS

The provision of Visual Aids is a highly desirable thing rather than being absolutely essential for teaching. At Nursery school level, Visual Aids help both the teacher and the pupils, without extracting much effort from the teacher in concept formation and the children being eased in perceiving such concepts. For Visual aids to be used profitably, their appropriateness and suitability are desirable. The teacher must consider the availability of such aids needed in any given lesson, their probable effectiveness and the efficiency of their use.

A variety of Visual Aids for teaching purposes are available, but their appropriateness is the key to a successful lesson. Pictures, sketches, charts, diagrams, specimens, toys are some of the aids useful in Nursery schools. They serve as source of seeing the real image of objects, identify ideas and even give impressions by touching or smelling. Some of the media aids like television and slides make children come in contact with children of other places, and even learn about their culture. Some educational programmes which are organized and recorded also enhance children's understanding. Toys like fish, cat, dog, and so on, give children near real impression. When Visual Aids are used properly they make learning enjoyable. They also aid good writing arrangements as seen in proper drawings (Farrant, 1964).

Certain corners in Nursery classes will not function well without Visual Aids, such as; home, shop, book corners, etc. This is because they make lessons more enjoyable where and when the right article(s) as in real life are used. However, such items must be bold, bright, clear and clean so that they serve the expected purpose. Maximum benefit and lasting usage of the items could be achieved by taking good care and repairing faulty ones as well as replacing old ones (Wilkins, 1975).

The environment is closely related to the child's visual aid. It can help the child to adjust to his surrounding and also develop within him the ability to discriminate about its quality. As a result, the child

needs a wholesome school environment appropriate to his needs as a developing human being. He needs a total environment, both socially and emotionally. He needs to explore and identify by using as many available aids as possible (James, 1971). Furthermore, James, reflects that people who spend much of their time in their classrooms need to make their surrounding pleasurable to work in. It must provoke children's curiosity, so that germs of ideas for creative expression of all kinds could be achieved. Demonstein (1974), agrees with James that providing appropriate materials to children in any subject or lesson provokes creative problem-solving by using qualitative means to achieve qualitative ends, although, the path towards solution is not a smooth one.

2.5 CREATIVE ARTS, A UNIQUE WAY OF ENHANCING THE DEVELOPMENT, EDUCATION AND CREATIVE AWARENESS IN CHILDREN

2.5.1 Creativity

Generally speaking, creativity is considered to be a kind of process through which something new results. The development of a new idea could be from scratch or a modification of an existing one. Creativity has been given different interpretations by various psychologists and educators. The most centrally accepted concept of creativity is that regarded as a process by which something new either an idea or object in a form or arrangement is produced. Whatever is produced or created is always new and different from those already existing, if its uniqueness must emerge (Hurlock,1972). This definition partly agrees with that given by(Drevdhal, 1956) who stated that:-

> ...capacity of persons to produce compositions, products or ideas of any sort which are essentially new or novel, and previously unknown to the producer. It can be imagination, where the product is not mere summation or it may involve the forming of new patterns and combinations of information derived from past experiences and the transplanting of old relationship to new situation... It may also involve the generation of new correlates. It must be purposeful and goal directed, not idle fantasy, although, it needs not have immediate practical application or be a perfect or complete product. It may take the form of artistic literacy or scientific product or may be procedural or methodological in nature.

Other educationists and psychologists tried to define creativity in different fields of human endeavour, but all such definitions come under the canopy of Drevdhal's definition. An example of such numerous definitions is one given by(Bruner, 1962), who speculates that there is creativity in every aspect

of life, that is creating something new which may result through day-to-day activities, which as a result enhances man to develop his environment.

Guildford (1950), on the other hand, says that the ability of a person to produce many solutions to a single problem can be referred to as creativity. He regarded a creative person as a divergent thinker because of his ability to generate many answers to a problem, even where they do not seem to appear workable. Therefore, the creative person is one who is always ready to explore endless possibilities.

Macfee (1961) and Mackinnon (1961) adopted a similar approach by considering creativity as a consistency of a number of components. Macfee see the term as relating to people's behavior when they make things. Thus creativity could be achieved through the use of existing ideas by re-arranging them or by using new or borrowed ones. Mackinnon's idea is also complemented by those of Meyer (1942) and Akiga (1985). They see creativity as the ability to produce new things completely, with the idea being adaptive to solve a problem which is capable of being evaluated. They opined that creativity involves the development of new patterns and combinations of informations derived from past experiences. Meyer (1942) considered creativity to be engagement in activities that are largely original or at least that offer new suggestions to some old situations that may lead to the solution of a problem. Furthermore, he stated that creativity is a basic drive which is second in potential intensity only to those human drives directed towards self-preservation linked closely with experience. On the other hand, Akiga is of the view that creative expression can be the interpretation of experience.

Palmer (1988) agrees with the definition of creativity as proposed by Poole (1980) when she stated that it is an idea in producing anything which is tangible such as a picture; new ways of handling social relationships or negative feelings. In this case, it must be an activity which is new and different from any existing activity. This is similar to the position taken by Masillas and Zenvin (1967) who see creativity in terms of personality, product, process or environmental conditions.

Koestler (1962) sees creativity as involving the ability to draw together unusual frames of

reference, which may yield an end to the result of laughter, tears or at least the highest level of creation. The bisociation is a central omnibus idea similar in spirit to that proposed by Ghesilin (1955), who suggest that creativity is a "process of change, development and evolution in the organization of subjective life".

Hoefeler (1962) agreed with the above definition and also pointed out that creativity is the ability to make new combination, which could be an innovation, and that high creativity is the ability to make such innovations of social worth. Furthermore, he says that creativity can best be defined in terms of its uniqueness of ideas and thought; conformity; and as a multi-dimensional phenomenon which operates with the types of behaviors and thought processes mentioned.

In the definitions presented above, creativity has been described in different ways and manner. All the definitions seem to have some similarities in one way or another. Infact, it would appear that they all have certain commonalities with that propose by Drevdhal which has for long been the most widely accepted and comprehensive definition of this concept.

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2.5.2 Creativity as a Phenomenon

Creativity may be conceptualized in different ways. It is sometimes viewed like a haphazard creation of something new and original occurring by chance. At other times, it is regarded as making something new and different from an already existing one; the idea could be found somewhere, but without the consent of the producer. Creativity is also considered to be a kind of unique mental process needed for no other purpose other than to produce something new, different and original. These conceptualizing ideas led to Guildford's answers, considering several possible solutions to a problem.

Another characteristic of creativity is the fact that it is regarded as being synonymous with high intelligence. This apparent similarity has led to the erroneous equation of high intelligence quotient (IQ) with creativity. There is evidence to show that there is some relationship between high IQ and high creativity. Rather, creativity is an aspect of intelligence as it relates to memory and reasoning.

Creativity is sometimes regarded as "traits of genius" which is inherited in a person and has no relationship to learning and environment. This idea suggests that a creative person himself is just a vehicle who plays no role in his creative behavior except to express in overt actions on the inherent traits. In this respect, it is further believed that experiences and decisions have little to do with the creative person. On the contrary, to be creative means acquiring accepted knowledge prior to using it in new and original ways as Drevdhal points that; "the creative person is both conceptional and unconventional" (Hurlock, 1972).

Creativity is also regarded as synonymous with imagination and fantasy making it a form of mental play. Goldner (1962) sees it as an organized comprehensive and imaginative activity of the brain toward an original outcome. Another popular notion about creative people is that which classifies them into two groups namely; conformers and creators. Conformers do what is expected without disturbing or causing trouble for others, while creators contribute origional ideas from various viewpoints thus providing a new way of looking at a problem and profering solutions to same. However, this idea does not appear to be applicable to children who at their age of development can neither ber conformers nor creators.

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Lowenfeld and Braittain (1970), realized that the arts and sciences have kept parallel in the advanced state of knowledge in each area and they believed that art can have meaning within a society beyond mere expression. Some think of art as an innate thing which comes intuitively from sensitive individuals. Strong proponents of the arts consider if vital to the society, and that it must begin early in education so as to teach good taste and develop habits of care in selecting objects from the environment.

Creativity can be demonstrated in all aspects of human endeavour ranging from the pure and applied sciences to the arts. The type of environment we provide at home or school, or the methodology employed by the teacher can promote or kill the creative instinct/growth in learners. It is therefore, necessary to provide a reasonable and stimulating environment which would enable the child learn at his own pace. The child may need to be encouraged to develop basic conceptual skills for life through toys,

music, drama and other artistic materials so provided in the creative arts class. These experiences may help the child to experiment and, as a result, develop an appreciation for works of art, music, drama and other aspects of the arts. The experiences gained can help the child take care of his environment and he may try to modify his surroundings to suit his own taste.

2.5.3 Creativity in the Arts and Sciences

Some definitions of creativity seem to include human activities with the arts, even though there is creativity in all human endeavors. Leeper (1979), stated that creativity is not only limited to the arts and music but it also manifests in other learning areas. Palmer (1980) and Lytton (1971), supported this idea when they opined that creative quality can reside in any kind of human activity. So, people can be creative not only in painting, writing poetry or discovering scientific theories, but also in cooking, dress making among others. It is therefore, not only the genius who produce creative works, but quality can be present in many minor acts, at many different level of ability and intelligence.

Chamber (1964), expressed a different view when he writes that creativity can best be understood in favour of scientific ability. He described the creative scientist as the person who is strongly motivated, dominant and careless of what the views of others are for his work. Such a person is always prepared to face the consequences of making unpopular decisions in his search for evidence relating to nature's laws. Roe (1951), agreed with Chamber's idea when she described the creative person as being persistent, curious and independent in his work.

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In the National Policy on Education (1981), five areas were listed as those constituting the general goals of Nursery education in Nigeria (Appendix - G). Item (e) is in consonance with the objective of this study which states; "... inculcating in the child the spirits of enquiry and creativity through the exploration of nature and local environment playing with toys, artistic and musical activities...".

Also, the Nigerian Educational Research and Development Council (1987) prescribed the subject being of Nursery schools, and creative arts is one of them in fulfillment of this objective. The objective

creative arts as they affect the various groups and other factors such as their development and intellectual ability like age were spelt out. The teaching of creative arts at various levels of Nursery education has different objectives as follows:

i. "Nursery - I

The child should be able to:

(a) scribble, draw and paint;

(b) dance to a variety of music;

(c) take part in creative (artistic) activities.

ii. Nursery - II

The child should be able to:

(a) build on the educational gains made at Nursery-I;

(b) draw and paint;

(c) model;

(d) participate in simple drawing, singing and dancing.

iii. Nursery - III

The child should be able to:

(a) build on the educational gains made at Nursery-II;

(b) make collages;

(c) construct things;

(d) make his own picture books;

(e) sing and dance".

Note
Normally, the appropriate age of Nursery I - III ranges from the ages of three to five (3 to 5) years.

2.5.4 Creative Arts and Child Development

The creative arts as a subject at the nursery school level involve those activities necessary for teaching children about the arts, though at th ridumentary level (Nigerian Educational Research and Development Council, 1987). Th significance of educating children on the relevance of of arts particularly at th early age lies in its capacity to enhance and develop their awareness. This help

environment and the need to preserve it as well as be able to see the importance of those things surrounding them, either natural or man-made. As a result, children can begin to appreciate their culture and those of others at so tender a period. Whereas, the best way of achieving this objective is through early education of the five senses of: hearing, seeing, touching, smelling and tasting. It is for this reason that visual aids become important tools in educating young children whose attention should be maximally arrested during this period. Children, are often engaged in play activities which primarily aim at satisfying most of their developmental needs physically, socially, morally, intellectually or otherwise.

Lowenfeld (1954), suggests that a child's complete developmental stages should be satisfied for his happiness, both in the present and the future as a citizen. How the child uses his mind, hands; whether he reacts sensitively toward what he sees, hears, feels, or touches, develops his desires to communicate with others constitute part of his happiness. He stressed further that when children express themselves through the art they show their ability to think and concentrate on something. The child, therefore, expresses his likes and dislikes in his own way to the world which surrounds him.

Lytton (1971), emphasized the encouragement of children at the pre-School level to develop the sense of perception, cognitive structure and social interaction though indirectly. This type of environment can be realized in a teaching/learning situation - in the creative arts class. The child can experiment with a variety of materials such as sand and water for instance. He can also mould using clay which affords him the therapeutic release of his energy. In the process he is also afforded the opportunity of exercising the drives that make him understand more. He can also mingle with friends and mates, which is a kind of socialization. Lytton, points out that; "... the Nursery school inculcates skills and promotes social and emotional development. It should enrich its surrounding for environmental stimulation, which will lead to intellectual competence...". He concludes by pointing to Piaget et al (1956) suggestion that, for the child to truly acquire new concepts and reach higher conceptual stages, he must be put in the way of discovering them for himself.

According to Ajayi (1983), children should be encouraged to see rather than scan, so that their visual responses will be stimulated since these visual responses are equally affected by the quality of their

seeing.

Demondstein (1974), discussed the functions and contribution of the arts to education, in two ways: enhancement of knowledge, and how they give form, to feeling. She explained how the arts help children's expression, where perception and feeling were integrated to create some selected experiences in order to gain an understanding of these perceptions as they are expressed in concrete forms. Children will then be able to feel the inward meaning of things, and find ways of expressing or documenting these feelings or experiences. She explained that the arts is a process of transformation of the child's personal imagination, where he is able to create representational images or imitations, whereby the products reflect their symbolic transformation. As a result, they acquire new attitudes and feelings which make them enjoy their own creative efforts and so find deeper meaning about themselves, through art. She concludes that the child is able to acquire such meaning through knowledge of recognition conveyed through discursive conventional language (like logical, deductive modes of thoughts), and the emotion expressed through non-discurvise language (like intuitive and inductive thinking). She suggested that a sound approach to learning must include intellectual, rational, sensory as well as emotional aspects. As a result the arts have a seriousness of purpose and mode of inquiry which make it have an important place in the educational process.

Greenberg (1966), speculates that the foundation of learning could be explored through pictures and words as children's hands, and minds. She further points out that, the development of children requires the teacher being involved and remaining aware, flexible, open to experimentation, questioning and finding new directions. Being involved deeply and caring enough works like magic because it turns education into a fascinating adventure. Considering the arts as a form of communication, she points out that communication is more intricate and complicated than simply expressing ideas in words. It reaches into much more subtle realms where no words parallel can reach and so much can be said with a few flowing lines. However, with individual differences in the arts as in other fields, some children can communicate best in dance, poetry or in prose; and for others the only way to communicate is by using pencil, charcoal or brush and paint. She suggests that every child should have the chance to try and explore and discover the many different means of expression as he may find among them a way of

talking, i.e., expressing himself.

2.5.5 Stages of Development

Many psychologists and educators have proposed a number of distinct stages of development for children in relation to their level of understanding especially in the teaching/learning situation in the arts. About the age of two (2) years, the child starts to make scribbles (marks) with any writing media: crayon, charcoal, chalk,among others. This scribbling could be done with any material and on any surface, and unless he child is provided with writing materials, he would continue in such a random manner. Paper, slates, or even painted walls could serve the purpose. This points to the fact that Nursery school personnel should furnish their classroom with adequate play materials while parents should also provide the necessary materials for their developing children, in order to have children grow and develop creatively.

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As the child grows, he finds that he can control his movements which make him practice more and thus, gain confidence. "Scribbling to a child means enjoyment, happiness, release, i.e., the coordination of motion..., every form of expression which helps the child to release tension is very important"(Lowenfeld, 1954).

Lowenfeld, noted that at the schematic stage the child likes to establish a 'real' relationship. He may represent his daddy with a big head and two legs, and as he grows he becomes sensitive to his environment and experience. His feelings may change, and so daddy is expressed with additional hands. These features concern him most and so becomes very significant, as they are the only ones he could see at this juncture. The child draws objects in sequence, as they come to his mind, thus, he makes drawings which show resemblance to the scenes visited. He may also develop some spiritual relationship arranged in an order that shows his emotion towards the object.

