

A SURVEY OF FACTORS AFFECTING THE PERFORMANCE OF
SECONDARY SCHOOL STUDENTS IN DRAWING IN THREE
SELECTED SCHOOLS IN ZARIA

By

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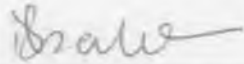
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DECLARATION

I hereby declare that the whole of this thesis has been written by me as the result of my investigation (except where reference is made to published literature and where assistance is acknowledged) and has not been presented for any other degree.



Dorcas Ibrahim

14th December 1988

Date

DEDICATION

To the memories of my Late Father,

IBRAHIM SAKO

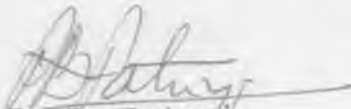
and Late Uncle,

NEHEMIAH SAKO

III

CERTIFICATION

This project report entitled: A survey of factors affecting the performance of Secondary School Students in Drawing, in three selected Schools in Zaria, by Dorcas Ibrahim meets the regulations governing the award of the degree of Master of Art Education of Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation:


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God bless you all.

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ABSTRACT

The thesis titled *A survey of factors affecting the performance of secondary school students in drawing in three selected schools in Zaria* by Dorcas Ibrahim:

The purpose of the study was to discover the effects of attitudes, Teaching, and Age on student's performance in drawing in secondary schools and to make recommendations for improvement. It was assumed that the performance of students in drawing was not satisfactory if

- (a) Their attitude towards the subject is negative,
- (b) Teaching methods are ineffective, especially if there is a lack of materials.
- (c) The age factor of students may affect their reactions and performance in the subject.

Based on the assumptions above the following questions were raised:

HOW DO THE ATTITUDES, TEACHER-MOTIVATIONAL TECHNIQUES, AND AGE FACTORS AFFECT THE PERFORMANCE OF STUDENTS IN DRAWING?

The investigations involved gathering of information from schools in Zaria. Three schools: Kufena College, Basawa Teachers' College, and Zaria Teachers' College were examined by stratified sampling method. Three methods were used in collecting the data. The first was Questionnaire, the second was interviews, and the third was the observational method. The response to the questionnaires administered among students in the three schools were analyzed, the data derived from interviews obtained information about teaching methods, materials and problems of teaching drawing. In the analysis of data Pearson's correlation and regression methods were used to determine the relationships among the variables measured.

The major findings of the study revealed that:

1. The students have positive attitudes towards drawing, that is, they like and admire drawing.
2. The correlation between attitudes and age revealed that there was a weak negative relationship between the two factors. This indicated that the ages of students may be affecting their attitudes towards drawing negatively. The

covariance however indicated that the extent of this was very minute.

3. The correlation between attitudes and class of students revealed a weak negative relationship. This implied that the class of a student affected his attitudes negatively, but the influence of this as indicated by the variance was very negligible.
4. The results of the observation showed that a minority of the students performs well in drawing while majority do not.
5. The correlation between performance in drawing and age revealed that this was a weak positive relationship. This implied that the maturation of a student affects his performance in drawing. The variance however showed that the extent of the differences in performance influenced by age was quite small.
6. The correlation between performance in drawing and age revealed a strong positive relationship. This implied that the amount of training received influenced performance in drawing. The variance shared among the two factors revealed that the difference were quite significant.
7. The correlation between performance and attitudes revealed a strong negative relationship. This could be interpreted to mean that the attitudes of students (found in the study to predominantly positive), had a negative effect on the low performance of students.

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INTRODUCTION

According to the Curriculum Planning Committee of the National Resources Council (NERC, 1977), the learning outcomes for Arts and Crafts were stated in performance terms referred to as the objectives or units of the lessons. The extent to which these goals are attained reflects the success of art education. However, within the one decade of its implementation, it is doubtful whether these objectives are being attained especially in individual aspects like Drawing.

Drawing is a very important aspect of art. It is often used to serve either as independent work or as ground work for other art work such as painting, sculpture, and design, etc. Drawing have also been found to be useful in other areas such as in the sciences where illustrations and symbolic representations are required. As an aspect of the creative arts, Drawing is also considered to have great influence on the learning process through the visual experience it gives to the child. For these reasons, Drawing should be taken very seriously at the secondary school level. Unfortunately, students may not always benefit from drawing if they are not proficient in it. It was in view of this significance that an appraisal of the performance of students in Drawing was considered necessary.

1.2 Statement of the problem

It is the general belief that secondary school students in Nigeria are generally poor in Drawing. But the questions are: Do all students perform poorly in Drawing? What factors influence the performance of secondary school students in Drawing? And, How can students' performance in Drawing be improved?

One of the concerns of the investigator was the general apathy towards art by the Nigerian society. There is an ample evidence for this apathy as indicated by various investigators. Ajidahun (1982), Anyasodo (1982) and Okpalaoka (1982) in separate studies observed that art is not held with a high esteem by Nigerians. In some other studies, Olorukooba (1977), Mamza (1983), and Bello (1986) found that secondary school students held negative attitude towards art. However, there is a dearth of information as to the causes of negative attitudes of the students towards Drawing. Another issue that needs to be clarified is the relative influence of a child's attitude on his or her performance in Drawing. This issue of attitudinal orientation is considered to be a determining factor on the performance of students in Drawing as an art subject.

The present investigator was of the opinion that the level of understanding of students in Drawing may also be one of the factors influencing their performance. By this, it is assumed that having a grasp and flay for the subject is considered both necessary to their reactions as well as their performance in the subject. With regards to this, the Art teachers, and their methods of teaching are considered as factors that may influence the outcomes of the Drawing. What needs to be verified therefore, is whether the availability or lack of art teachers and art materials, as well as teaching methods affect the performance of students in Drawing. The extent of the effect of teaching techniques on Drawing also needs to be known.

Sociologists and Educational Psychologists claimed that age influences the thought processes and behaviours of people. Art Educators have specifically attributed some artistic activities according to their developmental

stage. There is the need, therefore, to investigate whether the age of a student really influences his reactions as well as performance in Drawing. The questions are: How does age influence the drawing of a secondary school student? And, What steps should be taken to enhance the influence of age on the performance of students in Drawing?

Based on mere assumptions as discussed in the preceeding therefore, performance in Drawing is considered to be inter-related with a host of factors such as attitudes, the motivational techniques of art teachers, and the children's age. There are important reasons for this. The point is that students need to be properly motivated towards better achievement in Drawing. And the fact is, that if students are not rightly motivated towards Drawing they cannot perform well in the subject. Most significant to this is the obvious waste of potentialities and human resources when students perform below their capacities in drawing. Furthermore, if the reason for a child's under achievement can be discovered remedial measures may be taken.

1.3 Purpose of the Study

The general purpose of the study was to collect information concerning the reactions of secondary school students towards drawing, in order to establish how it affects their performance in the subject. This was with the intention to:

Increase awareness on the problems facing students in the process of learning drawing, through an understanding of the attitudinal behaviour of students, and also to investigate the influence of age, and teaching methods as factors influencing performance in Drawing.

Give an insight to some extent on the way Nigerian students

(with particular reference to the sample drawn from Zaria, Kaduna State) respond to, and express themselves through drawing.

Attempts were therefore made in the study to find out answers to the following questions.

1.4 Research Questions

- 1 What are the general attitudes of students towards drawing as a subject?
- 2 How do students react towards drawing as an activity (process)?
- 3 What are the reactions of students towards finished drawings (products)?
- 4 Are the attitudes of students related to their ages (developmental stages)?
- 5 How do students perform generally in drawing?
- 6 Does the performance of students in drawing correspond with their developmental stage?
- 7 What is the role of teaching techniques on the performance of students in drawing?
- 8 How does the availability of materials affect students' performance in drawing?
- 9 Does the class of a student correlate with his attitudes, and performance in drawing?
- 10 What is the extent of the attitudes of students on their performance in drawing?

1.5 Scope and limitation of the Study

The study was delimited to only two schools in Zaria town. In Kaduna State, there are four zones under the Ministry of Education. One of the zones, that is, Zaria Zone was chosen to represent the whole population of Kaduna State.

Zaria was considered suitable for the study because of the heterogeneity of its population. As an academic and commercial centre having many institutions such as the University, College of Education, College of Agriculture, College of Advanced Studies, etc and other government as well as private enterprises, Zaria draws people from various parts of the country. Students who attend the schools in Zaria are therefore drawn from this population. Three schools were selected by a stratified sampling method (described in the methodology section of this study) to represent all secondary schools in Zaria. The chief sources of limitation for this investigation were time, and financial constraints. Co-operation from the sources of data was also a limitation in the collection of data. The sample size was delimited to a small number in order to enable concentration and exhaustive treatment of the participant observation carried out as part of the study. It was found that in support of this kind of study, Campbell (1963) suggested that when it is not feasible to safeguard external validity, a study could still be undertaken since the finding would then give some understanding about the behaviour properties of the subjects of the sample. This view was also supported by Nachimas and Nachimas (1981).