Lowenfeld observed that some children (between the ages of three and four) may skip scribbling in drawing which might have been done in painting, either in sand or cereals and was not noticed. Other children may be scribbling up to the age of six, but this does not mean that such a child is retarded,

rather it may merely

mean that the child need time to establish confidence. Engaging children in activities like finger painting ma enable them to control their motions. Providing different materials of varying textures, and consistency enric the child's sensitivity in using his sense of touch. Clay could also permit the coordination of motions kneading.

Arnheim (1954), noted some characteristic differences in visual patterns, which shows the successiv stages in the mental development of children's art. He stated that children are willing and able to observe the environment through their own way of drawing. They usually start their scribbling with circles and shapes whi could be attributed to the natural forms of most creative persons. Charles (1934), in Frost's findings agrees wi that of Arnheim that children can pick circles from a collection of shapes even if they are told to pick shap other than circles. However, Arnheim noted that the child's inability to produce exact shapes could be due his insufficient eye and motion control; and that from the child's point of view, there is no need for producin the exact shape needed. He concluded that to the child, early shapes are topological rather than geometrica a view similar to those of Piaget and Inhelder as earlier mentioned. This refers to general properties such roundness, closeness, straightness and not specific ideal embodiments.

As the child grows, so also his art attributes (Lowenfeld and Brittain, 1970). Children grow predictable ways through fairly definite stages by first making marks on surfaces with their scribbling at the a of two to four or sometimes at various stages. Harwitz (1972), also observed that the drawing characterist of children vary as they grow older, and it is difficult to tell where one stage starts and another sto Essentially, they start from random to controlled scribbles.

The schematic stage is often believed to occur between four and seven (4 and 7) years. The child h draws typical head-feet representation of man and other objects he comes in contact with. He can place th randomly and vary the sizes. The child is always eager to show and explain what he does. He however, reacl the full schematic stage between the ages of seven and nine (7 and 9) years. As children grow, chan continuously occur in their drawing patterns. Their tendencies to copy from nature reduces and they begir show every aspect of any object drawn. they gain satisfaction from the ~~way they represent things and also sh~~

way they represent things and also show what they consider to be important to them.

Linderman, et al (1977), suggest that parents and teachers should encourage creative thinking abilities in children as early as possible in order to encourage their development. Since visual and tactile world begins early in the child's life,nurturing this would require rooting and developing. They agreed that children share similar developmental patterns, starting from the scribbling, disorganized and variable stage through the controlled, to the naming stages. This scribbles start when children seek to control their emotions, by using art materials. For instance, marks on paper with crayon or distorted shapes with clay are typical of what could be achieved. The child is here establishing a new relationship with the world around him and would require all the necessary encouragement which can enable him to realize this objective.

As the child progresses from one stage to the other, he learns to: identify major steps in controlling his emotion; vary the manner in which he uses media provided for him which may help him make simple discoveries that will set the stage for more experiences; and is laterable to name the forms he puts together. He could also tell stories of what he does, has produced from the stage of preparation to that of illumination as Wallas (1926) explained.

Plaskow (1968), described how children think for themselves in terms of their surroundings. With confidence from their families they look outward to others or things which influence their emotional life as creature of emotion without the capacity to rationalize or order their thoughts. At about the age of three (3), the learning process takes the form of play or discovery. It is at this time that they see more of the outside world. Opportunities to draw, paint or creatively express themselves in any medium will therefore, develop in them, a keener understanding. Parents will also be afforded the opportunity o understanding their pent-up feelings through their creative art products as well as their general attitud to art such as featuring, fears and kindness among others. Encouraging children in creative an imaginative endeavors will help them discover values of all kinds, which will indicate the direction c their development of talent. For Plaskow, stages of child development in art may be seen in two ways scribbling (which is further sub-divided into two) and the Nursery.

The early years in scribbling show the child grabbing crayons, weaving in any direction and making marks all over with pleasure. Holding, moving up and down o around contributes to his development of the tiny hand muscles and motor control. The child grows out of his scribbles with controlled marks and recognizable objects, and more sure of what his pictures are about "I", "me", "my", are all expressed or implied in his pictures, at about the age of four to six (4 to 6) years. They also represent the family, house, car, sun and flowers by placing more emphasis on what concerns them most. He eventually learns to control, select and simplify what he sees and feels, and so can produce drawings that contain very similar shapes and could be altered to depict something different.

In summarizing his views, Plaskow advised that children need encouragement which would help their drawings and thoughts as well as to differentiate lines from objects in their drawings. The child's imaginary play could also be encouraged as this could teach him to think. All these cold not be possible without the provision of various materials, especially the manipulative ones, and even some that could be made by the teacher or parent. Large wax crayons, big brushes, felt pens, bright colours, newspapers, wrapping papers and cardboard papers are just a few of the materials that could help. Assisting children to appreciate things like textures of different surfaces could be an enjoyment for experimentation.

Froster (1971), explained how children start their scribbling by touching and visualizing things. There is a strong relationship between their tactile and visual senses which make them enjoy the feel of things. At about the age of two or so, they make marks in a random manner through the exploration of touch which scribbles. The children subsequently develop the ability to control their scribbles in paralle to the development of their muscular coordination.

Frost (1988), edited the works of some writers on the role of kindergarten schools which i usually at about the age of five (5). Some of the writers pointed out that the child at this stage needs a lot of activities due to his bursting energy, which could allow for creative development, throug dramatization and experimentation. The roles include: promoting the child's physical development giving opportunity to broaden his social contacts with other children and adults; providing ric environment for living; thinking and learning which also includes abundance of fist-hand experiences while a variety of equipment and materials suited for his need expand his

language as a means of communication, broadening his understanding of social world and providing satisfyi aesthetic experiences like in music and art designed to help his creativity. They also brought to light Mukerj idea, that the early childhood years are particularly fruitful for several reasons. Three (3), four (4) and five (years are early years for learning about self in relation to others like concept formation, language and creativit For a successful achievement of the desired result, it is essential to understand these needs for effective outcom

Blark-Horovitz, et al (1973), when discussing child development in art, stated that art activities beg in young children when they discover that they can leave marks on any surface. These marks form the beginni of inventiveness. By the age of two (2) the child makes random marks and becomes aware that these mar express an idea. Later, he symbolizes the real world where shapes and lines are combined and modified w great enthusiasm to represent what he wishes. As the child's experiences grow out of the natural developmen course, he thus, devices and uses his own symbols to create a graphic language and uses it in his own wa They cited the example of an art educator, Cizek (1912), Blark-Horovitz, et al (1973) who stated th every child understands and enjoys art to the extent that he acquired such understanding by his own efforts.

Scribbling stage is achieved by sufficient motor control to make marks on a surface. The scribbles m represent an intention, even if it is fleeting and transitory. Schema refers to outline, where shapes have a deg of resemblance to actual objects with the forms being reduced to simplify and designate various objects a *repeated much the same way as words are used. They are usually semi-shapes drawn to express ent* complexes of ideas. Muhle (1955), divided the schematic stage into pre-Schematic where only parts of schema have been completed in fragmentary manner and the full schema which is reached when lines hav specific and understandable purpose in defining shapes. The third stage is the "true to appearance" stage, wh more characteristic of the aims are achieved. Pronounced and mixture of the stages were present and set s *by side where single objects may be represented in both or a mixture. Objects are drawn as observed fron* single vantage point position or movement of living things shown, which is also another characteristic differ from the former stage.

Educators like Thakur, et al (1981) divided the developmental stages into five, thus:

i. Infancy of the new-born (birth to four weeks).

ii. Infancy (from four weeks to two years).

iii. The pre-School period (two to five years).

iv. Middle childhood (six to nine years).

v. Adolescent or the teenage period.

They believe that human growth and development is a continuous and gradual process, rather than clear cut stages. Life begins right from conception in the mother's womb; as many events and things affect the individual even before he is born. Therefore, understanding these periods are now recognized as being much more important than the rest of the period in life. This is true as it is the time when a solid foundation is formed in the child.

During the first few years of life, the child is prepared by maturation process for a number of tasks, where before the age of five a number of skills have been acquired. Skills like talking, moving about, playing-like throwing, walking are practiced and perfected, which provide the basics for the development of skills used in childhood and adolescence like manipulative skills. The child's brain is developing and gradually becomes refined. His muscular system also develops to support and move his bones so that he is physical equipped; he is also influenced throughout his life by what happens around him which are more important than previously realized. The child also sows a great deal of independence culturally in dressing, playing and giving some helping hand in the home, while still dependent on adults to provide the opportunities. Linguistically, his vocabulary grows rapidly, always read to talk on topics that interest him. They conclude that teachers and parents should realize that children grow at different rates and each has his own unique way of growing and developing, even though there are general growth patterns that are common to all children.

Willard et al (1973), noted how the child grows socially. They believed that there are two processes through which children acquire attitudes, values and patterns of social behavior that occurs on

the basis of direct intuition, and the child's active imitation of his parental attitudes and behaviors. Parents and other socializing agents are explicit about what they wish the child to learn and attempt to shape his behavior through reward and punishment. The other process indicates how parental behavior characteristics gradually take positive or negative value for the child who is response produce positive or negative attributes in their behavior, respectively.

Farrant (1964), observed that development is a series of periods of progress, interspaced with periods of rest, which allow necessary consolidation. The child at birth is subjected to complicated environment composed of physical, emotional and social forces, to mention a few. The child gradually matures by acquiring skills that develop the muscles and coordinating the system for controlling performances of activities like walking, running, among others. However, he urged teachers to understand such functions, especially intellectual activities in order to know the ability of children in a teaching/learning situation so as to make necessary provisions. He also highlighted that development is influenced by environment and heredity right from conception and all through life. The child acquires his developmental characteristics at conception as a result of heredity which determines his basic structure. The child is therefore born with personality unique to him which he inherits. Environment on the other hand can hardly allow him express his inherited personality as he matures. The child enjoys care and security from its mother and this coupled with environmental influences which could breed anxiety and fear, unless he is strengthened by the family circle, that makes him happy and contented.

Social development is achieved by familiarity and association with feeling and comfort. Therefore, the child grows up with uniform pattern of behavior with the other members of the family who adhere to certain principles and standards of conduct. He could also be influenced gradually by other outside groups like neighbours, schools, community and the Nation as a whole. Environment is still powerful for developing attitudes, views, opinions and beliefs of the individual. Farrant advises parents and teachers to behave well so as to guide children to select good and useful attitudes.

Ajayi (1983), points to the fact that babies live and grow through direct sensory experiences. They can be stimulated to explore the sensations of their own bodies, thus, they push, pull, hold and

squeeze to explore sensation. He further observed that the patterns of understanding which are involved in human mind are reflected in the change of activity and response that become evident as the baby grows. The child uses control as a necessary tool which helps him to form the patterns of the mind in order to represent the world in his inner mind.

2.6 THE ROLE OF THE TEACHER IN PROMOTING CREATIVE ART ACTIVITIES

The teacher in the Nursery school, performs the dual role of an instructor as well as a parent who cares for the children. Olorukooba (1990), describes the expected role of the teacher in terms of organizing knowledge into logical units and becoming an expert in dispensing this material as well as getting pupils learn and understand facts and techniques which they can in turn use skillfully in different situations. Therefore, success will depend on how he actualizes the rationales for the teaching, especially of art at various level as contained in the statements of objectives (Fed. Rep. of Nigeria - 1981) (Federal Republic of Nigeria 1981) He summarized part of the expected roles of the teacher as contained in this policy statement, thus:

(a) accept and value learners as being creative; display an attitude of acceptance; give greater psychological freedom and security for projecting ideas and forms;

(b) help learners to see possibilities through forms by encouraging them to talk about their feeling and ideas, i.e., recognizing the importance of feed-back, invention and intention;

(c) encourage learners to make visual judgement. The need to learn to see the world around them to make visual judgements, i.e., to make visual judgements, help them to talk about and evaluate what they see within and around them;

(d) create conditions in which pupils learn the excitement in searching or discovering visual ideas and feelings towards realizing new forms.

Old teachers like Jacinta et al (1981), listed some qualities which make the teacher vulnerable in performing his duties in the class, the school, the community and the society as a whole.

They suggest that teachers should be morally sound and show good example for their pupils to copy. They further suggested other essential qualities, thus:

(a) he should be just, energetic and responsible so that he is always aware of what is entrusted to him;

(b) he should act in the best interest of the children;

(c) he should be initiative, decisive, sincere, honest, humorous, and show itself in pleasantness, cheerfulness and understanding with the children with a balanced attitude towards events both good and bad;

(d) he should also be loyal-doing the best he can for his pupils even if it involves self-sacrifice;

(e) he should be a leader by the nature of his work which requires him to be worthy of his children's efforts, idealized standards so that he makes the basis of his relations with them;

(f) he should guide his pupils in the learning process rather than impose his ideas on them.

It is part of the role of the teacher to be changing his teaching methods and use simple language. For the pupils to gain proper understanding, the teacher must have a deeper knowledge of what he teaches. In addition to the qualities suggested by Jacinta et al, the teacher should also perform the following:

a. He should like teaching and watching children grow up, which as a result will make him see teaching as a means of helping pupils meet the challenges of life.

b. He must be energetic, persevere, responsible and initiative among others.

c. He must always show good example such as being consistent, modest and self-critical.

d. He must watch the way he speak to his pupils which are among various ways the teacher accomplishes is roles.

e. The teacher should be dedicated, honest, intelligent, patient, lovable, knowledgeable and know how to teach effectively and efficiently or even beyond that, so that his pupils may look at him as a mirror and an instrument of learning, because what he does and says matters a lot to the children he teaches.

Balogun et al (1981), stated that the most important role of the teacher is how he carries out his relationship with the children as a mediator of learning in which he transmits knowledge and directs learning processes. Guiding them to seeking ways of solving problems for themselves ensures that they become independent with the kind of experiences that are likely to produce learning, and see that they have them. Giving life to the learners by applying what they learned to their environment in spiritual and philosophical ways, where they can relate their deeper thought and practical life to their surrounding, is also of optimal importance. The teacher is also parent substitute where he helps the child as a person; comforting, showing affection, praising or discouraging various behaviors. In other words, children need to be treated with sensitivity and understanding.

In her contribution, Lemu (1980), listed some expected roles of the teacher. According to her, the teacher is regarded as a model, to be admired, respected and imitated. The teacher need to understand his pupils first and his subjects second, and must understand both to be successful (Wilkins, 1975). He noted that a good teacher is easy and friendly in his relationship with his pupils, which result in good order and good learning. He should also set good examples through his personality by displaying qualities of moral and social behavior and attitude to work.

According to Lawton (1981), the teacher needs to know a good deal about what he is teaching and how children learn, so that those key features which give understanding and provide the basis for future learning, could be achieved. However, these features can give negative or positive achievement according to the level of knowledge of the teacher, which makes it necessary for the teacher to know the

essentials of teaching. Careful selection of experiences to get the most out of everyday teaching with good thinking can enhance their level of understanding. He observed Bruner's points about teaching children which prompted the teacher to provide short-cuts to significant learning to enable them make discoveries.

There is the need to understand the child and help him to be in closer touch with his own feelings and the outside word, so as to open new windows on the world ad perceive it more richly (Demondstein, 1974). The child is allowed to grasp those aspects of experience that he feels are significant and recreate them in visual, aural, tactile and kinesthetic forms. Therefore, it is only in the arts (especially creative arts), that children are given the opportunity to express themselves in ways that are purely imaginative to enable them abstract and transform in the recording and reporting of experiences.

In his contribution on the expected roles of art teachers, Ajayi (1983), stated that some measure of success can be achieved through familiarizing the children with materials and tools to awaken their inner sensitivities. Other suggested roles include:

i. Knowing their potentialities and the most practical way of using them.

ii. Always at hand when they are short of ideas, which as a result then necessitates the teacher to always motivate and encourage by means of new and interesting materials.

iii. By taking them out to explore their surroundings.

iv. The teacher being calm and understanding should help to inculcate in his pupils sensitivity to their mates, environment and even the materials they use.

v. Help to raise the children's visual responses, which goes further to extend their seeing beyond looking, so that they can enjoy subjects like creative arts which encourages seeing the visual and aesthetic dimensions.

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Bfark-Horo-ν ι+ㅈ도 ㅁ (1973), observed that it is part of the teacher's role to nourish and enrich each stage

of the child's growth and aid him in his progress to the next step. They noted, that though the nature of development remains the same, it could be modified and the rate also accelerated by learning experiences and enrichment of such stages. Parents and teachers are then called on to provide the child with appropriate requirements for such purposes.

In order to develop in the children we teach, our work involves being and remaining aware, flexible, open to experimentation, questioning, and finding new directions (Greenberg, 1966). She points out that children are complex units and yet in every stage they are whole and integrated individuals. Children should then have chances to try to explore and discover the many different means of expression, so that they may find a way of 'talking'. She believes that each of them is unique and special. Therefore, reaching out to guide and help each child discover his own special potential and expressiveness is the function of the teacher. The teacher can set about the creative process and learning by thrusting the child towards experiences. The child on his part follows challenging, questioning and learning that remains open-ended in his expectations. Plaskow (1968) agreed with Greenberg (1966) when he stated that encouraging children in creative and imaginative activities help them to discover values of all kinds. They need play and other related materials to manipulate and ponder about as these develop their talent and is an indication that things are going the right way. Given this opportunity the child develops keener understanding that help him to discover a lot. He also observed that the parent as well as the teacher could also understand a great deal of insight in the child and his feeling about things from what he does in his picture or drawing and his general attitude to art. Therefore, encouragement and support are needed from both the parent and the teacher for success. The main role of the teacher here involves supervision, organization and being involved in the activities to achieve maximum benefits.

Harrison (1960), shared the same views with Plaskow and Greenberg when she observed that self expression can be stimulated by providing the child with various materials, so that he is free to express his ideas with these materials. The teacher's job here is to encourage and guide the child whenever he needs help so as to take the right decisions, without much interference. The encouragement given will help to build some confidence in the child which will lead him to discuss what he feels, thinks and sees

with the teacher. Encouraging children's initiative is another key factor to originality and personality. Such could be achieved by praising, displaying and commenting on their works, including those of the less gifted children who may realize their contributions as worthy.

Cronbach (1954), believed that the impact of knowledge can be brought about by improving the understanding and thinking of children for the sake of problem-solving. Therefore, knowledge is used here as an instrument for anticipating the consequences of various possibilities in solving problems. Thus, the learner is not provided with ready-made concepts, but works them out by himself, and so achieve a mental structure of associations and operations just as he achieves within himself the coordinations for a motor skill.

Frost (1988), observes that the center of attraction for the child is the teacher who needs to consider factors such as; social contacts with others, (cultivating the foundation for literacy through the expansion of language as a forum of communication as well as broadening the child's understanding of social and scientific world); aesthetic taste, sense of responsibility and thinking behavior which must be learned, has made early childhood education an optimum period for learning, through successful and efficient efforts and sacrifice of the teacher. Therefore, the role of the teacher is to ensure the full understanding of the child he teaches through various approaches in their teaching methods and techniques. Also, Willard (1973), sees parents and teachers as socializing agents who are explicit about what they wish their children learn, and so they attempt to shape their behavior through reward and punishment. It is pertinent here that the teacher as well as the parent have a lot to do, or say in shaping children's behavior through influencing them either at home or school. They should also be models for their children's or pupils' behavior because children are very imitative of adults around them.

As Linderman and Linderman (1977) suggested, prompting children's thinking as early as possible in order to encourage creative development, is one of the most important roles of the teacher. They stressed the need for artistic and perceptual skills as key that sets the foundation for all learning, especially the active use of the senses which bring in data through discovery and information that the

child can put to work for concept building, observing, touching, listening and tasting. This therefore, makes it necessary for parents and teachers alike to provide ample opportunities for children in order to achieve these objectives.

Lowenfeld and Brittain (1970), stressed the importance of art as a means of understanding the growth of children emotionally, intellectually, physically, perceptually, aesthetically and creatively. Achievement of these goals posses a lot of challenge to the teacher who understands the child's thinking processes and patterns of behavior. They therefore, concluded that art as a subject can provide the child with a wide range of possibilities and his growth should not be limited by the educational system. This position may be justified because the answer he seeks and the solution he finds are his, since the drawings, paintings or constructions reflects his growing ability to deal with adverse range of possibilities in a constructive manner.

Hurlock (1972), considering the role of the teacher stressed that being creative adds spice to the child's play activities around his life centers. She says if creativity can make play pleasurable for him, he will be happy and contented and this in turn will lead to good personal and social adjustment. This is just what the teacher wants his pupils to be. It is also the teacher's goal to educate good citizens, (i.e., the children) so that they can contribute to the development of their society.

2.7 THE ROLE OF THE TEACHER IN SCHOOL AND SOCIETY

The main function of the teacher in schools is to impart knowledge which would bring about observable differences in the learner. As explained above, the teacher is expected to see that pupils understand his teaching, so that the benefit from instructions which can promote their development and sharpen their future in general. To achieve this objective, he is expected to use as many methods as possible in order to see that his pupils understand. He however, has other responsibilities as Balogun et al (1981) observed. The teacher needs to establish good relation with other adults in the school system like his employer, the headmaster, supervisors among others. Greenberg (1966) further supports this view

when she points to the fact that the teacher must work with administrators and parents in order to reach a deeper understanding of the need of the children, which is their end objective.

Lowenfeld and Brittain (1970), proposed that the teacher must organize the environment and other instructional materials in order to convey the development of the curriculum to be

covered. This is quite logical because children may not be able to understand and develop creatively where the environment is not free from obstacles that will disturb their learning experiences. It is therefore, the duty of the teacher as well as others in the school community to see to the well-being of the school's environs for the benefit of all.

Jacinta, et al (1981), also noted that the teacher is not only dealing with the children he teaches but also works with his co-teachers, the school and the society as a whole. He is also respected in the community mainly because he inculcates the right social norms to the future generation. Farrant (1964), made a similar observation in terms of the role of the teacher to the school and the community or society. The teacher, he noted, is always respected by his pupils who were taught at home to respect their teacher, as the parents see him as one transmitting knowledge and accepted social norms. The teacher on the other hand should respect his pupils as well as their parents' ideas and dignity for the smooth running of the school, as a community.

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It is part of the role of the teacher to give life to the school environment by enlightening his pupils (and others in the school), so that what he teaches can be applied to their environment, spiritually and philosophically as well. He is also expected to maintain discipline by exemplifying good manners like modesty and honesty among others so that he enhances the teaching profession in general.

Our review of related literature in this study therefore points to the fact that in order to use visual aids at the Nursery school level, there is the need to:- Understand and appreciate the role and importance of visual aids in general education; the types and uses of visual aids, and at various levels of children's development and the creative process and products of children since

the teacher is the final authority in a classroom situation, his role in the use of teaching aids is very crucial.

CHAPTER - THREE

METHODOLOGY Of RESEARCH

3.1 INTRODUCTION

According to Afolabi (1990), methodology is a set of systematic steps taken for accomplishing a given task. Kerlinger (1977) on the other hand describes it as a plan, structure and strategy conceived to obtain answers to research questions. The methods employed in this study for finding answers to the problems identified earlier on in chapter 1 are discussed here.

The research method employed is the survey research which involves collecting small sample from the large population in order to make generalizations, since all the subjects cannot be covered due to some constraints.

3.2 POPULATION AND SAMPLING PROCEDURE

The populations of Nursery schools in Samaru area range from 20 - 30. However, only 10 of these schools were sampled in order to reduce problems that would have arisen if a larger number of schools had been taken. Usually, there are three (3) arms of classes in Nursery schools which are Nursery I, Nursery II and Nursery III or Reception Classes. The ages of the Pupils in these classes range from 3 for Nursery I and 4, 5 and 6 in Nurseries II and III. Children in Nurseries II and III were considered due to their ability to concentrate more than those in Nursery I, who play mostly, both inside and outside the classroom situations. Their enrollment per class falls between 10 to 15 at the minimum, to 20 to 25 maximum. Considering this phenomena, only 6 children were sampled out of each of the selected class. The limited number becomes necessary as children of this nature are difficult to handle due to their playfulness and limited attention span, Arnheim (1954). Details of the schools are shown in Appendix A.

3.3 THE INSTRUMENTS

One of the instruments employed in this study is a set of tests adopted from the Minnesota Tests of Creative Thinkingdeveloped by Torrance (1966), titled "Thinking Creatively with Pictures, Booklet-B". Children were first exposed to various Visual Aids, mainly common-place objects around the school and home environment. The tests were constructed mainly to see the extent to which Visual Aids promote children's creative awareness, not necessarily after artistic excellence. The focus is rather on their ability to represent objects within the environment in terms of their shape, form and colour.

The scoring scheme used to assess the results is the one suggested by Yamomoto (1964). In order to validate the reliability of the tests, a pilot study was conducted. The tests consists of two types: picture construction and picture completion. As stated earlier pupils were exposed to some selected Visual Aids in the form of picture/objects, to bear some relationship with the objects concerning their shapes, forms and colours.

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3.3.1 The Tests

These tests were developed within an educational context, primarily to emphasize classroom experiences which foster and stimulate creativity (Torrance, 1962). Some of the tests were adapted from the techniques used in Southern California Tests. Also, the scores derived are based on factors identified by Guildford's research such as Fluency, Flexibility, Originality and Elaboration. Because Torrance did not seek factoriaaly pure tests, but rather sought for situations that provide models of the creative process in its natural complexity, he decided to score each test in terms of two, three or indeed all the four facrtors listed above.

Torrance Test may be grouped into three thus: Verbal, Pictorial and Auditory battery. They are labelled as: Thinking Creatively with words; Thinking Creatively with Pictures and Thinking Creatively with sound and words. In order to eliminate threat and also induce a friendly psychological climate, the tests are called "activities" while the instruments places emphasis on "having fun". The tests are designed for Nursery and Primary School children either as a group or individual test.

Thinking Creatively with words requires the use of a rather intriguing picture to which those to be tested provide various responses to some set of questions. Thinking Creatively with sound and words consists of two tests; administered by means of long - playing records which provide both the instruction and the stimuli. Sounds and images are used while those tested respond verbally and freely after listening to each stimulus. While the first text consists of four sound sequences presented four times, the second consists of ten words presented four times. Examiners are espected to give a different association each time.

Thinking Creatively with Pictures consists of three activities: Picture Construction in which a brightly coloured curved shape is pasted by the examinee on a blank sheet of paper in any position of his choice and is used as a starting point for drawing an unusual picture; "that tells an interesting exiting story"; Picture completion provides a few lines as a start for drawing a picture in each item. The instruction here stress unsual ideas. The last activity provides pair of short parallel lines or circles, with which as many different pictures as possible are to be produced. A total of four scores based on:

(a) Fluency - Production of many possibilities and variations.

(b) Flexibility - Ability to redefine, reinteprete and adapt.

(c) Originality - Production of unusual ideas and unique answers.

(d) Elaboration - Ability to add details, to build up can be obtained from this battery.

The Torrance batteries provide detailed scoring guides with many examples. The manuals also cite the results of several studies of scorer ability, with interscorer correlation falling mostly in the 80's and 90's. Means and Standard Deviations of several other grous are also included. Beacause of the ease of administration and scoring as well as the higher score reliability of the "Thinking Creativity with Pictures", this tests is therefore , adopted for use in this study. The outline of the three Activity Tests are shown in Appendix B

3.3.2 The Questionnaires

The questionnaires were aimed to obtaining general information from the respondents (pupils, proprietors as well as the teachers) from the schools selected. Such information included the level of relationship that exists between the teachers and their pupils and the Visual Aids used in teaching. Other areas covered included the methods of Visual Aids aquisition and their display for use by teachers at the respective schools. Sample of the questionnaires used for the study are presented in Appendix C.

There are two sections of the questionnaire and these were directed towards the proprietors and the teachers respectively. The questionnaire directed to the proprietors were aimed at finding general information on the schools. This relates to the history of the schools, year founded, and the present level - wheather at Nursery level only or they extend to primary or secondary levels. Also requested is information on the number of classes and the number of teachers as well as the levels of their qualifications; (Grade II, Diploma/NCE, Graduate). The remaining parts of the questionnaire cocentrated on issues directly related to Visual Aids. Types of Visual Aids, method of their procurement and usage as well as their care, including the assessment of the impact of their usage on the children were asked.

Alomost all the questions contained in the questionnaire administered on the teachers, with the exception of the firs three, dealt on issues related to Visual Aids. This is because the teacher are considered to be those directly involved in the day to day contact with the pupils and thus the once in a better position to adressed the various aspects of Visual Aids utilisation.

The results gathered through observation were used to strengthen other information collected through the other instruments. The researcher had the opportunity of observing the performance of pupils as this may indicate their level of understanding by the visual aids used in the tests.

3.3.3 The Interview

Interview was conducted among some selected teachers and pupils in order to obtain additional information in relation to the teaching methods, availability of Visual Aids among others so as to enable the researcher obtain a better understanding of the relationship between teachers and their pupils. The

questions administered on the Teachers and the Pupils during the interview/discussion are presented in Appendix D.

3.4 DATA GATHERING PROCEDURE

The questionnaires administered on both the proprietors of the schools and the teachers were a major source of data used for this study. Interviews were also conducted with the teachers as well as the pupils in order to enable the researcher accept or reject some of the views expressed by the proprietors and teachers. The third source of data for the study comprised of the outcome of the picture construction and picture completion tests mentioned earlier in this chapter. Respondents were given adequate time to complete the questionnaires while the time allowed for the tests (Activities 1-3) were as provided in the test mannual. Also, informal interviews with the children were arranged and conducted at times found suitable for them. This was done in order to obtain reliable information from the pupils in view of their playful characteristics.

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3.5 METHOD OF DATA ANALYSIS

Two methods of the analysis were used corresponding with the two distinct types of data obtained, (the interview / questionnaire of the proprietors) as well as test results were used. The outcome of the analysis are mostly presented in tables, using simple percentages, standard deviations and means.

The analysis of the test activity is derived statistically. As described in Section 3.3.1, each of the three activities consist of four factors viz: fluency, flexibility, originality and elaboration. Each of these factors were assigned a maximum score of 10 marks, making a total of 40 marks for each activity and one hundred and twenty (120) for all the activities combined thus:

Factors	Score
Fluency	10
Flexibility	10
Originality	10
Elaboration	10
Total	40

The total for each Activity is given by:

Activity I	=	40
Activity II	=	40
Activity III	=	40
Total Maximum score	=	120

Scoring of the factors and by extension the activities was done by four Jurors, who are experienced teachers with Creative Arts background, purposely selected. For ease of identification and reference, the three Activities were designated activities 1, 2 and 3 respectively while the Factors were given the designation a, b, c and d. Likewise the ten schools investigated were labelled as schools A, B, C, D, E, F, G, H, J and K respectively. This was done to conceal the true identity of the schools so as to prevent any embarrassment in the cases of schools that may have performed below others in the outcome of the analysis.

Prior to the actual analysis of the results the raw scores given by the Jurors for each of the three activities, according to the factors, were presented. The performances of the schools were then compared for each of the activities by factors using the mean scores of the four Jurors for each of the Factors. The means and standard deviations of the scores earned by all the schools were calculated as a means of determining the average performance and the correlation of the scores awarded by the Jurors.

The performances of the schools were also considered on the basis of the total scores they obtained from the Jurors for each of the activities considering all the factors. The schools were ranked from the first to the tenth position for the three activities and the outcome discussed to explain the results. The schools that took the 1st, 2nd and 3rd positions in all the activities as well as those that occupied the 8th, 9th and 10th positions were similarly discussed. Similarly the "All-in" scores earned by the schools from all the Jurors were calculated, including their means, and standard deviations and this was also used to determine the ranking of the schools.

The results obtained from the questionnaires administration and the interviews as well as those from

the activities tests were compared with the view of finding the answers to some of the questions for which this study was initially started. Furthermore the comparison also gave the opportunity for testing the hypotheses of the study. Details of the data obtained and their analysis are presented in chapter four.