The study was also designed to investigate the influence of certain factors such as attitudinal reactions of students towards drawing, age (the adolescent stage of development), motivational techniques of teachers, and availability of materials on the performance of students in drawing. Other factors such as sex, socio-cultural factors, socio-economic status or any other variables though pertinent to the issue of performance were not directly investigated by this study.

By performance, the overall demonstration of drawing skills that correspond with the content of the syllabus, as

well as the reactions of students in drawing were implied. This was conceived so because, apart from adopting some methods suggested by a host of researchers (discussed in the literature review), no standardized tests were used to measure the performance of students in drawing. A simple scale involving the use of drawing conventions described in the Methodology section was used to determine the performance of a student in drawing. Similarly, simple statistics such as comparison of percentages, means, an analysis of variance using Pearson's product-moment correlation, and predominantly descriptions were used for the analysis of the study.

The study was organized into seven Chapters: 1. Introduction, 2. The review of literature, 3. The Methodology of the investigation, 4. The presentation of data, 5. The analysis of data, 6. Discussion and 7. Conclusions and Recommendations.

CHAPTER 2

REVIEW OF LITERATURE2.1 Factors affecting the performance of students in drawing

Certain factors have been found to affect students' performance in learning subjects. Mukherje (1978) summarized the basic factors found by some Educational Psychologists to affect performance, into three Viz:

1. Antecedents
2. Development factors
3. Training factors.

Antecedents according to him was an explanation of those background factors that occurred within the child's experience which may affect his learning. Developmental factors refer to the Age and Maturation of a child. He reports that Kagan (1965), and Witkin (1966) found out that with age, individuals tend to be more reflective and to display signs of matured thinking. Training according to Mukherje, referred to the amount of teaching or instruction a child was exposed to. Eisner (1970) reviewed four major factors found by Mcfee (1963) to affect the performance in Art. These are enumerated as follows:

1. Readiness of the child This includes factors such as physical development, intelligence, perceptual development, response sets, and the cultural disposition of the child.
2. The psychological environment - in which he is to work. This includes the degree of threat or support existing in his environment, and the number or intensity of rewards or punishments he receives.
3. Informational handling - this implies the child's ability

to handle detail, intelligence, and the capacity he possesses for organizing perception.

4. Delineation skills - that is a child's ability to manipulate media, his creative ability, and his ability to design qualities of form (Eisner, 1970, p. 93).

The factors affecting performance in drawing in the present study will be discussed as follows:

1. The influence of Environmental factors on performance in drawing

Environmental factors refer to the physical as well as psychological surroundings of students. These include the socio-cultural backgrounds, socio-economic status of a students' parents, and the school or class room climates under which the student is being trained.

Socio-cultural factors

Evidence from various investigation suggests that socio-cultural factors influence the achievement of students in drawing. The socio-cultural factors refer to the socialising influence of institutions within the students' community such as social values and Religious beliefs. Relatively little is documented about the performance of Nigerian students. In fact, it seem that the influence of these values on Nigerian Education has been neglected. Evidences from literature shows that symbolic and representa-tional art were encouraged among the heathen and pagan peoples of Nigeria, and later among Christians (Fafunwa, 1974; Taiwo, 1980; Akolo, 1984). The reverse was observed of other religious practised in Nigeria. Representational art was not encouraged in Islamic art. Reporting on Islamic modes of representations Pinder (1957) noted that Islam was hostile to figural representation. According to him, "all images portrayed were but

shadows of the living forms, lacking in solidity, and pattern was of greater consequences". This observation indicates that drawing was not encouraged to the fullest among adherents of the Islamic religion. If this situation is still prevalent, it may have an effect on the students in Drawing since they may simply not be motivated towards figural drawing.

Socio-cultural factors have been found to have influence on the performance of children and students in subjects outside art. For instance, a relationship was found between this factor and the attitudes of female Teacher Trainees in Mathematics in Kaduna state (Ebenebe, 1976). The relationship between cultural deprivation and cognitive functioning in Samaru (Zaria) documented by Dauda (1976), and Olorunfemi (1977) also illustrates this. These studies however, indicated a negative relationship between cultural values and performance in learning tasks.

Kaufman (1970) visualized culture as having influence on artistic activities of children. According to him, "culture bears directly on the substance of art teaching, symbol making and response, and students' personal participation in the process of art." Studies dealing with the influence of this on performance in drawing appear to be rather scarce. However, the situation described in the observations of Anyasodo (1982), Ajidahun (1982) and Okpalaoka (1982) suggested that the attitudes of students may not be unconnected with their socio-cultural values; which may invariably be linked with their performance in Drawing. In his study, Mamza (1983) discovered a relationship between socio-cultural values and attitudes in secondary school students in Borno State. From his investigation it was discovered that cultural values formed a part of reason for choice of art as

a career. The choice of art as a career was in turn found to be very low. The implications of these findings were that socio-cultural values affect the attitudes as well as performance as students in Drawing.

Socio-economic status

Socio-economic status refers to the social class a student belongs to. The issues of social class is of importance in the consideration of performance in Drawing. Finding reviewed by Medinnus and Johnson (1969) and Mukherje (1978), suggest that differences exist in the performance of students with respect to their class. The major idea propagated behind this view is that it produces a difference in sophisticated thinking among children belonging to the various classes. Social classes specified by literature range from minority racial groups, to high, middle and low class based on family size and family economic situation. Most literature supporting this view claim that low status people lack flexible perspective, participate less in formal organization and have less information in public affairs. (Medinnus and Johnson, 1969; Pappas, 1970; Ebenebe, 1974; Daudu, 1976 and Olorunfemi, 1977).

Some specific investigations have represented the influence of social class on drawing of children. In one of such, Medinnus and John (op cit) reported the finding of Coles (1967) that white children revealed a profound understanding of the social context of their relations, he further reported that in a series of drawings, white children represented their negro classmates in a sketchy manner. They also represented the "white" side of the street in contrast to the "negro" side. These findings only suggest that the socio-economic status of a child affects his representation in

terms of how he categorizes objects in relation to himself. They say nothing about its influence on the level of performance that is, whether a child from a high class will perform better than another from the middle or low class.

School environment

The school environment represents to his members a model of society by its composition of students and academic staff. According to different studies, colleges of various kinds induct students into styles of life as well as response to subjects. In support of this Granis (1980) claimed that it is the structure of school that instructs systematically. Similarly, the studies of Madge and Weinberger (1978) suggested that school environment affects the attitudes of students towards art subjects.

Classroom environments has also been considered as influencing performance in drawing. The influence of the classroom was however, reviewed in terms of the kind of atmosphere created by the class teacher as observed by Kaufman (1980), and Wangboje (1982).

2.2 The influence of Age factor on performance in Drawing

Much of the discussion among Art Educators about the performance of children in Drawing has centred on the question of Age. Psychological studies on learning difficulties suggest that under achievement in Drawing may be significantly related with the developmental stage of a child. Goodenough (1926) in his DRAW-A-MAN test used human figure drawing to assess the maturity of a child. In the drawing, the scoring was based on the number of details included by the child in the drawing. Eisner (1966) was also of the view

that age influenced Drawing. As such, he compared the difference between ages and cultural deprivation in the drawings of culturally advantaged and culturally disadvantaged children. Working with the age of children, Lowenfeld proposed four stages of artistic activity based on developmental stages. Reporting on this Dimonstein (op cit, p. 56) remarked that most literature beginning with Lowenfeld ascribed various aspects of drawing and painting to the different stages of development in psychology. She claimed that despite differences as to the exact chronological age, this implied that the visual forms produced by children were natural results of growth factors appearing at predictable stage. The Lowenfeld (1975) stages are summarized as:

1. SCRIBBLING STAGE (from 2-4 years). At this stage, the representations of a child are non-directional in nature. They gradually become more controlled in motion (Lowenfeld, Ibid, p. 47).
2. THE PRE-SCHEMATIC STAGE (4-7 years). The art of the pre-schematic child is characterized by symbolization (Ibid, p. 47).
3. THE SCHEMATIC STAGE (7-9 years). The representations of the schematic child is mainly based on formation of concepts such as geometric signs (Ibid, p. 48).
4. The stage of DRAWING REALISM (9-11 years). The art of the child at this stage is characterized by removal from geometric schema. Lowenfeld refers to this stage also as "Gang age" (Ibid, p. 49).
5. PSEUDO-NATURALISTIC STAGE (11-14 years). A child's work at this stage is characterized by naturalistic approach to objects and subjects. The child also shows a tendency towards visual reality.
6. The ADOLESCENT STAGE (13-17 years). At this stage, the

adolescent is charged with ambition, energy, romantic ideas, and exuberance which are reflected in his art (Ibid).