3.6 THE PILOT STUDY

As it was explained in section 3.3, a pilot study was conducted prior to the full administration of the test activity. Two schools were selected for this purpose with twelve pupils taken from each school; six each from Nursery II and Reception classes. The the scores awarded by the four selected Jurors for

Tablbe 3.1 Pilot Study Test Scores for School X.

ACTIVITIES	JURORS	FACTORS a	b	c	d	TOTAL
1	First	4.4	4.6	4.6	4.4	18.0
	Second	4.4	4.9	4.2	4.2	17.7
	Third	4.7	4.2	4.6	3.8	17.3
	Fourth	5.0	3.9	4.3	5.0	18.2
2	First	8.4	7.6	6.9	6.8	29.7
	Second	7·9	7·1	6·6	6·1	27·6
	Third	7.1	7.5	6.3	6.3	27.2
	Fourth	7.0	6.1	6.3	6.1	25.5
3	First	7.9	7.2	6.4	5.9	27.4
	Second	7.6	6.6	5.9	6.6	26.7
	Third	7.1	6.0	5.7	5.5	24.4
	Fourth	7.4	6.3	6.2	5.5	25.4

Table 3.2 Pilot Study Test Scores For School Y.

ACTIVITIES	JURORS	FACTORS a	b	c	d	TOTAL
1	First	5,3	4.5	4.4	4.7	18.9
	Second	5.1	4.7	4.4	4.8	19.0
	Third	5.2	4.6	4.1	4.8	18.7
	Fourth	5.4	5.0	4.6	4.8	19.8
2	First	6.6	5.8	5.8	5.8	24.0
	Second	6.6	6.1	5.2	5.7	23.8
	Third	6.0	5.7	5.6	5.8	23.1
	Fourth	6.2	6.3	5.3	6.0	23.8
3	First	7.1	6.1	5.8	5.4	24.4
	Second	6.4	5.8	5.7	5.8	23.7
	Third	6.0	5.7	5.1	4.9	21.6
	Fourth	6.1	6.1	4.8	4.8	21.8

the three test activities are presented on Tables 3.1 and 3.2. The figures in the Tables represent the averag of the scores awarded to the twelve selected pupils by the Jurors for the respective factors of each activity. T actual scoress awarded to the pupils are shown in Appendix F. In general the numbers presented in the t Tables are in agreement with each other inrespect of each of the Factors. This statement applies to both scho and all the three activites.

Table 3.3 Pilot Study Average Jurors Scores by Factors.

SCHOOL	ACTIVITY	FACTORS a	b	c	d	TOTAL
X	1	4.63	4.40	4.43	4.35	17.81
	2	7.58	7.08	6.53	6.33	27.52
	3	7.50	6.53	6.05	5.88	25.96
Y	1	5.50	4.70	4.38	4.78	19.36
	2	6.35	5.98	5.48	5.83	23.64
	3	6.40	5.93	5.36	5.23	22.92

The variations of the lower and higher Juror scores are shown in Table 3.4. The least lower individual Juror score variation from the average scores of the JUrors are 4% and 2% for Schools X and Y respectively; while the higher individual Juror score variation from the average scores of the Jurors are 15% and 11% for the two respective schools.

Table 3.4 Variation of Juror Score from Average of Jurors Scores.

SCHOOL	Level ACTIVITY of Variation	PERCENT VARIATION OF JUROR SCORE FROM AVERAGE OF JURORS SCORES. FACTORS a	b	c	d
X	1 Lower	5	11	5	13
	1 Higher	8	11	4	15
	2 Lower	8	14	4	4
	2 Higher	10	7	6	7
	3 Lower	5	8	8	6
	3 Higher	5	10	6	12
---	---	---	---	---	---
Y	1 Lower	4	4	6	2
	1 Higher	2	6	5	1
	2 Lower	6	5	5	2
	2 Higher	4	5	6	5
	3 Lower	6	4	10	8
	3 Higher	10	3	8	11

The figures above indicate a good correlation of the scores awarded by the Jurors. It is therefore reasonable to asume that the scoring of the Jurors is reliable for use in main test.

CHAPTER FOUR

DATA COLLECTION AND DISCUSSION OF RESULTS

4.1 The DATA.

The material used for this study has been obtained from all the parties involved with the operations of Nursery Schools and these are, the proprietors, the teachers and the pupils. The principal target of interest for the study are the pupils on whom a test consisting of three activities was administered.

Table 4.1.1 Score For Activity 1 By Schools By Factor.

S/ No	SCHOOL	SCORES			
		1st Juror	2nd Juror	3rd Juror	4th Juror
		FACTORS			
		a b c d	a b c d	a b c d	a b c d
1	A	5 5 5 4	4 3 5 7	3 3 4 5	5 6 7 5
2	B	8 7 7 6	6 3 7 8	4 4 3 4	7 5 6 7
3	C	5 4 4 4	4 5 4 5	4 5 6 5	5 6 8 4
4	D	5 5 5 5	8 6 5 6	6 7 4 6	6 7 7 8
5	E	4 4 4 4	7 5 6 8	5 4 4 3	4 3 8 5
6	F	8 5 5 4	4 3 6 8	5 4 4 4	8 6 6 7
7	G	9 5 5 4	6 2 4 5	4 3 3 3	5 7 8 6
8	H	4 4 4 4	5 6 5 5	7 6 6 8	6 7 5 4
9	J	4 3 4 3	7 4 5 7	7 5 6 7	6 7 7 8
10	K	5 4 3 5	5 5 4 6	7 6 8 6	6 6 6 5

The activities are:

i) Activity 1: Picture Construction

ii) Activity 2: Picture completion

iii) Activity 3: Picture production with lines.

As stated earlier, the outlines of these activities tests are shown in Appendix B. The performance of each pupil was assessed for the following four perspectives referred to as factors:

a) Fluency
b) Flexibility
c) Originality
d) Elaboration.

Table 4.1.2 Score for Activity 2 By Schools By Factors

S/No	SCHOOL	S C O R E S 1ST JUROR 2ND JUROR 3RD JUROR 4TH JUROR F A C T O R S a b c d a b c d a b c d a b c d
1	A	4 4 4 6 5 6 7 7 8 7 7 6 8 7 6 5
2	B	7 5 5 4 5 5 5 8 5 7 6 7 6 5 8 8
3	C	5 5 6 8 8 7 8 8 8 8 8 8 6 6 7 5
4	D	6 6 7 8 7 7 8 7 8 7 7 7 8 8 8 7
5	E	4 5 5 4 6 8 9 7 8 4 5 7 9 8 6 5
6	F	5 4 5 5 7 6 7 9 9 6 9 9 8 7 8 6
7	G	6 5 5 5 8 7 6 8 7 6 8 8 9 7 9 6
8	H	5 4 4 4 8 7 7 8 5 7 8 7 8 8 7 5
9	J	4 4 4 4 7 8 7 8 8 5 7 8 6 8 9 5
10	K	6 5 5 5 8 9 9 9 9 8 8 9 9 9 8 7

Four Jurors were used for the assessment of pupils performances. Each activity was evaluated bsed on the factors outlined according to schools. The raw scores of schools for Activities 1, 2 and 3 based on the four factors a, b, c, and d are shown in tables 4.1.1, 4.1.2 and 4.1.3 respectively. In addition to the test, the pupils were also interviewed, the outcome of which is presented in section 4.2 while the outcome of the teachers and the school proprietors are in section 4.3. and 4.4. respectively.

Table 4.1.3 Score for Activity 3 By Schools By Factors

S/No	SCHOOL	SCORES			
		1ST JUROR	2ND JUROR	3RD JUROR	4TH JUROR
		FACTORS			
		a b c d	a b c d	a b c d	a b c d
1	A	5 5 5 6	6 8 8 9	5 6 7 8	8 8 6 3
2	B	4 4 4 5	6 7 8 9	8 9 8 9	7 8 3 4
3	C	6 5 5 7	7 8 8 9	7 8 9 9	4 4 6 5
4	D	7 5 6 9	8 7 8 9	8 8 7 9	3 5 4 3
5	E	8 6 5 7	6 6 7 8	7 8 8 8	3 3 5 3
6	F	8 5 6 5	7 9 8 9	7 8 7 8	6 5 3 3
7	G	7 7 6 5	7 6 7 8	6 8 8 8	6 3 4 5
8	H	7 5 5 5	7 8 9 8	6 4 6 5	7 4 5 5
9	J	5 4 4 4	6 7 8 9	8 5 6 6	5 2 3 4
10	K	8 6 6 9	8 8 8 9	7 6 7 8	4 3 3 1

4.2 Responses to Interview/Questionnaire with pupils.

As explained in the previous chapter, the procedure adopted for this investigation involves interview/discussion with pupils in addition to the "test" also administered. The outline of the interview with the pupils is contained in Appendix D. Six pupils were interviewed from each school giving a total of sixty pupils for the ten schools under investigation. The results obtained are presented in the following sections.

4.2.1 Pupils Ability to Write their Names

In the interview with the pupils, it was considered appropriate to determine how they learnt writing their names. Three options were provided from which they selected one.

Table 4.2.1 Pupils Response on the method by which they learnt writing their names.

SCHOOLS	Pupils Response to the Question "How you learn to write your name: (Figures indicate percentage of respondents)		
	By copying from Book	Through the use of the alphabets	Through other means (e.g. from a family member).
A	17	17	66
B	17	17	66
C	17	-	83
D	17	-	83
E	33	17	50
F	33	17	50
G	17	50	33
H	50	17	33
J	33	17	50
K	80	-	20
Average	31.4	15.2	53.4

Some of the questions asked were directed at determining pupils interests in their surroundings (that is the classroom). It is generally accepted that the learning environment plays a significant role in the pupils learning abilities. The questions asked sought to know if anything in their classroom interests them. Two possible responses were expected to the question - positive or negative. A follow-up question requesting the pupils to state what interests them was provided for the positive response. Furthermore the pupils were asked whether they could name some or all the items that were of interest to them. The response obtained in this regard is contained in Table 4.2.2

Another aspect of the interview was directed at finding out the attributes of teachers to their pupils. This is considered appropriate because teachers' attitude and the manner in which they conduct themselves in the school, particularly in the classroom has a bearing on the likeness which the pupils will develop towards them and the subject. Furthermore it is generally accepted that pupils who have some liking for their teachers will, most probably, tend to be more receptive and thus be in a better position to learn. Table 4.2.3 presents the results of the responses obtained.

Table 4.2.2: Pupils Interest in their Surrounding

SCHOOL	Pupils Responses to the Following Questions which they were asked. (Figures indicate percentage of Respondents)					
	Is Anything in the classroom interest you		If Yes. What is of interest		Can you name some or all items of interest	
	Yes	No	Stated	Not stated	Yes	No
A	50	50	67	33	100	0
B	33	67	50	50	50	17
C	67	33	50	50	83	17
D	67	33	50	50	83	33
E	50	50	33	67	67	0
F	67	33	50	50	100	17
G	67	33	0	100	83	17
H	67	33	33	67	50	50
J	67	33	67	33	100	0
K	83	17	83	17	67	33
Average	62	38	48	52	72	18

The children's ability to recognize colour and shapes of certain objects was also tested, they were asked the colour and sizes (big or small) of objects commonly found within the school and their home environments. They were asked to mention the colours of their uniform, school box (if any), pencil, book and ruler. They were also asked to give the relative sizes (big or small) of the table in their classroom, chair, hand cup and shoes. Pupils' responses were recorded on the basis of their being true or false. Since the items upon which information was requested are varied (ten items) the average number of true and false responses was considered and the result in Table 4.2.4.

Table 4.2.3 Pupils Likeness of their Teachers/Mates

SCHOOL	Pupils Response on Whether or Not they like their Teachers/Mates	
	Yes	No
A	83	17
B	67	33
C	83	17
D	83	17
E	83	17
F	100	0
G	83	17
H	100	0
J	67	33
K	100	0
Average	85	15

In the concluding part of the "pupils questionnaire" an attempts was made to determine what activities (if any) the pupils get involved after school. Three choices were given to the pupils among which they were requested to specify the one(s) they get involved in with after school. The three choices were:- eat and play, goes for lesson and help at home. The first choice is regarded as a vehicle for socialization and the second aids in academic ability and understanding while the third is directed towards community service. The responses obtained on this, for the ten schools under consideration is presented in table 4.2.5.

Table 4.2.4: Pupils Recognition of Colours and Sizes.

SCHOOL	Average Response to Colour Recognition (%)		Average Response to size Recognition (%)	
	True	False	True	False
A	83.0	17.0	80.0	20.0
B	83.2	16.8	86.6	13.4
C	96.3	3.7	100.0	0.0
D	96.6	3.4	83.2	16.8
E	74.8	20.2	76.6	23.4
F	90.0	10.0	83.2	16.8
G	63.4	35.6	56.6	43.4
H	76.6	23.4	83.2	16.8
J	73.4	26.6	66.6	33.4
K	96.6	3.4	66.2	33.8
Average	83.4	16.6	78.2	21.8

4.3 Interview/Questionnaire for Teachers.

The study also covers the teachers of the schools under investigation. As with the pupils, the teachers were served with a questionnaire and they were also interviewed. A total of twenty questionnaires were distributed out of which seventeen were returned. The responses of the teachers to the questions asked are presented in Tables 4.3.1 and 4.3.2. In view of the number of teachers involved the numeric assessment of the response from individual schools was not made, rather a note of the responses from each school was made.

Table 4.2.5: Pupils Activities After School Hours.

SCHOOL	Proportion of pupils participating in the Listed Activities (Percent of Respondents)		
	Eat and Play	Goes to lesson	Help at Home
A	67	17	0
B	67	17	17
C	50	33	17
D	17	17	50
E	33	50	17
F	0	33	67
G	33	33	34
H	50	33	17
J	0	0	17
K	0	0	100
Average	32	23	34

With respect to teacher qualifications, two schools were found to report not having qualified teachers. Both respondents from these schools indicated that their highest qualification was the SSCE. In this study, it is considered that the minimum qualification for a teacher to teach in a Nursery school is the Grade II. This is because it is considered necessary for a person required to teach children at the level under consideration to have some training in education. The Grade II is therefore considered the minimum for the level and holders of SSCE are deemed to be below this grade.

All the teachers that responded from six schools (60%) of the total schools under consideration) possessed at least the Grade II. Two other schools had teachers who had Grade II qualification or above as well as the SSCE holders.

Table 4.3.1 Teachers Responses to Questionnaire

SCHOOL	QUALIFICATIONS		TYPE OF V.As.				V.A. DISPLAY		
	Grade II or High.	Below GR.II	Skct	Diag	Pict	Mod	On Wall	On Brd.	Dur. Less.
A	x		x			x	x		x
B		x		x	x		x		
C	x	x			x		x		
D	x		x	x	x		x	x	
E	x	x	x	x	x	x	x	x	x
F		x				x		x	
G	x				x			x	
H	x				x		x		
J	x			x	x		x	x	
K	x			x	x			x	

On the types of visual aids in use, schools (A & F) did not report the use of pictures as VAs and only one school (E) reported using all the four kinds of VAs. The response with respect to the methods of visual aids display is also varied. Two schools reported that they use the V.A. just during lessons. Three of the schools use only one method of V.A. display but majority of them use at least two methods. The "Hang on Wall" method is by far the most widely used method and has been reported from seven schools. The least popular method is that of restricting the use of the V.A to "Just during lesson" which was reported by two schools only.

Table 4.3.2 Teachers Response to Questionnaire / Interview

ASPECTS		SCHOOLS									
		A	B	C	D	E	F	G	H	J	K
Method of Caring for VAs	Lamination				x						
	Framing		x					x			
	Careful Use		x	x	x	x				x	
	Kept untill Needed	x		x	x	x	x		x	x	x
Actions Usually Taken on a Damaged V.A.	Repairing		x	x						x	
	Replacing	x		x	x		x		x		x
	Iprovising	x						x		x	
Prefer-ences to the use of VAs.	Yes	x	x	x	x	x	x	x	x	x	x
	No										x
Reason for Teach. Particu. Class	Personal Choice			x			x				x
	Assigned By H/M	x	x	x	x	x	x	x	x	x	x
	Other Reasons						x				

As for the method of caring for V.A., eighty percent of the schools reported that they keep the V.A. until needed. This is followed by "instructing pupils on the importance of VAs which was reported by fifty percent of the schools. The least method used is that of lamination which was reported by only one school. This can be attributed to the high cost to be incured if VAs are laminated.

With respect to the action taken on damaged VA, sixty percent of the schools reported that they would normally replace the affected V.A. Three schools each reported that they would repair and improvise respectively. On the preference of using VA, respondents from nine schools reported in the affirmative while one respondent, from school C indicated the lack of preference of VAs.

Table 4.3.3 Levels of Classes Teachers Teach with Reasons

Teaching Classes	Percent of Respondents	Basis for Teaching Particular Classes	Percentage Respondents
Reception	24%	Personal Choice	13%
Nursery II	29%	Assigned by H/M	81%
Nursery I & II	12%		
Nurser I	35%	Other Reason(s)	6%

Teachers were asked to indicate the classes they teach as well as state the reason why they teach the particular class. The response obtained is presented in Table 4.3.3. The figures represent the results obtained from all the schools and do not show any special characteristics. Most of the teachers (81%) taught in classes assigned to them. Two of the teachers (13%) gave personal choice as the reason for teaching their respective classes.

All the teachers interviewed indicated that they use VAs in teaching and they were all of the view that their pupils understand more with the Visual Aids than without them. There are two basic methods of utilization of VAs given by the teachers namely hanging/sticking on wall and holding/showing to pupils. Responses to the question as to whether or not teachers enjoy teaching children at this level are persented below :-

Table 4.3.4A. Teachers Responses on Attraction to Teach in Nursery Schools.

SCHOOL	Reasons Given by the Teachers As Cause for Teaching at Nurssry Schools.
A	i) Enjoy Children's Company, their behaviour, singing and playfulness. ii) No other job to do.
B	i) Talented in teaching children and enjoy teching them. ii) Likes children and likes helping backward childern.
C	i) Enjoys teaching children due to their characteristics. ii) Children are funny to teach so likes teaching them.
D	i) Children learn quickly due to their nature. Enjoys teaching them as they are easy to control. ii) Likes children, learns from them.
E	i) There is a joy in watching children develop. ii) Teaching childern requires sacrifice.

4.4 Response to Proprietors Questionnaire.

A total of ten questionnaires were distributed to the school's proprietors of which nine were collected back. Efforts to collect the tenth proved abortive and consideration was therefore limited to the nine available ones. The information sought in the questionnaire can be classified into two categories. The first part of the questionnaire relates to information concerning the schools while the second part is concerned with the use of visual aids in the schools. The responses obtained with respect to the two categories are presented in Tables 4.4.1 and 4.4.2 respectively.

Table 4.3.4B Teachers Response on Attraction to Teach in Nursery Schools.

SCHOOL	Reason Given by Teachers as Cause for Teacting at Nursery Schools
F	i) Love for Children , they need help ii) Likes to see children learn and follow their development.
G	i) Likes to have more knowledge about children.
J	i) Likes children's way of learning. ii) Childern are easy to control if one knows the way.
K	i) Children are easy to control when handled properly. ii) Lkies to see children develop morally, socially, spiritually etc.

Issues of General Interest for Schools.

From Table 4.4.1, the ages of the schools range from six (6) to twelve (12) years. With regards to location, two (2) of the schools are located within the University Main Campus while seven (7) are in other areas of Samaru. Similarly seven of the schools are owned by individuals and two of them are owned by organisations. On levels of operation, two of the schools operate up to post-primary school level, four operate to primary school level while three are limited to Nursery level. The sizes of the schools are equally varied, the school with the smallest size has only three classes and three teachers; and the biggest school has thirty five classes and fifty five teachers. Eight of the schools reported having teachers with Diploma/NCE qualifications and only one school did not have this category of teachers, because it mainly employed Grade II holders.

Schools Response on Issues Related to Visual Aids.

Seven of the schools (78% of the respondents) obtained their VAs through purchasing and making some of them themselves. The schools were also requested to indicate the type of visual aids they have. Five types were given to them and their responses are shown in Table 4.4.2.

Table 4.4.1: Response of Proprietors on General Issues.

ASPECTS		SCHOOLS									
		A	B	C	D	E	F	G	H	J	K
School Location	Main Campus	x								x	
	Samaru Area			x	x	x	x	x	x		x
School's Length of Existance											
Type of Ownership	Individual	x		x	x	x	x	x			x
	Org'sation								x	x	
Level of School	Nursery Only	x							x	x	
	Up to Primary			x			x	x			x
	Post Prim. Level				x	x					
School Size	Number of Classes	9	-	4	14	35	7	6	3	6	4
	Number of Teachers	22	-	8	16	55	11	15	3	17	4

On the cost of visual aids, three schools or 33% of the respondents considered them to be very expensive. Two schools, 22% of the respondents viewed them as just expensive while four schools, 44% of the respondents considered them as moderate. (Table 4.4.3). With regards to the ease of acquisition, five schools, 56% of the responding schools indicated that Visual Aids are easy to obtain; four other schools 44% did not consider the acquisition of visual aids as easy. Furthermore all the responding schools indicated that they used Nigerian (local) visual aids and only two of the schools reported using foreign visual aids as well. Varied reasons were given by the schools for using locally made visual aids.

Table 4.4.2 Types of Visual Aids Owned and Used by Schools.

Types of Visual Aids in Use	RESPONSE	
	No. Of Schools	Percentage of Respondents
Models	2	22
Sketches	4	44
Charts/Diagrams	8	89
Pictures	9	100
Other (specify)	1 (toys)	11

Table 4.4.3 Response of Proprietors on Visual Aids (VAs)

ASPECTS		SCHOOLS									
		A	B	C	D	E	F	G	H	J	K
Method by which VAs are Obtained	Purchased	x		x	x	x	x		x	x	x
	Self Produce	x			x	x	x	x	x	x	x
Views on Cost of VAs	Very Expensive	x		x		x					
	Expensive							x	x		
	Moderate				x		x			x	x
	Cheap	-	-	-	-	-	-	-	-	-	-
Ease of Visual Aids Procur.	Easy to Obtain			x	x			x		x	x
	Not Easy to Obtain	x	-			x	x		x		
Origin of VAs in Use	Locally Made	x	-	x	x	x	x	x	x	x	x
	Foreign	x						x			

These include:

i) The Local Visual Aids are more realistic to the children.
ii) They are easier to recognize.
iii) Children tend to respond positively to them.
iv) Children understand quickly because they mainly contain items commonly found around them.

4.5 The Test Outcome:

As explained in section 4.1, the principal target of interest for this study are the pupils of the selected Nursery Schools. In addition to the questionnaire/interview with the pupils, a test comprising three activities was administered on the pupils. A full description of the test has been given in chapter three while the outline in which it was administered on the pupils is presented in Appendix B. The raw scores awarded by selected Jurors and based on the four factors (a, b, c and d) for activities 1, 2 and 3 are presented in Tables 4.1.1, 4.1.2 and 4.1.3 respectively. The scores are re-arranged such that the scores for all jurors for a given factor are placed together and in accordance with the schools (Appendix E). The means of these scores for Activities 1, 2 and 3 are presented in Tables 4.5.1, 4.5.2 and 4.5.3 respectively.

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4.5.1 Schools Performance in Activity 1 Based on Factors:

The mean scores for the four factors under consideration is presented on table 4.5.1. The factor with the highest mean score is factor (d) - Elaboration with 5.45. This is followed by Fluency and Originality with 5.275 and 5.225 respectively, while Flexibility got the least score of 4.875. The performance of the schools with respect to the individual factors are described in the following sections.

Factor (a): Fluency:

This factor has the second highest mean score of 5.275. The scores of the schools vary from 4.25 for schools A and E to 6.25 obtained by school D. Six of the schools (A, C, E, F, J and K) obtained scores that are below the mean for the factor while the remaining four (B, D, G and H) had scores higher than the factor mean. The standard deviation of the mean scores is 0.759 which is the highest among the factors. This means that the variations of the scores obtained by the schools is more for this factor than for the others.

Factor (b): Flexibility:

The least mean score of 4.875 is obtained by this factor and it also records the second highest standard deviation of 0.710. As with factor (a), the highest score for this factor (6.25) was obtained by

school D while the least score of 4.00 is that for school E. Similarly, six of the schools, (A, B, E, F, G and J) obtained scores less than the mean score for the factor and the remaining four schools (C, D, H and K) had scores higher than the mean score.

Table 4.5.1 Means of "All-Jurors" Scores for Activity 1

SCHOOL	FACTORS (a) Fluency	(b) Flexibility	(c) Originality	(d) Elaboration
A	4.25	4.25	5.25	5.25
B	6.25	4.75	5.75	6.25
C	4.50	5.00	5.50	4.50
D	6.25	6.25	5.25	6.25
E	4.25	4.00	5.50	5.00
F	5.25	4.50	5.25	5.75
G	6.00	4.25	5.00	4.50
H	5.50	5.75	5.00	5.25
J	5.25	4.75	4.50	6.25
K	5.25	5.25	5.25	5.5
Mean	5.275	4.875	5.225	5.450
Std. Dev	0.759	0.710	0.343	0.675

Factor (c): Originality:

School B obtained a score of 5.75 to top all the other schools for this factor while the least score of 4.50 was obtained by school J. The scores for this factor are more consistent than those of the other factors. The standard deviation of 0.343 for the scores awarded to schools under this factor is the least. Seven of the schools (A, B, C, D, E, F and K) had scores higher than the mean score and only three (G, H and J) had scores below the mean score.

Table 4.5.2 Means of "All-Jurors" Scores for Activity 2

SCHOOL	FACTORS (a) Fluency	(b) Flexibility	(c) Originality	(d) Elaboration
A	6.25	6.00	6.00	5.50
B	5.00	5.50	6.00	6.75
C	6.75	6.50	7.25	7.25
D	7.25	7.00	7.50	7.25
E	6.75	6.25	6.25	5.75
F	7.25	5.75	7.25	7.25
G	7.50	6.25	7.00	6.75
H	6.50	6.50	6.50	6.00
J	6.25	6.25	6.75	6.25
K	8.00	7.75	7.50	7.50
Mean	6.750	6.375	6.800	6.625
Std. Dev	0.833	0.637	0.587	0.710

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Factor (d): Elaboration:

The highest mean score of 5.450 was obtained by this factor and its standard deviation (0.675) is the second least for the activity. Three schools, (B, D and J) obtained a score of 6.25 each which is the highest for the factor. The least score of 4.50 was obtained by schools C and G which also together with schools A, E and H had scores that are below the mean for the factor. The remaining five schools (B, D, F, J and K) obtained scores higher than the mean score.

4.5.2 Schools Performance in Activity 2:

The mean scores of the schools, reflecting the four factors being considered, are shown in Table 4.5.2. Generally, the range of mean scores of the factors for this Activity is close. The highest mean score of 6.80 is obtained by factor (C) - Originality and this is followed by that of factor (a) - Fluency with a mean score of 6.75. Factor (b) - Flexibility obtained the least mean score of 6.375 while factor

(d) - Elaboration had a score of 6.625. The performances of the various schools in each of the factors are discussed in the following sections.

Factor (a): Fluency:

The mean score for this factor (6.75) is the second highest for the Activity although it records the highest standard deviation of 0.833. The means the variation of the scores obtained by the various schools is more for this factor than for the others. School K obtained the highest score of 8.00 and is followed by school G with a score of 7.50 while the least score of 5.00 was obtained by School B. Four schools each (A, B, H and J) and (D, F,

Table 4.5.3 Means of "all-Jurors" Scores for Activity 3

SCHOOL	F A C T O R S			
	(a) Fluency	(b) Flexibility	(c) Originality	(d) Elaboration
A	6.00	6.75	6.50	6.50
B	6.25	7.00	5.75	6.75
C	6.00	6.25	7.00	7.50
D	6.50	6.25	6.25	7.50
E	6.00	5.75	6.25	6.50
F	7.00	6.75	6.00	6.25
G	6.50	6.00	6.25	6.50
H	6.75	5.25	6.25	5.75
J	6.00	4.50	5.25	5.75
K	6.25	5.75	6.00	6.75
Mean	6.325	6.025	6.150	6.575
Std. Dev	0.355	0.759	0.459	0.602

G and K) obtained scores below and above the mean score of the factor respectively. The remaining two schools (C and E) had scores of 6.75 which is equal to the mean score.

Factor (b): Flexibility:

This factor obtained the least mean score for the Activity (6.375) and its standard deviation (0.637) is the second least. School K obtained a score of 7.75 to top other schools for this factor while the least score of 5.5 was obtained by School B. Six schools, (A, B, E, F, G and J) had scores with values lower than the mean score for the factor and the scores of Schools C, D, H and K are above the mean score.

Factor (c): Originality:

This factor had the highest mean score (6.80) and the least standard deviation (0.587) for this Activity. Schools D and K had scores of 7.50 which is highest while the least score of 6.00 was obtained by schools A and B. Five of the schools, C, D, F, G and K obtained scores higher than the mean score for the factor while the other schools, A, B, E, H and J had scores that were lower than the mean score.

Factor (d): Elaboration:

School K obtained a score of 7.50 to top all other schools in this factor; it is closely followed by three other schools, C, D and F with 7.25. The least score of 5.50 was obtained by School A and the standard deviation for the factor is 0.710 which is second highest for Activity. Six of the schools B, C, D, F, G and K had scores that are higher than the mean score for the factor while the other four schools, A, E, H and J had scores that are below the mean score.

4.5.3 Schools Performance in Activity 3:

Table 4.5.3 shows the mean "All-Jurors" scores as obtained by the respective schools for Activity 3. The values of the mean scores for the four factors are close, ranging from the highest value of 6.575 for factor (d) - Elaboration to the least value of 6.025 for factor (b) - Flexibility. Individual schools performances with respect to the four factors are discussed in the sections that follow.

Table 4.5.4 Schools Ranking Based on Their Positions in "All-Jurors" Mean Scores.

SCHOOL	POINTS EARNED BASED ON MEAN SCORES			TOTAL POINTS	FINAL POSITION
	Activity One	Activity Two	Activity Three		
A	17	9	28	54	8
B	36	10	26	72	5
C	21	31	31	83	3
D	37	36	33	106	1
E	15	17	22	54	8
F	24	27	26	77	4
G	16	27	27	70	6
H	24	19	21	64	7
J	23	18	8	49	10
K	27	40	22	89	2

Factor (a): Fluency:

School F obtained a score of 7.00 to top all the other schools for this factor. School H comes a close second with a score of 6.75 while the least score of 6.00 is obtained by four (4) schools, A, C, E and J. The standard deviation for the factor is 0.355 which is the least for the Activity. Six of the schools, A, B, C, E, J and K had scores below the mean score for the factor and the remaining four schools, D, F, G and H had higher scores than the mean.

Factor (b): Flexibility:

This factor records the least mean score for this Activity with a value of 6.025. On the individual schools performances, school B had the highest score of 7.00 and it is closely followed by School A with 6.75. The least score for the activity, obtained by School J, is 4.50 and the standard deviation is 0.759 which is the highest for the activity. Five schools each had their scores below and above the mean score

for the activity which are Schools E, G, H, J and K and A, B, C, D and F, respectively.

Factor (c): Originality:

The mean score for this factor is the second lowest for the Activity and its standard deviation is also the second least. In terms of individual schools' performance, School C obtained the highest score of 7.00 while School J obtained 5.25 as the least score. Six schools, A, C,. D, E, G and H had scores higher than the mean score of the factor while four schools B, F, J and K scored below the mean score.