The secondary school students in Nigeria normally fall within the range of pseudo-naturalistic art, and the adolescent stage. In some very rare cases, some of them may fall within the stage of dawning realism (9-11 years). These developmental stages are of importance to the teacher of drawing, since they provide an avenue for him to understand the child, and therefore to properly motivate him towards participation in the subject. They are also of significance in the consideration of factors affecting the performance of students in drawing, since a knowledge of student's developmental stage in art enables an assessment of his drawing e.g. whether a student's drawing correspond with his developmental stage, or whether he is performing above or below his expected level of development and so on; a view which was also adopted for the present study.

2.3 The effects of Attitudes on performance in Drawing

Several studies attempted to uncover emotional and personality values as causes of under achievement in Drawing, which need to be taken seriously in a setting like Nigeria. By this point of view, it is considered that satisfaction with the school situation is likely to encourage better performance in Drawing. Various investigations have established a relationship between positive attitudes and high achievement in subjects and the converse between negative attitudes and low performance in school subjects generally.

There seems to be two major groups of thought concerning the issue of attitudes towards art. The first group of art educators hold the view that secondary school students (i.e. mostly adolescents) react negatively towards art. Kaufman

(1970) found out that interest of adolescents in art was directly linked with their age factor. Commenting extensively on this, he remarked that there is a wide-spread rejection of genuinely artistic activity observed in the early adolescent. He further pointed out that no sub-sequent activity in art at a more advanced level seem to occur in any great measure. This also includes the reactions of adolescents towards drawing. Eisner (op cit. 124) reported the observations of some art educators research into art activities, that drawing skills tend to be arrested at about the period of adolescence. In support to this view Madge and Weinberger (1973, op cit) found out in their study that only a fraction of teenagers (i.e. mostly adolescents) that goes on from school to college, and to University, chooses art. In another view, Robertson (1971, op cit) discussed extensively about the value of crafts to the adolescent child, which was borrowed here for the purpose of understanding their reactions towards drawing. She was of the opinion that the adolescent stage brought about a "change of seeing" to the adolescents. She further claimed that there were four main forms of creative work which this may lead to, which are:

1. The loving portrayal of things.
2. The new discovery of interest in the immediate environment
3. The discovery of strange forms, colours, textures, unnoticed before, and the inspiration from then to create.
4. The discovery of beauty (in forms e.g. stones and wood).

Robertson, Ibid, p. 75)

This view of Robertson's suggest that adolescents may have a positive image of art which may lead to the desire to create. However, from evidence of the former views discussed already there is doubt as to whether these ideals suggested by Robertson are realised in the drawing (or art) class. In

a specific study of secondary school art in Britain, Porchmouth (1973) discovered a series of reactions among students who were mostly adolescents towards art. These reactions mostly towards drawing are enumerated as follows:

1. A gradual withdrawal from any really personal attempt at expression.
2. Recourse to copying or "short-hand" art forms picked up from caricature and cartoons.
3. The use of rulers or compasses to help in drawing.
4. A return to earlier symbols, becoming at the later stage, stiff and lifeless from inert efforts.
5. Retreat into pattern making - secure from the kind of criticism levelled at his more natural efforts.
6. Leaving work unfinished where his symbols let him down. Porchmouth (Ibid, p. 13).

Porchmouth further noted the dilemma of the youth as follows: "his attempts suffer from the realistic work he sees around him everywhere in illustrations, photographic reproduction and the work of older people". These reactions documented by Porchmouth are observable characteristics of the adolescent child. Part of this study therefore was set on validating these general reactions of students towards drawing in the Nigerian setting.

Attitudes have been generally found to affect the performance of students in school work. For instance, Mukherje (op cit) reported that Jordan (1941) found a significant relationship between attitudes and performance in certain subjects. The studies of Olorukooba (1977) and Mamza (1982) suggest that attitudes may have bearing on performance in art (and consequently in drawing). Implicitly also, the observations of Kaufman (op cit), and Eisner (op cit) suggest that attitudes affect the performance of adolescents in art.

2.4 The Role of the Art Teacher

It has been observed that teaching methods affect the learning situation. There have been findings to suggest that performance of students may differ depending on the effects of teaching methods. Relative to this issue of teacher-motivation Mukherje (op cit) reported that Barker and Lynn (1962) studying primary school children in the United States found that the attitudes of children were linked with some variables related to their teacher. McDill and Eckland (1972) also suggested that contact with outstanding teachers among other factors may have influence on students' performance in art. This implies that a teacher may affect the way students react towards his subject. The teacher is charged with the responsibility of guiding and stimulating the child as such he is the most influential in determining the child's attitudes and values. Talking about teacher performance in art generally, Hausman (1980) observed that all good teachers may demonstrate artistry in the performance of their teaching functions, but all who are skilled artists may not be effective as teachers and vice-versa. He therefore suggested that the teacher should be one who has a clear-cut but not necessarily rigid, idea about what he is trying to do. He substantiates this by pointing out that - the art teacher should be able to take the initiative in the development of new dimensions in art, through the extension of existing philosophical foundations, and careful considerations of major changes in the practice of art (Pappas ed. 1980, p. 193).

Similarly, Kaufman (1980) remarked that the art teacher requires both perspective and initiative insight into art as well as commitment to teaching art. Wangboje (op cit) observed that the success of any art programme depends to a

large extent on the competence of the art teacher. He remarks that the art teacher of the adolescent faces the task of teaching young people who are passing through a difficult phase in their life. According to him, "It is an age where they begin to show dimensions of behaviour, interests, and competencies". He therefore suggests that the art teacher should be receptive to ideas, be adaptable, and at the same time firm. He further lamented that unfortunately most of the lessons are spent in value conflicts between the adolescent and the teacher. From the review, the role of the art teacher can be seen to be mainly in the area of motivation and guidance. Chapman-Taylor (1982, op cit) suggested that teaching should proceed according to an educationally logical order, that is, follow a sequential manner. Other suggested methods through which teachers motivate students is in the area of assessment: The Curriculum Planning Committee on Art, Akolo (ed. 1977) suggested that progress (implicitly performance) can be monitored through evaluation, and through priced methods of assessment including classroom and homework assignments.

2.5 Various Methods and Instruments Used to Measure Attitudes and Performance in Drawing

Bales (1950) observed that the attitude of a person is reflected in opinions which are specific judgements on particular issues. This implies that attitudes are expressed either through verbal reactions or physical expressions; thereby implying that they can be measured or observed. Various types of methods have been suggested for measuring attitudes.

Kerlinger (1973 op cit) suggests three scales for the measurement of attitudes:

1. The summated rating interval scale
2. The equal appearing interval scale
3. The guttman or cumulative scale

He pointed out that the purpose of an attitude scale is to place an individual somewhere on the agreement point of the attitude scale. The Likert scale which is a five-point scale is an example of the equal appearing interval scale. This scale according to Kerlinger (op cit) reports the extent of agreement or disagreement expressed thus:

Strongly Agree	Agree	Undecided or Uncertain	Disagree	Strongly Disagree
(S/A)	(A)	(C)	(D)	(S/D)

Each of these responses are assigned a score on the scale. At the end of the scale, the scores are added up to yield interval data which can be manipulated and analysed. The Attitude scale are normally administered in questionnaire form. The disadvantage envisaged for questionnaire are low returns, possible lack of response, and inability to check the responses given (Kerlinger, Ibid, p. 144). The likert scale was chosen for this study.

2. INTERVIEWS: are also suggested as forms of deriving information on opinions of people. They are used to probe further into the opinions expressed by people on issues.
3. OBSERVATION: Observation has been found to be a very effective methods of obtaining insight into the behaviours of people especially in art. Beittel (1971) specifically suggests participant observation for investigating into the making of art. This method involves taking field notes and making inference from the following:

1. Modes of mute-evidence; that is it is assumed that art speaks for itself. Therefore the art work itself forms part of the observation via interpretation of symbols used
2. Verbal expressings of the artist, or statements on the art process or product, Beittel (Ibid, p. 19).