Factor (d): Elaboration:

This factor obtained a mean score of 6.575 to top all the other factors. Two schools C and D scored 7.50 each which is the highest score for the Activity. Likewise, two other schools, H and J obtained a score of 5.75 each which is the least for the factor. The standard deviation for the factor is the second highest with a value of 0.62. Only four schools B, C, D and K had scores above the mean score while the six others, A, E, F, G, H and J scored below the mean.

4.5.4 Schools Ranking Based on Positions from Mean Scores:

In the previous section, the performance of the schools with respect to the four factors being considered has been discussed. The mean scores of each of these factor in comparison with those of others have also been discussed.

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It may be appropriate to find out how each of the schools performed on the basis of the means of the scores awarded by the Jurors. This is done by awarding points to the schools depending upon their position, when ranked with other for a given factor of an Activity. The school in the first position scored 10 points, the second 9 points -- and the school in the last position (10th) gets 1 point. The positions of the schools in the respective Activities were determined on the basis of the "mean scores" awarded by the Jurors as earlier presented in Tables 4.5.1, 4.5.2 and 4.5.3 . The total pointss earned by each school for each of the Activities and the total for all the schools are shown in Table 4.5.4. Obviously the school with better performance in the Activities is to be indicated by a higher total score. This can therefore be

used to actually find a final ranking of the schools and this is indicated in the same Table. However the individual positions of the schools in the three Activities are shown in Table 4.5.5. From Table 4.5.4, it can be seen that School D has a total of one hundred and six (106) points and come first. It is followed by Schools K and C in the second and third positions with eighty nine (89) and eighty three (83) points respectively. total points earned School J obtained the least point (49) to be placed in the last (10th) position.

Table 4.5.5 Schools Positions Based on Scores for Each Activity

SCHOOL	POSITINS ACCORDING TO ACTIVITY		
	Activity One	Activity Two	Activity Three
A	10	9	4
B	2	10	4
C	8	3	1
D	1	2	2
E	9	8	8
F	4	4	3
G	7	4	6
H	6	6	9
J	3	6	10
K	4	1	6

Table 4.5.6 Points Scored By Schools for Activity 1

SCHOOLS	JURORS. (JR) JR1	JR2	JR3	JR4	Mean Score	Schools Position
A	19	18	15	23	18.75	10
B	28	24	14	25	22.75	2
C	17	18	20	23	19.50	8
D	20	25	23	28	24.00	1
E	16	26	15	20	19.25	9
F	22	21	17	27	21.75	4
G	23	17	13	26	19.75	7
H	16	21	27	22	21.50	6
J	14	23	25	28	22.50	3
K	17	20	27	23	21.75	4

4.5.5 Schools Performances in Respective Activities:

In sections 4.5.1 to 4.5.3 the performances of schools in each of the three Activities have been discussed in accordance with four aspects of the test (factors) under consideration, namely, fluency, flexibility, originality and elaboration. The schools have been ranked on the basis of their positions in the respective factors. In this section, the performances of the schools is to be considered based on the actual scores awarded to them by the Jurors for the respective activities rather than the mean scores used in sections 4.5.1 to 4.5.3.

Schools' Performances in Activities 1, 2 and 3:

The points earned by each school for Activities 1, 2 and 3 are presented in Tables 4.5.6, 4.5.7 and 4.5.8 respectively. The means of the scores awarded to each school by the Jurors are also indicated and using these means the schools are ranked from the first to the tenth positions. The outcome of this is presented in Table 4.5.5. The schools that occupy the first, second and third positions as well as the

eighth, nineth and tenth positions for the three activities are shown in Table 4.5.9.

4.5.6 The Over-All Performances of Schools:

So far, the performances of the schools have been considered either on the basis of factor or the respective activities of the test. Different schools occupy the first and second as well as the nineth and tenth positions for each factor and/or activity. An attempt has been made to rank the overall performances of the schools on the basis of the positions they occupied in the respective activities. The outcome of this is presented in Table 4.5.4. Although this ranking may have some merit, it is not quite qualitative in the sense that positions do not take cognisance of the actual scores earned by each school. It is considered a better approach to use the marks awarded to each school by each of the Jurors in respect of all the activities. These marks - referred to as the "All-In" scores are given in Table 4.5.10 together with the mean scores and the standard deviation of each of the schools. The ranking of the schools has also been indicated and it is based upon the mean scores.

As in the ranking based on the position occupied in the respective activities, Schools D and K occupy the first and second positions here. The third and fourth positions are occupied by Schools F and C respectively and this is a reverse of what was obtained in the earlier consideration, when School C was in the third position and School F in the fourth. There is also a change in respect of the last (10th) position, due to a tie of mean scores which places schools A and E in the 9th position. These schools scored equal points and were therefore placed at the 8th position in the previous analysis. However, the position is different for schools G and J who originally came 6th and 10th respectively but now took up the 5th and 8th positions respectively.

Table 4.5.7 Points Earned By Schools for Activity 2

SCHOOLS	JURORS (JR)				Mean Score	Schools Position
	JR1	JR2	JR3	JR4		
A	18	25	28	26	24.25	9
B	21	23	25	27	24.00	10
C	24	31	32	24	27.75	3
D	27	29	29	31	29.00	2
E	18	30	24	28	25.00	8
F	19	29	33	29	27.50	4
G	21	29	29	31	27.50	4
H	17	30	27	28	25.50	6
J	16	30	28	28	25.50	6
K	21	35	34	33	30.75	1

Table 4.5.8 Points Eared by Schools for Activity 3

SCHOOLS	JURORS (JR)				Mean Score	Schools Position
	JR1	JR2	JR3	JR4		
A	21	31	26	25	25.75	4
B	17	30	34	22	25.75	4
C	23	32	33	19	26.75	1
D	27	32	32	15	25.50	2
E	26	27	31	14	24.50	8
F	24	23	30	17	26.00	3
G	25	28	30	18	25.50	6
H	22	32	21	21	24.00	9
J	17	30	25	14	21.50	10
K	29	33	28	11	25.25	6

This indicates an improvement in their performance which can be attributed to the numerical values of

the scores obtained. However the position of schools B and H (5th and 7th) respectively remained unchanged. As mentioned earlier, the use of "All-In" scores was aimed at presenting a broad overview of the performances of pupils and schools as will be referred to in further discussion.

4.5.7 Variations of Juror Scores:

A review of the marks awarded to the pupils for various aspects of the test shows that the assessment of the Jurors differ for almost all the factors/activities. This is evident from the marks they award to the various items.

Table 4.5.9 Schools in the firs and last three Positions

ACTIVITY NUMBER	POSITION OF RANKING					
	First	Second	Third	Eighth	Nineth	Tenth
1	D	B	J	C	E	A
2	K	D	C	E	A	B
3	C	D	F	E	H	J

It is for this reason that mean values of the scores have been used to assess some aspects of the schools performances. The mean values supposedly take care of the variations that exist between the individual marks awarded by the Jurors. Despite this fact, it is important to know the extent of variation between these marks - standard deviation is a factor by which this was done. It is for this reason that the standard deviation of the various scores were computed and shown in the respective tables. In general, the values of the standard deviation vary considerably for all the scores, although they are within similar range for a given set of scores. Despite the high values of the standard deviation in certain cases, all the scores obtained have been used in the analysis without ignoring any of them.

4.5.8 Pupils Performance With Respect to Factors:

In Sections 4.5.1, 4.5.2 and 4.5.3, the performances of pupils with respect to factors (Fluency, Flexibility, Originality and Elaboration) have been discussed on the basis of their schools as well as the three main activities. In this section, the overall performance of the pupils with respect to the factors

(regardless of the schools) is considered. This is done by considering the mean scores of the pupils in the factors under the various Activities, (Table 4.5.11).

Table 4.5.10 Schools Positions Based on "All-In" Scores

SCHOOLS	ALL-IN SCORES BY JURORS				Mean Score	Std Dev	Position
	JR1	JR2	JR3	JR4			
A	58	74	69	74	68.8	7.5	9
B	66	77	73	74	72.5	4.7	5
C	64	81	85	66	74.0	10.6	4
D	74	86	84	74	79.5	6.4	1
E	60	83	70	62	68.8	10.4	9
F	65	83	80	73	75.3	8.0	3
G	69	74	72	75	72.5	2.7	5
H	55	83	75	71	71.0	11.8	7
J	47	83	78	70	69.5	15.9	8
K	67	88	89	67	77.8	12.4	2
Mean.	63	81	78	71	73.0	-	-

The outcome shows that Factor (d) - Elaboration has a higher mean score (6.22) and it is followed by Factor (a) - Fluency (6.12), Factor (c) - Originality (6.06) and Factor (b) - Flexibility comes last with 5.76. With respect to the three major Activities, Activity 2 - Picture Completion records the highest mean score (6.64) and it is followed by Activity 3 - Picture Production with Lines which records 6.27 while Activity 1 - Picture Construction got the least point of 5.21.

Hypothesis Number 3: Nursery Schools Teachers who use Visual Aids Consider them Essential for the Benefit of Children's Understanding.

The main focus of this Hypothesis is the teachers views of the essence of VAs to children's understanding. This view is not necessarily connected with the outcome of the test Activity conducted on the children. The most appropriate testing place for this Hypothesis, therefore, is the response of the teachers to the questionnaire as well the interview held with them. This has earlier been presented and discussed in Section 4.3 and it was then concluded that teachers are of the view that **their pupils understand more with VAs than without them.** The implication of this is that the teachers consider VAs as desirable rather than an absolute necessity (essential) for children's understanding. The outcome of this Hypothesis is therefore positive.

Hypothesis Number 2: Children Gain Effective Understanding when these aids (VAs) are well Manipulated.

This Hypothesis considers the manipulation of VAs as having a direct relation to the understanding of children, the greater the manipulation of VAs the more effective the understanding of the children will be. In this study, the manipulation of VAs is considered to be related to their variety, that is, several kinds of them as well as the number of ways they are utilized. For this Hypothesis to be true, then it is to be expected that children in a school that has greater variety of VAs and utilizes (displays) them in more ways than the others should do better in the Activity tests. The assessment is now done by considering four schools, two each on upper and lower segments of the factors.

Information relating to VAs manipulation, that is their variety and ways of display is contained in Table 4.3.1. The schools on the upper and lower segments of each of the criteria are extracted as follows:

Manipulation Criteria.	Upper Segment Schools	Lower Segment Schools
Types of VAs	School E (4 types) School D (3 types)	Schools C, G, & H. (1 type each)
Modes of VAs Display	School E (3 types) Schools D & J (2 types)	Schools B, C, F, G, and K (1 type each)

The above information is compared with the list of schools occupying the first three and last three positions in the Activity tests, as shown in Table 4.5.9. The two upper segments schools for both criteria are schools E and D. and considering the positions they occupy in Table 4.5.9, it is seen that school D took the 1st position in Activity 1 and the 2nd positions in both Activities 2 and 3. This seems to be in agreement with the Hypothesis currently under review. On the other hand, school E occupied the 9th position in Activity 1 and the 8th positions in both Activities 2 and 3 which contradicts the Hypothesis.

Considering the lower segments schools, schools C and G feature on both criteria but when their respective positions in Table 4.5.9 are considered a different message seem to emerge. For example, school C took the 1st , 3rd and 8th positions in Activities 3, 2 and 1 respectively and this contradicts the insinuation of the Hypothesis; further more school G did not feature at all in the 1st to the 3rd as well as the 8th to the 10th positions. A similar picture emerges from the positions occupied by the schools based on the "All-in" scores (Table 4.5.10). From the above discussions it is reasonable to say that the test for this Hypothesis is inconclusive.

Hypothesis Number 1: The Provisions of Appropriate Visual Aids in Nursery Schools are desirable in Promoting Children's learning Capacity.

The outcome of the test of Hypothesis number 3, presented earlier, can be used in this case as well. It has been stated then that teachers consider VAs as being desirable rather than essential for children's

understanding. The present Hypothesis did not only refers to the provision of VAs but specifically stated "APPROPRIATE" Visual Aids which further reinforces the situation. On the basis on this it is only fair to conclude that the test of this Hypothesis is positive.

It is proper at this juncture to reconsider questions 3 and 4 under "Statement of the Problem" and objective number 2 under "Aims and Objectives" , the considerations of which were deferred earlier on. All the three items, namely the two questions and the objective can be said to address one common theme. They aim at quantifying the effectiveness of using VAs for teaching at Nursery Schools. From the outcome of the tests of the respective Hypotheses, a conclusive answer cannot be provided for the questions and neither could a definite statement be made in respect of the said objective. The main reason for this is conclusion reached in respect of the test of the second Hypothesis.

Obviously there is a need to find the right answers to the questions that have remained unanswered, however the data collected and the results of the analysis made during the course of this study are not adequate to provide these answers. This deficiency has been identified and it is part of the areas for which further study has been suggested.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 *Conclusions*

The education of children has always occupied a position of eminence particularly among most parents who are often eager and prepared to go to any extent to ensue that their children have a good start in the "battle" for acquiring knowledge. The positions of such parents may not be unconnected with general feelings of the decline of the standard of education in most public schools. The competition to get into any of the few still fairly good public schools, such as those owned by established institutions (eg. the A. B. U. Staff school) is often high. Parents therefore start educating their children at the pre-primary level (in Nursery Schools) in an attempt to ensure the eventual success of their children.

Education at this level is not out of tune with the general philosophy of education in the country. Indeed the revised National Policy on Education (1981) defines pre-primary education as the education given in an educational institution to children aged 3 to 5 years prior to entering primary school. The fact that children at this early age lack any measure of prolonged attentiveness but are almost always playful, Visual Aids have been widely considered to be important components of the ingredients required to teach them. In this study an attempt has been made to establish the creative awareness of children through the use of Visual Aids.

Children from selected Nursery schools within Samaru area were the target of the study and the procedure adopted has been fully described in Chapter three. The results are presented and discussed in the previous chapter and from the outcome of the analysis made thereof the following conclusions are drawn.

i) Nursery Schools in Samaru Area are provided with Visual Aids that are generally considered appropriate by the teachers as well as the Proprietors of the schools.

ii) Nursery schools teacher consider Visual Aids to be a means of enhancing the learning of children - and thus they are not "essential" but rather desirable.

iii) Pictures are the most common type of Visual Aids used by Nursery schools while sketches are the least used.

iv) The cost of Visual Aids is considered to be expensive or very expensive by most Nursery schools Proprietors who in most cases produce some of the Visual Aids for their schools using locally available materials.

v) There seems to be no correlation between children's learning capacity and the number of different kinds of Visual Aids or the ways of displaying them.

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5.2 Recommendations

Based on the findings, the following recommendations are made.

1. There is a need to give higher priority to the provisions of Visual Aids in Nursery Schools to enhance children's learning.
2. Only qualified teachers, particularly those with interest in children should be employed for teaching in Nursery Schools.
3. Greater care should be given for the handling and usage of Visual Aids in Nursery Schools.
4. There is a need to establish a minimum level of Visual Aids availability for Nursery Schools.
5. Nursery schools teachers should explore the possibilities of adapting common items for use as Visual Aids in schools.
6. There is a need for an effective supervisory machinery for monitoring Nursery Schools to ensure they conform with the expected standards.
7. Nursery Schools Proprietors should have a forum for discussing common problems including those related to the acquisition and utilization of Visual Aids.

5.3 Suggestions for further Studies.

From the outcome of this study, definite answers to some of the questions raised could not be found because the data collected could not provide adequate information. Obviously, the limitations in terms of time, finance and other considerations did not permit the extension of the study. Furthermore , in addition to the initial study questions, others that required to be answered also came up in the course of the study. It is in this regard that the following areas are identified as those requiring further investigations.

1) A research of similar nature to this one should be done for two sets of pupils, one set exposed to Visual Aids for a period of time while the other is not and both sets are then tested.

2. This type of research can also be done at Primary school level, where the response from response could be in better form due to the age of the children.