Kerlinger (Ibid, p. 546) pointed out that "the criterion for observation is to know clearly what is being observed". As such, he suggested rating scales for registering the observed behaviour. Plummer (1974) suggested an observational guide for observing artistic activity, also adopted for the this study.

2.5.2 Examples of Attitude Studies in Art (and Drawing)

It was discovered by going through literature that a lot of attitude studies have been carried out in the area of art. Examples of these are given below, which served as guides to the present study.

1. In the Eisner study of attitudes towards art, he employed the likert scale. The Eisner - Attitude Inventory as it was called, was made up of 60 items and was divided into four sub-tests as follows:
 - a) Deals with voluntary activity in arts.
 - b) Stratification in art.
 - c) Self-estimate of art ability.
 - d) Attitude towards art and artists.

The alternative of responses to the statements were five ranging from Strongly Disagree. The maximum score for a respondent was $(5 \times 60) = 300$ points, a "middle of the road" respondent will get $(3 \times 60) = 180$ points, while a negative attitude will be simply $(1 \times 60) = 60$ points. The scale according to Eisner (op cit) has been administered on various groups of children in the United States, and results were

found to be variably the same.

2. Akolo (1979) also employed a 5-point scale to derive the attitudes of Fourth and Fifth year Teachers' Colleges students towards art. The questionnaire was adapted from the Morris and Stuckhardt (1980) scale for measuring attitudes towards art. The questionnaire drawn by Akolo had 30 items which covered eight key areas: value, life contribution, personal contribution, personal expression, creativity, society, culture, teaching, emotion, learning and general education.
3. In his study Mamza (1983) made use of the questionnaire and interview methods. The questionnaire was made up of thirty items. Some of the responses required Yes/No answers, while others required the respondents to make choices from A to E. The items covered art related to occupational choice, attitudes related to socio-cultural backgrounds, socio-economic backgrounds, and teacher motivation factor.
4. Madge and Weinberger (1973) studied students across a wide range of various factors over a period of three years. They employed the survey research using questionnaires, interview and observation. In the process of the observation, a lot of description was used on students offering the pre-diploma programme in art design courses at the post-secondary school level in Britain. Some of the factors studied during the course of the study were orientations of students at the beginning of the course, and their induction to the subject during the course of their study. They also surveyed the attitudes of those students, and factors influencing the orientations of students towards art.

2.5.3 Studies on Performance in Drawing

Most literature dealing with the measurement of performance in Drawing specify certain criteria for judging an art work. These are physical elements considered to make up a successful art work. Beittel (1973, op cit) suggests that basically similar techniques to those used by Eisner (1966) could be used to inquire into children's ability in Drawing. For his observation Eisner utilized the conventions of space as developed in Western representational art.

Conventions given by Beittel (1973), Linderman (1974), Arneim (1974), Pappas (1983, op cit), Uzuagba (1988) and Wangboye (1982) include: (1) Line, (2) Colour, (3) Texture, (4) Space, (5) Form, and (6) Value.

Day (1980) made a study of interest to present investigation. He set out to find out whether the development of drawing skills was related to continued artistic activity of adolescents, and whether those who had obtained skills of perspective tend to draw better than their peers. He used basically two methods: Observation and questionnaires. Day developed a system for evaluating the use of drawing conventions in the representation of space on a two-dimensional surface. The criteria used by him were:

1. The use of overlap
2. Placement of objects on the page
3. Decreasing size with distance
4. Convergence of lines.

These were placed on a scale ranging from 1-20 points. Each of the four criteria carried five points. In addition to this, he drew a self-evaluation scale in questionnaire form which similarly carried 20 points. The questionnaire was meant to elicit information regarding the drawing involvement of each child involved in the observation. The scores of the

questionnaires were correlated with those of the scores on the drawings to determine the relationship between the involvement in drawing skill and in the use of perspective.

For this particular study, four conventions adopted from Arneim (1974, op cit) were used in assessing the performance of students in drawing. These are listed as follows:

1. **SHAPE:** This referred to the structural skeleton of the images drawn in the picture.
2. **FORM:** Perspective, Application of Tone, and levels of abstraction of images.
3. **SPACE:** Overlap of images, General arrangement, and placement of objects on the paper.
4. **BALANCE:** The general design and structure of the entire elements in the drawing (i.e. Synthesis).

CHAPTER 3

RESEARCH DESIGN AND PROCEDURE3.1 Research Design

The approach adopted for this study was the Descriptive Survey Research. According to Kerlinger (1973, p. 410) definition on quote, "A survey research studies large and small populations by selecting and studying samples drawn from the population to discover the relative incidences, distribution and interrelations of sociological and psychological variables". The specific research design followed was the one-shot case study. Campbell and Stanley (1974) noted that securing scientific evidence requires at least one comparison. They pointed out that in the case of this type of design, a single instance is carefully studied and implicitly compared with other events casually observed. This type of design was employed due to the limitation of time, as well as the fact that it has been found to be useful in research. According to Nachimas and Nachimas (1981, p. 108) it may lead to insights that, in turn could be studied as research hypothesis. For the methodology of the survey research, Kerlinger (Ibid, p. 414) suggested the flow-plan which has been followed for this research. According to him, the flow-plan starts with the objective; the general and specific objectives to be solved are stated as carefully as possible. The operational definition of the variables or terms are then given; followed by the sampling procedure, Instrumentation, Measurement, Pilot study and proposed treatment of data.

3.2 Population and Sampling

The population of the study was the post-primary schools within Zaria Township, and the variables being measured were relationships and attitudes of students, and age factor, and "experience" factor such as teacher motivational techniques, informational level of students, and availability of materials on their performance in drawing. To determine the samples for the study, the "stratified" sampling method was used. According to Kerlinger (1973, op cit), this is a method designed to permit the inclusion of parameters of special interest and to control for internal validity in terms of selection factors through the use of moderator or control variables. In the procedure suggested for the selection, the strata are formed in terms of known characteristics that ensure variability of the character under study.

3.2.1 Sampling

In Zaria, there are a total of seventeen (17) post-primary institutions. Fifteen of these are State Government owned schools, while two (2) are private institutions. These schools were categorized under two types: The Teachers' College, and the secondary schools. The Teachers' Colleges in Zaria are only three in number: namely Basawa Teachers' College, Zaria Teachers' College and Women Teachers' College (WTC) Zaria. All of these schools are boarding institutions. Among the secondary schools, five are both old schools as well as boarding institutions which are Barewa College, Kufena College, Alhuda-huda (formerly Government) College, Zaria City, Government Commercial College Zaria, and the Nigerian Military School (NMS) which is a private institution. Others include Government Day Secondary School (GDSS) Bomo, Government Day Secondary School (GDSS) Samaru, Government Day Secondary School (GDSS)

Tukur-Tukur, Government Day Secondary School (GDSS) Dagon Bauchi, Government Day Secondary School (GDSS) Kofan Gaya, Government Day Secondary School (GDSS) Chindit Barracks, and Ahmadu Bello University Demonstration School (owned by the University) are day schools.

The selection of the two schools used for the study was carried out following a disproportionate allocation within the stratified samples, that is the number of schools selected did not take into account the size of the population (that is number of schools within the type of school). Also, it was found that not all Day Secondary Schools had art teachers, art was being offered in three Day Secondary Schools. Whereas art was being offered in all of the Government Boarding Schools. To avoid picking out a school where art was not being taught, the Day Secondary Schools were excluded from the selection exercise carried out to derive the samples. The schools were first of all divided according to type of schools, that is Teachers' College, and Secondary Schools.

The Hat-draw method of random selection was used to pick out the schools. Table 3.1 illustrates the stratification, and schools selected.

Table 3.1 Method of Stratification for Selection of Two Sample Schools.

Types of School (Strata)	No. of Schools	No. Selected
Teachers' College	3	1
Boarding Secondary Schools	5	1
Day Schools	7	-
Total	15	2

3.2.2 Allocation of Subjects in the Sample

A proportional allocation was used for the placement of subjects within the final samples for the questionnaire. In this type of allocation according to statisticians, the observation among the strata are allocated in proportion to the size of the stratum. The strata in this case were the various classes within the schools. A brief survey of the sizes of the classes showed that the fourth year students were generally more in number than the fifth year students in most schools. The largest number of students were either found in the third year of the first year, and the second year was equally an averagely large class. As such, less questionnaires, ten (10) were assigned to the fifth year. All the other classes were allocated an equal number of fifteen (15) questionnaires each, making up a total of seventy questionnaire per school. This is presented in Table 3.2 below.

Table 3.2 Allocation of Questionnaire per School

Class	No. of Questionnaire	Percentage
5	10	14.4
4	15	21.4
3	15	21.4
2	15	21.4
1	15	21.4
Total	70	100.0

On the whole, a total of 140 questionnaires were allocated to both schools.

3.2.3 Allocation of subjects in the observation sample

An equal number of ten (10) students per class were to be observed while drawing making up a total of fifty (50) students per school is presented in Table 3.3.

Table 3.3 Allocation of subjects in the observation sample per school

Class	No. of subjects	Percentage
5	20	20
4	20	20
3	20	20
2	20	20
1	20	20
Total	100	100

3.3 Instrumentation

Three methods were used in collecting the data viz: these were the questionnaire, observation, and interviews. The procedure for the collection of data is discussed under the various instruments.

3.3.1 The Questionnaire

This was adopted from Akola (1982). The Akola questionnaire had been specifically planned for Teachers' Colleges and it contained thirty items (reviewed in the review of literature of this study). The word drawing was substituted for the word art. From the pilot study carried out for this study, it was discovered that some of the items were directly relevant to the present study, also that the level of communication was a bit

too high for the students. The questionnaire was then readjusted and the statements were made simpler to enable understanding of students. The number was reduced to 24 items only which were felt more relevant to the study. One item was added which was meant to discover whether the students find themselves presently more interested in art than previously, which brought the total number of items to 25.

The items in the questionnaire covered the following areas: Attitudes towards drawing generally, Attitudes towards the activity of drawing (i.e process), Attitudes towards finished drawings (product), and value of drawing. Two questions, one on the reason for participating in drawing and the second, to give the definition of drawing were included at the bottom of the questionnaire. The questionnaire also carried statements covering the attitudes of students towards drawings of peers, and other artists. All items were statements, placed on a five-point (Likert) scale and choice of response ranged from strongly agree through strongly disagree. A (strongly agree) represented five points, four points were assigned to B (Agree), three points for C (Uncertain), two points for D (Disagree) and one point for E (Strongly Disagree). Ten items in all were negatively stated, that is Items 3, 6, 7, 9, 11, 13, 15, 17, 21, and 24. The scores for the first 9 of these were therefore reversed the other way round with E (Strongly Disagree) having 5 points, and B (Disagree) 4 points and so on. The exception to this was item 24 which was considered to be stated in the positive. A sample of the Questionnaire is placed in the appendix.

3.3.2 The Observational Guide

The instruments used during the observation were:

(i) the observational guide (ii) a list containing:

(a) types of drawings, (b) art terms and elements, and (c) materials used in drawing; and (3) a scale for measuring the performance of students in the drawings.

1. The observational guide was derived from adaptation and suggestions from various researchers e.g. Beittel (1973) and Plummer (1974). It was drawn in a tabular form with spaces whereby the observer would report the behaviour of students while drawing. Information that was recorded in the spaces included:

- a) personal information about the student e.g. age, sex, and date of work.
- b) The description of the drawing such as: use of elements, e.g. shape, form, space and Balance as described in the review of literature. These criteria were placed on a twenty point scale similar to that of Day (1980) also cited in the literature review. This also meant that each criterion carried five (5) marks.
- c) Chronological sequence of the drawing from start to finish; and
- d) Judgemental comments such as whether the student expressed likeness, dislike or neutrality about his own drawing, those of his colleagues, and those exhibited. The comments also included the general reaction (behaviour) of students while drawing. (A sample of the observational guide is also placed in the appendix).

2. The list was meant to elicit the informational level of students in drawing. The students were asked to indicate the ones they were familiar with. Information included in the list was:

- (a) Types of Drawings
 - Landscape Drawing
 - Stilllife Drawing

Drawing from Imagination

Plant Life Study

Human Figure Drawing.

(b) Terms and Elements

Line, tone, Shape, Perspective and Shading.

(c) Types of Materials Used in Drawing

- | | |
|--------------------|------------------------|
| 1. Pencil | 6. Chalk |
| 2. Crayon | 7. Charcoal |
| 3. Pen and Ink | 8. Pastel |
| 4. Paint and Brush | 9. Conte |
| 5. Brush and Ink | 10. Any other material |

3.3.3 Interview Schedule

The questions were directed at problems affecting the teaching and performance of students in drawing. Lead questions were therefore:

1. What percentage of the student population offer art at the Senior Secondary School (SSS) level in your school?
2. Are there art teachers in your school?
 - a) How many are they?
 - b) What are their qualifications?
3. How many periods are allocated for Art on your school time table?
4. What methods do you use in teaching Drawing?
5. a) Are there sufficient materials for Drawing in your school
 - b) Which materials do you use in teaching Drawing?
6. How often do you assess your students in Drawing?
7. How do you assess the students' drawings?
8. Have your students ever participated in art exhibitions?
9. What do you think of your students' performance in Drawing as a subject of art?

- a) Do they perform well or poorly in your own opinion?
10. What are the factors that affect the performance of your students in Drawing?

3.4 Data Collection

3.4.1 Questionnaire Data

Seventy (70) copies of the questionnaires were distributed to Basawa Teachers' College. The responses to the questionnaires in that school are shown in Table 3.4 below.

Table 3.4 Response to Questionnaires from Basawa Teachers' College

Class	No.	Percentage
5	-	-
4	13	21.6
3	30	50.0
2	1	1.7
1	16	26.7
Total	60	100.0

The response of the respondents from Basawa Teachers' College presented in Table 3.4 showed that the returns were not as planned. This was explained by the Art Teacher to be as a result of unavailability of students in school (i.e. those offering art in the fifth year were absent during that distribution of the questionnaires, which was also the examination period). The highest number of respondents from this school were from the third year i.e. 30 (50%) of the respondents.

Sixteen (26.7%) of them came from the first year, 13 (21.6%) from the fourth year, while only one respondent (1.7) filled the questionnaire in the second year. No respondent came from the fifth year.

Similarly seventy (70) questionnaires were distributed to Kufena College. The responses to the questionnaire in that school are illustrated in Table 3.5.

Table 3.5 Response to Questionnaire
from Kufena College

Class	No.	Percentage
5	5	7.3
4	3	4.4
3	30	44.1
2	10	14.7
1	20	29.4
Total	68	99.9

From this school, the greatest number of respondents, 30 students (i.e 44.1%) came from the third year. Twenty (29.4%) were from the first year, 10 (14.7%) from the second year, 5 students (7.3%) responded to the questionnaires from Form Five, and 3 (4.4%) from Form Four.

The total number of questionnaires collected from both schools is shown in Table 3.6 below.

Table 3.6 Total Return of Questionnaires

School	Given	Return	% Per School	Overall %
Kufena C.	70	68	53.1	53.1
Basawa T. C.	70	60	46.9	46.9
Total	140	128	100.0	100.0

Out of the total of 140 questionnaires sent to the two schools, 128 were returned (i.e. 91.4%). Approximately 8% were not returned. The returns of questionnaire for Kufena College was 68 (53.1%), while 60 (46.9%) returned their questionnaires from Basawa Teachers' College.

3.4.2 Observation Data

The observation data was collected from three schools instead of only two. The reason was because it was not possible to observe the respondents from Basawa Teachers' College, as such, a sample was drawn from Zaria Teachers' College in place of the Basawa Teachers' College students. The first observation involved eight (8) students picked at random from the second year at Zaria Teachers' College. The personal information about each student was recorded on the observational guide assigned to him by the researcher. The sequence (i.e. progress) of the drawings were also noted by going round to see what each student was doing. Beittel's (op cit) suggestions were followed, that is information can be recorded during an observation by taking quick, short

notes. The students were individually asked questions such as: Do you like the drawing? Do you find it interesting? etc. The responses to these were recorded on the various observational guides. When the drawings were completed, the students were stopped and the finished drawings were collected from the students. They were then asked to comment about the drawings made by all of them. The comments were also recorded on the observational guides.

The next part of the observation exercise, the list containing the information about drawing was written on the board. The students were asked to write down only the types of drawings, terms and elements, and types of drawing materials they were familiar with on sheets of paper given to them. When the students had finished writing, the sheets of paper were also collected for analysis.

This procedure was repeated for 26 students from the first year also at Zaria Teachers' College.

It was generally observed that both the first and second year students in this school kept making reference to the drawings exhibited on the art room walls. Some of the students actually reproduced exact copies of these drawings. The students observed at Kufena College were the third year and the fifth year students. In this school the procedure for the observation was much the same for the two classes, except that the fifth year students were specifically requested to make Landscape Drawings which were executed outside. It was noticed that the students were quite lively while drawing. Students freely expressed their opinions while drawing. Some even did so without any provocation at all.