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APPENDIX A

Alphabatical Listing of the Schools Studied

Serial Number	Name of School
1	Aunty Grace School Samaru
2	Child Development and Research Centre
3	God's Time Nursery/Primary School
4	Happy Children Nursery/Primary School
5	Laurat Nursery School
6	Model Learning Centre Samaru
7	Morning Star Nursery/Primary School
8	Unity Children School
9	Vital Years Nursery/Primary School
10	Zakis Islamic Nursery & Primary School

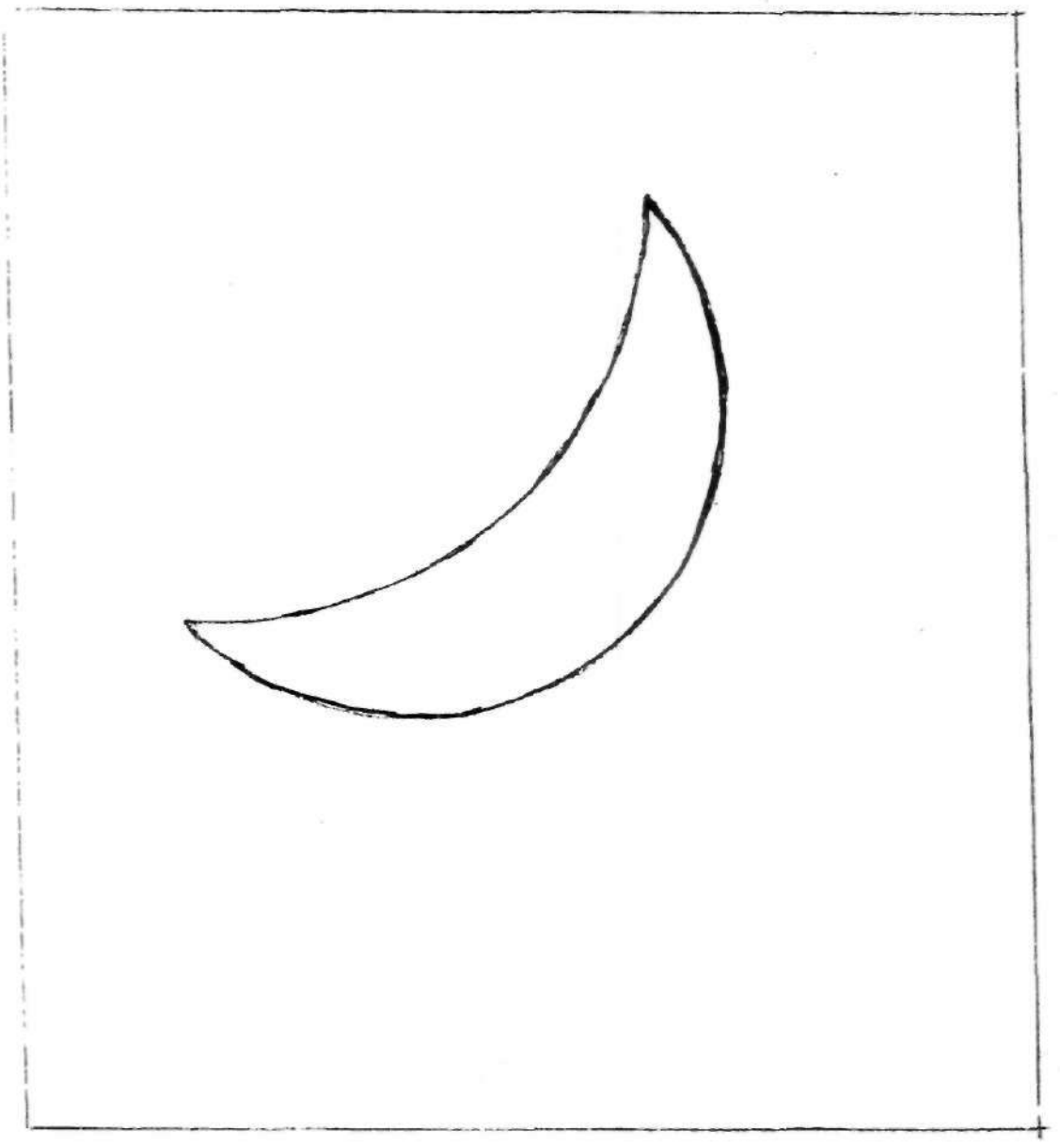
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Note: This listing is alphabatical and it is not related to the numbering of the Schools (A - K) done in the main body of this work.

APPENDIX B

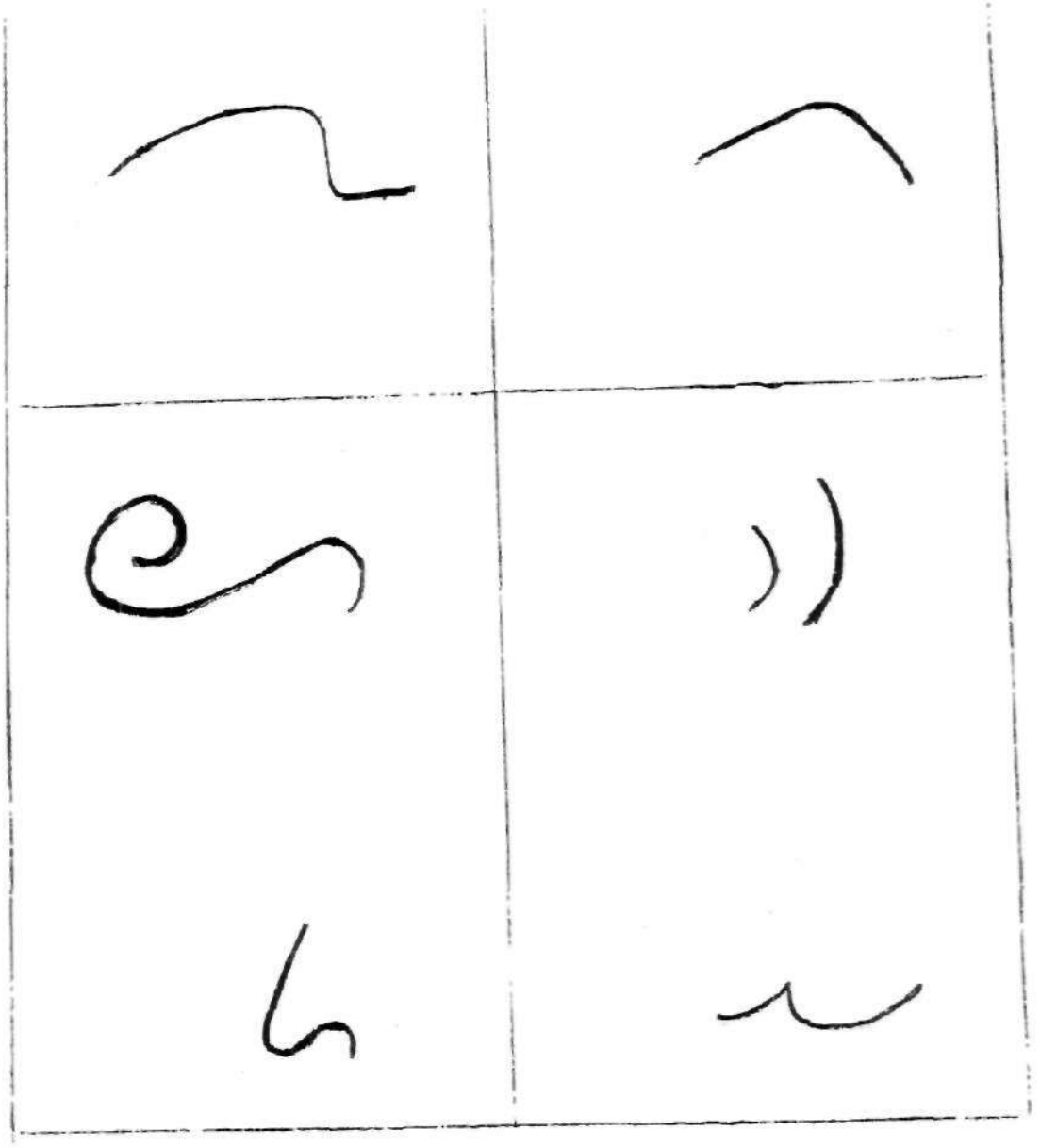
Outline of Activity Tests

Activity ONE: Picture Construction



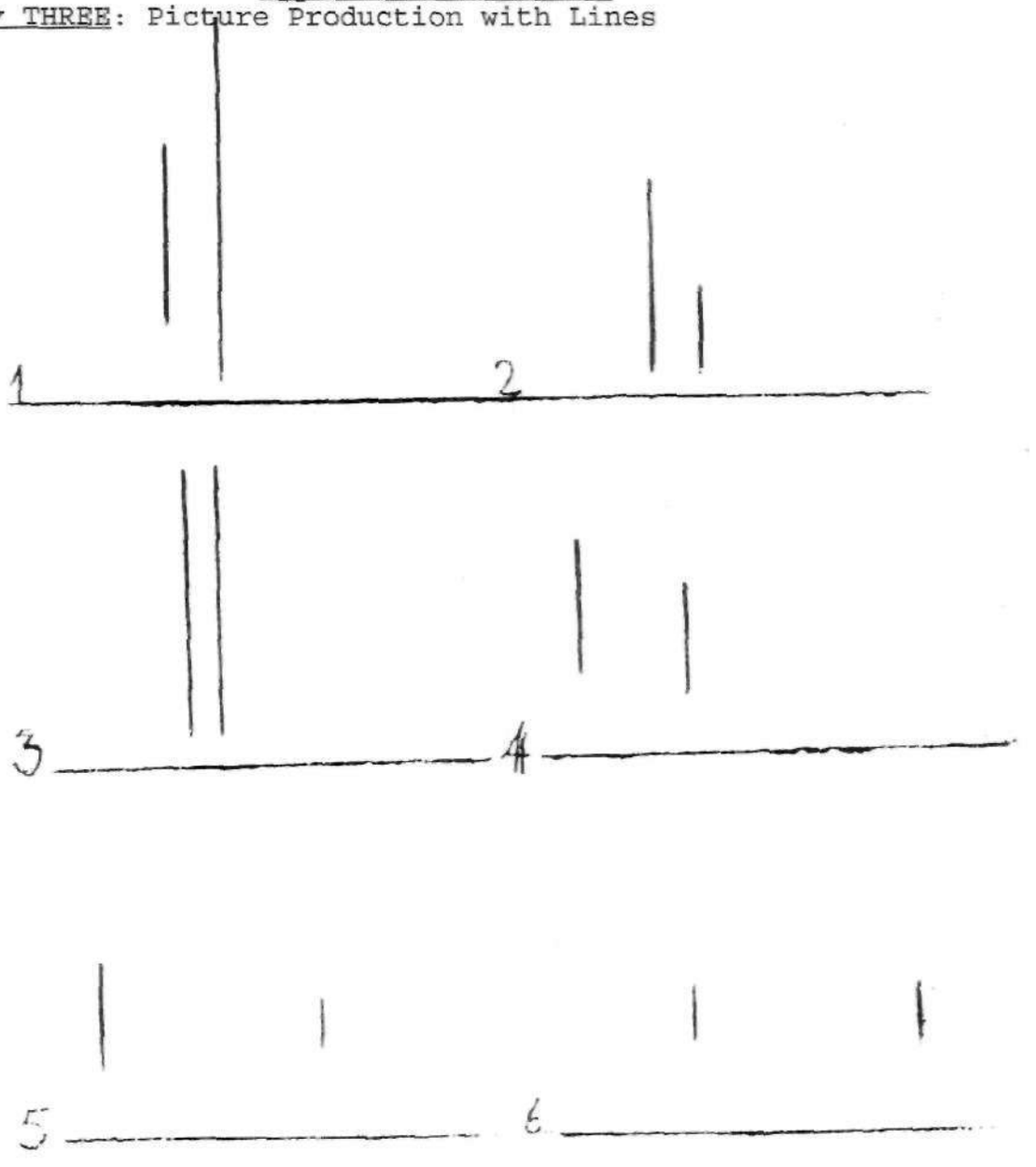
Appendix B Continues

Activity TWO: Picture Completion



Appendix B Continues

Activity THREE: Picture Production with Lines



APPENDIX C

The Sample Questionnaires for the Study

(a) The Questionnaire to Proprietors

1. Name of School:.....
2. Location:.....
3. Year of Founded:.....
4. School Ownership:
   (a) Individual ( )
   (b) Organization ( )
   (c) Other (specify): ( )
5. Does the school end at Nursery Level?.....
   (a) Yes ( ) (b) No ( )
6. If your answer to 5 above is No, would you please indicate the appropriate level below?
   (a) Primary ( ) (b) Secondary ( )
   (c) Tertiary ( )
7. Number of Classes:..... Number of Teachers:.....
8. Teachers' Qualification(s):
   (a) Grade II ( ) Diploma/N.C.E. ( )
   (c) Graduate ( ) Others (specify):.....
9. Do you purchase your visual aids or do you produce them yourself?

   .....

   .....

   .....

Appendix C Continues

10. What type do you have?

(a) Models ( ) (b) Sketches ( )

(c) Charts/Diagrams ( ) (d) Pictures ( )

(e) Others(specify):.....

11. How expensive are the aids you buy?

(a) Very Expensive ( ) (b) Expensive ( )

(c) Moderate ( ) (d) Cheap ( )

12. Are these aids easy to obtain in the open market?

(a) Yes ( ) (b) No ( )

13. If they are easy to obtain, what do you thing are the causes?

.....
.....
.....

14. Are the aids you use Nigerian or Foreign?

(a) Nigerian ( ) (b) Foreign ( )

15. If Nigerian, do you get them from local people or from skilled experts?

(a) Local ( ) (b) Skill Expert

(c) Why.....

16. Do you patronize Nigerian teaching (visual) aids as they depict our culture?

(a) Yes ( ) (b) No ( )

17. If Yes, what is their impact on the children?

.....
.....
.....

Appendix C Continues

(b) Questionnaire to Teachers

1. Introduction:.....

2. Name of School:.....

3. Qualification(s):

   (a) Grade II ( ) (b) Diploma/N.C.E ( )

   (c) Graduate ( ) (d) Others (specify):.....

4. Which class do you teach?

   (a) Nursery I ( ) (b) Nursery II ( )

   (c) Nursery III ( )

5. What kind of Visual/Teaching Aids do you use?

   (a) Sketches ( ) (b) Diagrams/Charts ( )

   (c) Pictures ( ) (d) Models ( )

6. How do you display your aids in the Classroom?

   (a) Stick on Wall ( ) (b) Paste on Boards ( )

   (c) Hang on Wall ( )

   (d) Just Used During Lesson Session ( )

   (e) Others(specify):.....

7. How do you take care of your Aids?

   (a) By Laminating ( ) (b) By Framing ( )

   (c) By instructing the pupils the importance of the Aids ( )

   (d) By keeping them safe until needed ( )

   (e) Other means (specify):.....

Appendix C Continues

8. If a useful Aid is damaged, how do you repair it?

(a) By Repairing ( ) (b) By Replacing ( )

(c) By Improvising it with another one ( )

(d) By throwing it away ( )

(e) Other means (specify):.....

9. Do you enjoy teaching with all types of Visual Aids?

(a) Yes ( ) (b) No ( )

APPENDIX D

Questions for Interview/Discussion with Teachere & Pupils

(a) Interview with Teachers

1. Introduction of Researcher to Teachers
2. What is your rank here?

   (a) Teacher ( ) (b) Attendant ( )

   (c) Other Rank (specify):.....
3. If teacher, which class do you teach?.....
4. Why do you teach this particular class? Because,

   (a) I choose to teach this class

   (b) I was assigned to teach the class

   (c) Other reason(s) (Please, specify):.....
   .....
5. Do you use Visual Aids in teaching?

   (a) Yes ( ) (b) No ( )
6. If Yes how do you use them? .....
   .....
   .....
7. Do your pupils understand more with Visual Aids or without?

   (a) Yes ( ) (b) No ( )
8. What type(s) do you use?

   (a) Models ( ) (b) Pictures ( )

   (c) Sketches/Diagrams ( ) (d) Objects ( )
9. Do Visual Aids ease your teaching especially when it is a new concept to learn?