There were quite a few drawings displayed at the back of the art rooms but the students did not make any reference to

these. The students who were the third year students generally drew from imagination, and a few from observation of still-life objects in the art room.

Some drawings were collected from the Basawa Teachers' College students for analysis when it was not possible to observe them while drawing. This was in order to enable comparison between observation data and questionnaire data. This was in keeping with Beittel's suggestion that art works could serve as mute-evidence (see Chapter 2). The total of all drawings collected from students, and the descriptions of these are illustrated in Table 3.7 to 3.10 below.

Table 3.7 Distribution of Students Observed from the Two Schools per class

Class of Student	Kufena College	Zaria TC	Total	%age
5	6	-	6	10.9
4	-	-	0	-
3	16	-	16	29.1
2	-	8	8	14.5
1	-	25	25	45.5
Total	22	33	55	100.0

The grand total of students observed by simply adding up the number per school, was 55 students in all. Six of these students (10.9%) came from the fifth year. Sixteen students (29.1%) were third year students, all from Kufena College. Eight (14.5%) were second year students, and twenty five (45.5%) were from the first year.

On the whole, a total number of seventy seven (77)

drawings were collected from the three schools. Table 3.8 represents the distribution of total drawings collected.

Table 3.8 Total Number of Drawings collected from the Three Schools

School	Number
Zaria Teachers' College	33
Kufena College	22
Basawa Teachers' College	22
Total	77

Thirty three (33) of the drawings were collected from Zaria Teachers' College, Twenty-two (22) from Kufena College, and twenty-two (22) from Basawa Teachers' College.

3.4.3 Data Interview

The interview were carried out by asking each of the art teachers in the three schools the questions from the interview schedule. All information given by them were recorded in a jotter provided for that purpose. To supplement the information given by the art teachers, some students were asked some of the questions, and their responses were similarly recorded.

3.5 Treatment of Data or (Data Analysis)

The information derived from each of the methods used in collecting the data were treated separately under each instrument as follows:

3.5.1 The Questionnaire Data

The questionnaires were first of all counted to derive the returns for each school, and then overall returns of all questionnaires administered were then recorded under different tables. This included the number of respondents per class. Information such as ages of respondents were recorded on a sheet of paper. The frequencies of these were derived and the information was then represented in an appropriate table.

3.5.2 Observational Data

Data derived from the observation were treated in three different ways. First of all, all personal information was recorded. Then, the scores of the students on the drawings were derived and recorded under appropriate tables. Secondly, information on the knowledge level of students in Drawing was also treated under separate tables. Thirdly, a description of the drawings made by students was also made under separate table.

3.5.3 The Interview Data

Data derived from the interviews was recorded under Tables according to the questions asked during the interviews. No scores were assigned for this. The information derived was used to support the Questionnaire and Observation data.

3.5.4 Scores of Students Attitude Scale

Each questionnaire was served by first of all identifying the reversed items, that is, Items 3, 6, 7, 9, 11, 13, 15, 17 and 21. After taking into account reversal, the appropriate score was then assigned to each response which

was written down against that response - for example where a respondent indicated (A) Strongly Agree to item 1, the score was 5 points written against item 1, etc. the total scores for the individual were then added up and the overall score noted on the questionnaire itself, then recorded on a score sheet for that purpose. A distribution of scores per each item was made by counting up the number of those who indicated Disagree, or Uncertain, etc. From these scores, the mean scores and frequencies were worked out, and this was included along with the general scores on all items shown in the presentation of data section of this study.

Thirdly, the information on the questionnaire were treated under different groups. These categories corresponded with the objectives of the study or were treated according to the variables under investigation which were the reactions of students towards:

- a) Drawing as a subject, Items 1, 3, 4, 11, 19.
- b) Drawing as an activity (process), Items 2, 6, 7, 8 and 21
- c) Drawing as a finished products, Items 22, 23, 28.
- d) Value of drawing, Item 10, 25 and 37.
- e) Previous interest in drawing as against the previous item 24.
- f) The developmental stage of students.

CHAPTER FOUR

PRESENTATION OF DATA1. Response to Questionnaire Per Class

The greatest number of respondents came from the third year: 60 (46.9%) of the questionnaire respondents were from form three. Thirty-six (28.1%) were from one students. Sixteen of them (12.5%) came from the fourth year. Eleven (8.6%) from the second year and 5 (3.9%) from form five. This distribution is presented in Table 4.1 below.

Table 4.1 Distribution of Questionnaire
Respondent Per Class

Class	No. of Respondents	Percentage
5	5	3.9
4	16	12.5
3	60	46.9
2	11	8.6
1	36	28.1
Total	128	100.0

2. Ages of Respondents

The ages of questionnaire respondents generally ranged from 10-20 years. Majority of these respondents fell between 12 and 19 years, and only a few (one or two) were either 11 or 20. This is shown in Table 4.2 below.

Table 4.2 Ages of all Respondents

Ages	No. of Respondents	Percentage
20	1	1.1
19	4	4.3
18	17	18.3)
17	14	15.1)
16	11	11.8) Lowenfeld's
15	16	17.2) adolescent
14	15	16.1) stage
13	9	9.6)
12	4	4.3
11	1	1.1
10	1	1.1
Total	93	100.0

The table showed that only 93 students in all indicated their ages. The age with the greatest number of respondents was 18; 17 respondents (18.3%) indicated 18 as their age. It was also possible to see by simply adding up the number and corresponding percentages, that 65 (69.8%) of the respondents fell within Lowefeld's adolescent stage which is from 12 or 13 years to 17 years. A total of 87 (93.5%) of the respondents were either adolescents or in their early adulthood. Only 6 (6.4%) were below the stage of adolescence. The age range implied that ages of respondents could be used in analysis and comparison to discover relationships between age, attitudes and performance in drawing.

Table 4.3 Attitudes of Students Towards Drawing as a Subject

Category of Response	S/A		Agree		Uncert.		Dis.		S/D		Total
	(A)		(B)		(C)		(D)		(E)		
	S	%	S	%	S	%	S	%	S	%	
Item 1. D. has a necessary and vital function in art	69	54.3	54	42.5	1	0.8	3	2.3	0	0	127
Item 3. D is a difficult aspect of art.	16	12.6	37	29.3	10	7.9	42	33.3	22	17.4	126
Item 4. You enjoy D best among other forms of art.	36	28.1	43	33.6	16	12.5	27	21.1	6	4.7	128
Item 11. Money spent on D as a part of art is a waste	16	12.5	22	17.2	22	17.2	37	28.9	31	24.2	128
Item 19. D is of benefit to learning other aspects of art	46	36.5	58	45.3	11	8.7	5	3.9	6	4.7	126

I. Reactions to items that covered drawing as a subject of art showed that students favoured drawing. In responses to item 1, 69 (i.e. 54.3%) of the respondents felt that drawing had a necessary and vital function in art, while 3 (2%) of the students were in disagreement. Fifty-four (42.5%) also agreed to this statement. One student was

uncertain. No respondent disagreed strongly to the statement.

- II. Reacting to Item 3, Drawing is a difficult aspect of art. Responses of students showed that majority of them: 42 (33.3%) and 22 (17.4%) making up a total of 64 (50.0%) were of the opinion that it was not. Sixteen students indicated strongly Agree implying that drawing was very difficult; 37 (29.3%) also agreed with this making up a total of 53 (i.e. 42.1%) who found drawing difficult. Ten of the respondents (i.e. 7.9%) were uncertain about this.
- III. Responses of students to Item 4 also shown in the table indicated that majority of them, i.e. 79 (63%) respondents felt they enjoyed drawing best among the other forms of art. Thirty-six (i.e. 28.1%) felt very strongly about this, while 43 (33.6%) merely agreed. A total of 27 (21.1%) who indicated Disagree, and 6 (4.7%) who indicated Strongly Disagree, were of the opinion that they did not enjoy drawing best among other forms of art. Sixteen students (i.e. 12.5%) were undecided about the statement.
- IV. Item 11 was meant to elicit information about how students rate the benefit of learning drawing as a part of art. Responses showed that 36% (i.e. 46) respondents were in strong support of the idea that it was of benefit to learning art. 58 respondents also agreed with this; on the whole 104 (82%) respondents felt that drawing was of benefit to learning art. Eleven (8.7%) reacted negatively to this statement, while 9 students (5%) were uncertain.

2 Attitudes of Students Towards Drawing

(As an Activity)

The statements that covered this were found in items 5, 6, 7, 8, and 21 shown in Table 4.4 below.