   (a) Yes ( ) (b) No ( )

Appendix D Continues

10. Do they show interest in them?

(a) Yes ( ) (b) No ( )

11. What other methods do you use when your children did not understand your lesson?

.....
.....
.....

12. When appropriate Visual Aids are not available, what do you do?

(a) Improvise ( ) (b) Else ( )

13. Do you enjoy teaching, in Nursery Schools?

(a) Yes ( ) (b) No ( )

14. If Yes or No (please give reasons):.....
.....
.....
.....
.....

15. What do you think about the Government privatizing the NurserySchools?.....
.....
.....
.....
.....
.....

(b) Interview (discussion) with Children

Discussion will focus on general knowledge, by using the Visual Aids as mediators.

1. What is your Name:.....

2. How do you get to write your name?

(a) By the writing on his book by the teacher ( )

(b) By the Alphabet ( )

(c) Other means (specify):.....
.....

Appendix D Continues

3. What can you see in the Classroom that interests you most?.....
.....

4. Why?.....
.....

5. Can you name all or some of them?.....
.....
.....

6. I know you like your teacher/mates. They are good, can you tell me why?.....
.....
.....

7. What is the colour of your:

(a) Uniform.....
(b) Box.....
(c) Pencil.....
(d) Book.....
(e) etc.:.....
.....

8. What is the shape of your:

(a) Table.....
(b) Chair.....
(c) Hand.....
(d) Cup.....
(e) etc.:.....
.....
.....
.....

9. Some questions may lead to others - in all the above.

APPENDIX E

ACTIVITY 1

_all jurors scores for Given factors by schools

SCHOOL	FACTOR	SCORES				MEAN SCORE
		JR1	JR2	JR3	JR4	
A	a	5	4	3	5	4.25
	b	5	3	3	6	4.25
	c	5	5	4	7	5.25
	d	4	7	5	5	5.25
B	a	8	6	4	7	6.25
	b	7	3	4	5	4.75
	c	7	7	3	6	5.75
	d	6	8	4	7	6.25
C	a	5	4	4	5	4.50
	b	4	5	5	6	5.00
	c	4	4	6	8	5.50
	d	4	5	5	4	4.50
D	a	5	8	6	6	6.25
	b	5	6	7	7	6.25
	c	5	5	4	7	5.25
	d	5	6	6	8	6.25
E	a	4	7	5	4	4.25
	b	4	5	4	3	4.00
	c	4	6	4	8	5.50
	d	4	8	3	5	5.00

APPENDIX E

ACTIVITY 1 Continues

SCHOOL	FACTOR	SCORES				MEAN SCORE
		JR1	JR2	JR3	JR4	
F	a	8	4	5	8	6.25
	b	5	3	4	6	4.50
	c	5	6	4	6	5.25
	d	4	8	4	7	5.75
G	a	9	6	4	5	6.00
	b	5	2	3	7	4.25
	c	5	4	3	8	5.00
	d	4	5	3	6	4.50
H	a	4	5	7	6	5.50
	b	4	6	6	7	5.75
	c	4	5	6	5	5.00
	d	4	5	8	4	5.25
J	a	4	7	7	6	5.25
	b	3	4	5	7	4.75
	c	4	5	6	7	4.50
	d	3	7	7	8	6.25
K	a	5	5	7	6	5.75
	b	4	5	6	6	5.25
	c	3	4	8	6	5.25
	d	5	6	6	5	5.50

APPENDIX E

ACTIVITY 2

SCHOOL	FACTORS	SCORES				MEAN SCORE
		JR1	JR2	JR3	JR4	
A	a	4	5	8	8	6.25
	b	4	6	7	7	6.00
	c	4	7	7	6	6.00
	d	6	7	6	5	5.50
B	a	7	5	5	6	5.75
	b	5	5	7	5	5.50
	c	5	5	6	8	6.00
	d	4	8	7	8	6.75
C	a	5	8	8	6	6.75
	b	5	7	8	6	6.50
	c	6	8	8	7	7.25
	d	8	8	8	5	7.25
D	a	6	7	8	8	7.25
	b	6	7	7	8	7.00
	c	7	8	7	8	7.50
	d	8	7	7	7	7.25
E	a	4	6	8	9	6.75
	b	5	8	4	8	6.25
	c	5	9	5	6	6.25
	d	4	7	7	5	5.75

APPENDIX E

ACTIVITY 2 Continues

SCHOOL	FACTORS	SCORES				MEAN SCORE
		JR1	JR2	JR3	JR4	
F	a	5	7	9	8	7.25
	b	4	6	6	7	5.75
	c	5	7	9	8	7.25
	d	5	9	9	6	7.25
G	a	6	8	7	9	7.50
	b	5	7	6	7	6.25
	c	5	6	8	9	7.00
	d	5	8	8	6	6.75
H	a	5	8	5	8	6.50
	b	4	7	7	8	6.50
	c	4	7	8	7	6.50
	d	4	8	7	5	6.00
J	a	4	7	8	6	6.25
	b	4	8	5	8	6.25
	c	4	7	7	9	6.75
	d	4	8	8	5	6.25
K	a	6	8	9	9	8.00
	b	5	9	8	9	7.75
	c	5	9	8	8	7.50
	d	5	9	9	7	7.50

APENDIX E continues
ACTIVITY 3

SCHOOL	FACTORS	SCORES				MEAN SCORE
		JR1	JR2	JR3	JR4	
A	a	5	6	5	8	6.00
	b	5	8	6	8	6.75
	c	5	8	7	6	6.50
	d	6	9	8	3	6.50
B	a	4	6	8	7	6.25
	b	4	7	9	8	7.00
	c	4	8	8	3	5.75
	d	5	9	9	4	6.75
C	a	6	7	7	4	6.00
	b	5	8	8	4	6.25
	c	5	8	9	6	7.00
	d	7	9	9	5	7.50
D	a	7	8	8	3	6.50
	b	5	7	8	5	6.25
	c	6	8	7	4	6.25
	d	9	9	9	3	7.50
E	a	8	6	7	3	6.00
	b	6	6	8	3	5.75
	c	5	7	8	5	6.25
	d	7	8	8	3	6.25

APENDIX E aActivity 3
continues

SCHOOL	FACTOR	S C O R E S				MEAN SCORE
		JR1	JR2	JR3	JR4	
F	a	8	7	7	6	7.00
	b	5	9	8	5	6.75
	c	6	8	7	3	6.00
	d	5	9	8	3	6.25
G	a	7	7	6	6	6.50
	b	7	6	8	3	6.00
	c	6	7	8	4	6.25
	d	5	8	8	5	6.50
H	a	7	7	6	7	6.75
	b	5	8	4	4	5.25
	c	5	9	6	5	6.25
	d	5	8	5	5	5.75
J	a	5	6	8	5	6.00
	b	4	7	5	2	4.50
	c	4	8	6	3	5.25
	d	4	9	6	4	5.75
K	a	8	8	7	4	6.75
	b	6	8	6	3	5.75
	c	6	8	7	3	6.00
	d	9	9	8	1	6.75

APPENDIX F

ACTIVITY 1

School X Pupil Number	SCORES 1st Juror				2nd Juror				3rd Juror				4th Juror			
	FACTORS a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d
1	3	5	4	4	2	4	5	3	3	4	6	2	4	4	5	6
2	5	4	3	4	6	5	3	3	5	6	4	3	7	5	4	5
3	6	5	4	5	5	5	4	4	5	3	4	4	6	3	5	5
4	3	4	3	5	4	5	4	5	6	4	4	3	5	2	4	5
5	4	5	5	4	5	4	5	3	3	3	4	5	4	3	5	3
6	5	5	4	5	4	6	2	3	6	4	3	5	5	4	5	6
7	5	6	3	4	4	5	3	5	5	4	4	3	4	2	3	5
8	1	2	3	4	5	6	4	6	4	3	4	2	5	5	3	4
9	5	4	5	3	4	5	4	4	3	4	5	4	4	3	4	4
10	5	6	7	6	5	5	6	4	6	5	4	4	5	4	3	5
11	4	3	5	4	3	4	4	5	5	4	6	6	6	5	6	7
12	7	5	6	5	6	5	5	6	5	6	5	4	5	7	5	6

ACTIVITY 1

School Y	SCORES			
	JR1	JR2	JR3	JR4
Pupil	FACTORS			
Number	a b c d	a b c d	a b c d	a b c d
1	8 5 6 8	7 4 6 8	6 6 5 7	5 5 6 7
2	5 5 5 5	6 5 4 5	6 5 4 6	7 6 5 5
3	4 3 4 2	6 5 4 3	6 4 4 4	5 4 5 4
4	7 6 5 7	6 6 5 5	5 4 5 5	7 8 6 5
5	4 3 4 2	5 4 4 3	4 5 3 4	5 5 4 5
6	5 4 3 2	2 4 3 5	4 3 3 4	4 5 5 4
7	8 7 6 6	7 7 6 6	8 8 7 6	7 7 6 7
8	2 2 2 2	3 2 3 2	3 3 2 3	4 3 4 3
9	5 5 4 5	4 5 5 5	4 4 5 5	4 4 3 4
10	4 4 5 6	5 4 5 5	5 5 5 5	6 5 4 5
11	6 5 5 6	5 5 4 6	7 5 4 5	6 5 4 5
12	6 5 4 5	5 5 4 5	4 3 2 3	5 3 3 4

ACTIVITY 2

School X Pupil Number	SCORES															
	JR1				JR2				JR3				JR4			
	FACTORS															
	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d
1	8	7	6	7	7	6	6	5	5	6	5	5	5	4	5	5
2	9	8	6	7	8	7	6	5	7	8	6	5	6	5	6	7
3	8	7	7	5	7	6	5	6	6	7	5	5	5	6	7	5
4	8	7	7	6	7	5	6	6	9	8	6	5	8	5	6	5
5	9	8	7	8	8	8	7	6	8	7	6	8	9	8	7	6
6	8	7	8	6	7	8	7	6	7	6	7	5	8	6	6	5
7	10	9	10	8	9	9	9	8	8	9	8	7	8	7	8	9
8	9	8	8	9	8	8	6	7	8	9	7	8	7	7	6	7
9	9	10	6	7	9	9	8	7	8	7	9	8	7	7	5	6
10	8	5	6	7	8	7	6	7	7	6	6	8	7	6	7	5
11	9	8	7	7	8	6	7	5	7	8	5	6	8	8	7	8
12	6	7	5	5	7	6	6	5	6	7	5	5	6	4	5	6

ACTIVITY 2

School Y Pupil Number	S C O R E S			
	JR1	JR2	JR3	JR4
	F A C T O R S			
	a b c d	a b c d	a b c d	a b c d
1	4 2 4 2	3 3 2 4	4 2 2 4	5 4 3 2
2	6 5 4 5	5 5 3 4	4 4 5 5	6 4 4 5
3	7 6 6 5	6 6 5 4	5 6 4 5	5 5 5 6
4	4 4 3 4	5 4 4 5	6 5 4 5	5 3 4 5
5	6 5 4 5	5 4 4 5	6 5 4 5	5 3 4 5
6	5 4 4 5	6 5 5 5	4 4 3 4	4 4 3 3
7	8 6 7 5	7 6 6 6	4 5 6 5	7 6 7 7
8	7 6 7 5	6 7 6 6	7 5 5 5	5 5 6 6
9	10 9 8 8	9 9 7 8	8 8 9 7	10 9 9 8
10	9 9 8 9	10 9 8 10	8 9 9 9	8 9 8 9
11	8 8 7 8	9 7 6 8	8 7 8 8	7 7 6 8
12	7 6 8 9	8 7 6 8	9 8 7 6	6 6 5 8

ACTIVITY 3

School X Pupil Number	SCORES			
	JR1	JR2	JR3	JR4
	FACTORS			
	a b c d	a b c d	a b c d	a b c d
1	8 8 7 6	9 8 8 7	8 7 7 5	9 7 8 6
2	10 8 8 7	8 7 7 8	9 6 7 5	9 7 6 5
3	9 7 7 6	7 6 6 7	8 7 6 4	6 7 5 6
4	6 7 8 5	8 6 4 5	7 5 5 5	7 6 5 4
5	7 7 6 5	6 6 7 8	7 6 5 3	8 5 7 5
6	8 7 5 8	7 7 7 7	6 5 4 5	7 6 4 7
7	10 7 5 8	9 10 6 7	8 7 5 8	8 8 7 6
8	7 6 7 7	7 5 4 5	8 5 4 4	6 6 7 5
9	9 8 6 5	8 8 7 6	7 8 8 9	8 6 6 6
10	8 6 8 7	8 6 5 9	7 7 6 7	7 6 8 5
11	6 6 5 7	7 4 5 4	6 5 6 5	5 5 4 6
12	7 6 5 5	7 6 5 6	4 5 5 6	7 6 7 6

APPENDIX F

ACTIVITY 3

School Y Pupil Number	SCORES											
	JR1				JR2				JR3				JR4			
	FACTORS											
	a	b	c	d	a	b	c	d	a	b	c	d	a	b	c	d
1	9	8	7	8	8	7	8	8	7	6	5	5	8	5	4	6
2	10	9	8	7	9	8	8	8	8	8	7	6	9	9	8	7
3	6	5	5	4	4	5	4	4	4	3	3	4	6	2	5	3
4	8	6	6	5	7	6	5	5	6	7	4	6	5	6	4	5
5	5	3	4	4	5	4	4	3	4	4	3	2	4	3	3	2
6	10	9	8	8	9	9	7	7	8	9	9	8	7	8	7	7
7	7	6	5	5	7	5	4	5	6	6	5	4	5	5	4	4
8	6	4	4	3	5	5	3	4	4	4	5	5	5	3	3	4
9	8	8	7	6	6	7	8	8	6	6	5	4	7	6	5	5
10	5	5	5	5	5	4	5	6	7	6	5	5	6	4	5	4
11	6	5	6	6	7	5	6	7	7	4	6	5	5	5	4	4
12	5	4	4	4	5	4	6	5	5	5	4	5	6	5	5	6

APPENDIX G: National Policy on Education
Section 2, Page 6

PRE-PRIMARY EDUCATION

9. Pre-primary education as referred to in this document is education given in an educational institution to children aged 3 to 5+, prior to their entering of the primary school.

10. The purpose of pre-primary education should be :

(a) effecting a smooth transition from the home to school ;

(b) preparing the child for the primary level of education ;

(c) providing care and supervision to children while their parents are at work (on the farms, in the markets, offices, etc.);

(d) inculcating social norms ;

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(e) inculcating in the child the spirit of enquiry and creativity through the exploration of nature, and the local environment, playing with toys, artistic and musical activities etc.;

(f) teaching co-operation and team spirit ;

(g) teaching the rudiments of numbers, letters, colours, shapes and forms etc through play ; and

(h) teaching goods habits, especially good health habits.

11. To achieve the above objectives Government will :

(1) encourage private efforts in the provision of pre-primary education,

(2) make provision in Teacher Training Institutions for student teachers who want to speacialise in pre-primary education,

(3) ensure that the medium of instruction will be principally the mother-tongue or language of the immediate community ; and to this end will

(a) develop the orthography for many more Nigerian languages, and

(b) produce textbooks in Nigerian languages. Some of these developments are already being pursued in the University Departments of Linguistics and under the auspices of state some Ministries of Education. The Federal Government has also set up a language centre as part of the educational services complex under the Federal Ministry of

APPENDIX G Continues

Education. This language center will be expanded so as to wider scope ;

(4) ensure that the main method of teaching in the pre-primary instituion will be through play, and that the curriculum of Teacher Training Colleges is appropriately oriented to achieve this ;

(5) regulate and control the operation of pre-primary education as well as ensure that the staff of the pre-primary institutions are adequately trained and that essential equipment is provided.

12. To achieve this aims Government will review and enforce the educational laws which relate to the establishment of Nursery Schools to make sure that schocols that are opened are well-run and that pre-primary teachers are qualified and other academic infrastructure provided. Ministries of Education will make regular inspections to ensure maintainance of high standards.