- I. In response to Item 2, Drawing is an enjoyable activity, an identical number of 59 (46.1%) respondents each indicated both Strongly Agree and Agree to this statement. This meant that a total of 118 (92%) of the respondents were in favour of the idea that drawing is an enjoyable activity. Only a small fraction of the total combined sample, that is 4 (3.9%) and 1 (about 0.8%) were in disagreement with this statement. Five of the students indicated uncertainty about this statement.
- II. Items 6 and 7 covered statements meant to elicit the opinions of students concerning who they felt should indulge in the activity of drawing. A total of 30 (23.4%) of the respondents felt by their responses that drawing should only be for those who were highly talented. A combined total of those disagreeing with the statement were 80 (62.5%), while 13 were undecided. From Item 7, most of the respondents (85%) indicated that drawing was best suited for children at the nursery and primary schools. A combined total of 33 (26.4%) disagreed with this view, while 7 (5.5%) were uncertain.
- III. From responses given to Item 8, only 20 of the respondents felt very strongly that it was very easy to draw. Thirty-six (28.1%) merely supported this view, making up a total of 56 (82%) who were in positive agreement on this point. Forty-two respondents (33.8%) disagreed very strongly with the statement, making a total of 40 respondents who held a negative view of this. Quite a substantial number 23 (18%) of the respondents were undecided.

Table 4.4 Reaction of Students Towards Drawing as an Activity

Category of Response	S/A		Agree		Uncert.		Dis.		S/D		Total
	(A)		(B)		(C)		(D)		(E)		
	S	%	S	%	S	%	S	%	S	%	
Item 2. D is an enjoyable activity.	59	46.1	59	46.1	5	3.9	4	3.1	1	0.8	128
Item 6. D should only be for those who highly talented.	8	6.2	22	17.1	13	10.1	53	41.4	27	21.1	128
Item 7. D is an activity best suited for children in the nursery and primary schools.	41	32.8	44	35.2	7	5.5	19	15.2	14	11.2	125
Item 8. It is very easy to draw.	20	15.6	36	28.1	23	18.0	42	33.8	7	5.5	128
Item 21. D is a useless activity.	7	5.6	8	6.3	7	5.6	46	36.5	58	46.0	126

IV. Choices of response to Item 21 showed that only a few felt it was a useless activity. Seven of the respondents (5.6%) felt very strongly about this. Eight merely agreed. On the whole 15 students (12.2%) felt drawing was a useless activity. Forty-six (36.5%) of the respondents disagreed with the statement, while 58

(46.0%) indicated Strong Disagreement, making up a total of 104 on the whole who felt that drawing was not a useless activity.

4.3 Attitudes of Students Towards Drawing

(As a Finished Product)

- I. In item 22, the investigator sought to find out what students felt about the drawings their peers or colleagues. Twenty-seven (21.4%) of them felt strongly that the drawings of peers were often interesting. Sixty-four (51%) also agreed to this. On the whole, 91 (72%) of the respondents were in positive support of the idea that drawings of colleagues were often interesting. Sixteen students (12.7%) felt strongly on the negative about this. Seven (5.5%) of the respondents also disagreed making up a total of 23 (18%) who found the drawings of peers interesting. Twelve students indicated uncertainty about this statement.
- II. Item 23 was meant to discover what a student felt about his/her own drawings. More than half of the respondents 66 (51.9%) felt that their own drawings were often good and interesting. Thirty-six (28.1%) of them especially felt very strongly about this. In all, a total of 104 (81%) of the respondents were of the positive opinion about this. Fifteen respondents on the whole were in disagreement, while 3 were uncertain.
- III. From item 25 it was possible to get the opinions of students about the drawings of other artists. By this the investigator was implying the drawings of artists either those known or not known to the students. On the whole, a combined number of 103 (81%) found the drawings of other artists

Table 4.5 Reaction of Students Towards Finished Drawings

Category of Response	S/A		Agree		Uncert.		Dis.		S/D		Total
	(A)		(B)		(C)		(D)		(E)		
	S	%	S	%	S	%	S	%	S	%	
Item 22. The Ds made by other students are often interesting	27	21.4	64	50.1	12	9.5	16	12.7	7	5.5	126
Item 23. Your own Ds are often good and interesting.	36	28.1	68	53.1	9	7.0	11	8.6	4	3.1	128
Item 28. Ds of other artists are interesting and inspiring.	66	51.9	37	29.1	12	9.5	18	14.1	4	3.1	127

interesting and inspiring. A total of 22 felt negatively about this, while 12 were uncertain.

4 Value of Drawings to Students

It was assumed that the rating of students of drawing in terms of its value was part of their attitudinal reaction towards the subject as a whole. The reactions of students to this are presented in the following tables 4.6 to 4.8 below.

Table 4.6 Attitudes of Students Towards Drawing
in Terms of its General Value

Category of Response	S/A		Agree		Uncert.		Dis.		S/D		Total
	(A)		(B)		(C)		(D)		(E)		
	S	%	S	%	S	%	S	%	S	%	
Item 22. The Ds made by other students are often interesting	27	16.6	64	50.7	12	9.5	16	12.7	7	5.6	126
Item 23. Your own Ds are often good and interesting.	36	28.1	68	53.1	9	7.0	11	8.6	4	3.1	128
Item 28. Ds of other artists are interes- ting and inspiring.	66	51.9	37	29.1	12	9.5	18	14.4	4	3.1	127

I. In Item 22, the investigator sought to find out what students feel about the drawings of their peers or colleagues. Twenty-seven (16.6%) of them felt strongly that the drawings of peers were often interesting. Sixty-four (50.7%) also agreed to this. On the whole, 91 (72%) of the respondents were in positive support of the idea that drawings of colleagues were often interesting. Sixteen students (12.7%) felt strongly on the negative about this. Seven (5.6%) of the respondents also disagreed making up a total of 23 (18%) who found the drawings of peers uninteresting. Twelve students indicated uncertainty about this statement.

Table 4.7 Attitudes of Students Towards Drawing in Terms of its General Value

Category of Response	S/A		Agree		Uncert.		Dis.		S/D		Total
	(A)		(B)		(C)		(D)		(E)		
	S	%	S	%	S	%	S	%	S	%	
Item 13. Students should not waste time D. It is just play.	10	7.8	13	10.2	10	7.8	47	37.0	47	37.0	127
Item 14. D is good for everybody.	25	19.7	43	33.9	20	15.7	31	24.4	8	6.3	127
Item 18. D helps you understand life better.	34	26.7	47	37.0	18	14.1	18	14.1	10	7.8	127

- I. In response to Item 13, a combined total of those disagreeing both strongly and otherwise was 94 (77%) of the respondents who felt that drawing was not just play. Twenty-three students on the whole felt that students should not waste their time drawing since it is just play. Ten (8%) of the respondents felt uncertain about the issue.
- II. Responses of students to Item 14: Drawing is good for everybody showed that most of them felt drawing was good for everybody. Sixty-eight respondents (i.e. 53.5%) on the whole responded to this on the affirmative: 25 indicated strong agreement, and 45 agreed to this statement. A total of 39 (30.7%) felt negatively to this while 20 (16%) were undecided.

III. Responding to Item 18: drawing helps you understand life better. A total of 81 (63.7%) of the respondents supported this view. Twenty-eight (22%) on the whole disagreed with the statement while 18 (14.1%) were uncertain about it.

IV. Similarly, responses of students to Item 21, drawing is useless activity shown in Table 3.14 indicates that a majority viewed drawing as a useful activity. One hundred and four (104) respondents on the whole responded on the affirmative to this. A small proportion of 15 students viewed it as a useless activity.

4.4.2 The Value of Drawing to Education

From the attitude scale, certain items were meant to elicit information on whether students felt drawing was of significance to education. How they valued drawing in respect to education was conceived as part of the reasons for their reactions towards the subject. Their responses on this is shown in Table 4.7 below.

I. The responses of students to these two items showed that they generally felt drawing is necessary to learning (education). In response to Item 9, 17 respondents (i.e. 13.3%) felt very strongly about this, 32 (25%) were also in support. On the whole, 69 (54%) of the respondents disagreed with the statement that drawing is not necessary to learning. A combined total of those who agreed with the statement was 49 (38.9%). This number felt that drawing was not necessary to learning, while 10 students (7.8%) were uncertain. In reaction to item 16, drawing can help you learn other subjects better, the total of those agreeing both strongly and mildly was 93 (73.8%) of the respondents. Twenty-five (20%) of the whole disagreed with this, while

B indicated uncertainty.

Table 4.8 How Students Rate Drawing in Terms of Value to Education

Category of Response	S/A		Agree		Uncert.		Dis.		S/D		Total
	(A)		(B)		(C)		(D)		(E)		
	S	%	S	%	S	%	S	%	S	%	
Item 9. D is not a necessary part of learning.	17	13.3	32	25	10	7.5	38	29.7	31	24.2	128
Item 16. D can help you learn other subjects better.	42	33.3	51	40.5	8	6.3	17	13.5	8	6.3	126

Table 4.9 How Students Rate Drawing in Terms of Value to the Individual

Category of Response	S/A		Agree		Uncert.		Dis.		S/D		Total
	(A)		(B)		(C)		(D)		(E)		
	S	%	S	%	S	%	S	%	S	%	
Item 10. D enables you opportunities to express yourself	43	34.6	62	48.4	9	7.0	6	4.7	8	6.2	128
Item 12. D helps you feel your emotion.	43	33.8	42	33.1	16	12.6	16	12.6	10	7.8	127
Item 18. D helps you understand life better.	34	26.7	47	37.0	18	14.2	18	14.2	10	7.8	127

- I. Three items covered the value of drawing to the individual. Reacting to Item 10, drawing enables you opportunities to express yourself. A total of 105 (82%) combining those who strongly agreed with those who agreed, indicated they felt drawing enables them to express themselves better. A combined number of 14 (10.9%) of the respondents felt negatively about this, while 9 (7%) were uncertain.
- II. To the statement that drawing helps you feel your emotion those who were in agreement to this amounted to a total of 85 (67%), taking into consideration both those who strongly agreed and those who indicated Agree. A combined number of 26 (20%) indicating disagree were of the opinion that drawing does not help them feel their emotion. Sixteen (12.6%) of the respondents were uncertain about their stand on this.
- III. In response to Item 18, Drawing helps you understand life better, majority of the respondents, that is combining those who strongly agreed with those who merely agreed, were of the opinion that it helps to understand life better. A total of 84 (64.1%) were in agreement with the statement. A total of 28 (22%) however felt that drawing does not contribute to understanding life. Eighteen (14.2%) of the respondents felt undecided about the contribution of drawing to life.

Evidence from literature had suggested that the interest of adolescents at the secondary school level towards art would reduce. A single item was stated to find out whether students felt their interest in drawing had reduced or not. Table 3.19 below presents their reactions to this.

The items were grouped under these categories and the corresponding scores of these items were derived from the general score sheet (Appendix III). To derive the developmental

Table 4.10 How Students Rate their Present Interest in Drawing as against the Previous Interest

Category of Response	S/A		Agree		Uncert.		Dis.		S/D		Total
	(A)		(B)		(C)		(D)		(E)		
	S	%	S	%	S	%	S	%	S	%	
Item 24. You are not interested in D now more than before.	12	9.4	28	22	15	11.8	39	30.7	33	26	127

stage of students, the age of each students was derived from the questionnaire was used. All those students who fell within the range of 12 or 13 years to 17 years were considered to be within Lowenfeld's adolescent stage (see Table 4.12).

Based on the scores of the questionnaire, a student could be assigned to either a positive, negative or neutral attitude towards drawing depending on where his scores fell as illustrated by Figure 1 below.

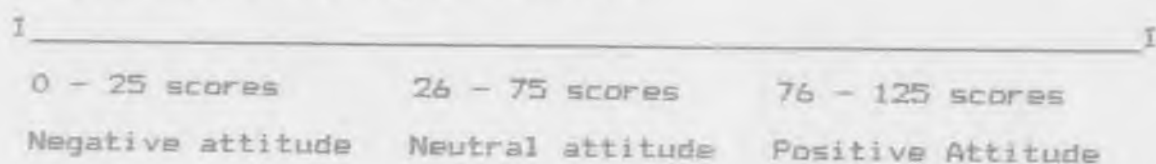


Figure 1 Categories of Response of Students on Questionnaire Scale

3.4 (b) The Observation Data

The total number of students observed was recorded (see Table 3.7). Then the ages of these respondents were derived

and also illustrated in Table 3.4.

Table 4.11 Ages of Students Observed Per Class

Age	Zaria Teachers' College		Kufena Teachers' College		Total	%
	Class 1 No.* %	Class 2 No. %	Class 3 No.	Class 5 No.		
23	1	-	-	-	1	1.70
22	-	-	-	-	-	-
21	-	-	-	-	-	-
20	1	-	-	1	2	3.70
19	2	-	-	3	5	9.25
18	2	1	2	1	6	10.60
17	4	1	2	1	8	14.40
16	1	3	4	-	8	14.40
15	7	1	4	-	12	21.60
14	4	-	3	-	7	12.90
13	1	1	-	-	2	3.70
12	1	-	-	-	1	1.90
11	-	1	1	-	2	3.70
Total	22	8	16	6	54	100.00

* One student did not indicate his age.

The combined distribution of age for the two schools is shown in Table 4.12

Table 4.12
Distribution of Age for
all Students Observed

Age	No.	%
23	1	1.9
22	-	-
21	-	-
20	2	3.7
19	5	9.3
18	6	11.1
17	8	14.8
16	8	14.8
15	12	22.2
14	7	12.9
13	2	3.7
12	1	1.9
11	2	3.7
Total	54	100

From Table 4.12 above it was possible to see that the ages given by the students ranged from 11 years to 23 years. Majority of the students, that is 69.9% of them fell within the range of Lowenfeld's adolescent stage; as such drawings made by them could be used for analysis.

IV. A general description of the drawings was made. These drawings were grouped under categories depending upon

the dominant objects in the picture. A summary description of these is shown in Table 4.13.

Table 4.13 Types of Drawings made by Students

Type	Zaria T. C	Kufena T.C	Basawa T.C	Total
Car or Vehicle	3	2	1	4
Buildings	18	2	3	23
Still life	7	7	2	16
Plant life	2	1	-	3
Human figure	2	2	14	18
Landscape	-	6	2	8
Design	1	2	1	4
Total	33	22	23	76

From the table it could be seen that many of the students favoured drawings depicting buildings. A total of 28 students made drawings that included a building or buildings as the dominant objects. Eighteen students made representations of the human figure in various forms of action. Eight of the students made an observation of Landscape scenery. Four students were interested in drawing vehicles which included both cars and bicycles. Three of the students concentrated on plants from nature, while four of the drawings were some sort of designs having floral patterns in abstract form. Most of these drawings were executed in pencil on paper. A few of the students coloured some of the objects with crayons, while one student actually applied paint after drawing. A description of materials used for the

drawings is given in Table 4.14.

Table 4.14 Materials used in the Drawings made by Students

Medium	Zaria T. C	Kufena T.C	Basawa T.C	Total
Pencil	31	20	20	71
Pencil and Crayon	2	1	1	4
Pen and Ink	-	1	-	1
Paint and Brush	-	-	1	1
Total	33	22	22	77

From the table, it was possible to see that out of the 77 drawings made by the students, 71 were carried out purely in pencil. Four students employed the use of crayon along with pencil. One student used a biro to draw, while only one used paint and brush. Samples of the drawing made by the students during the observation have been placed in the appendix.

Only the first two schools - Kufena College and Basawa Teachers' College participated in the exercise involving the informational level. From the responses of students 37 of the 55 students from both schools indicated familiarity with the pencil. Thirty-two indicated crayon as a familiar medium. Twenty-seven students in all felt they were familiar with pen and ink, 14 students indicated they knew about chalk, paint and brush as drawing mediums. Thirteen (13) of the students indicated ink and brush, and 6 students wrote

Table 4.15 Types of Materials used in Drawings Students were familiar with.

Material	Zaria T. C	Kufena T.C	Basawa T.C	Total
Pencil	19	13	5	37
Crayons	17	4	11	32
Charcoal	-	3	-	3
Pen and Ink	16	2	9	27
Ink and Brush	4	5	4	13
Paint and Brush	4	5	5	14
Chalk	8	4	2	14
Conte	-	-	-	-
Pastel	-	3	3	6
Others	-	-	-	-

pastel as medium they knew, while 3 indicated charcoal. No student indicate he knew about conte.

Table 4.16 Drawings Students were Familiar with

Types of Drawing	Zaria T.C.		Kufena T.C.		Total
	Class 1	Class 2	Class 3	Class 5	
Landscape	2	8	3	4	17
Still life	4	8	2	5	19
Drawing from imagination	7	8	10	5	30
Observation from nature	10	6	2	2	20
Human figure drawing	5	7	4	2	18

The figures represented in Table 4.16 above shows that students were most familiar with drawing from imagination. Thirty students indicated familiarity with this. Twenty indicate observation from nature. Eighteen indicated human figure drawing, while 17 indicated landscape drawing.

Table 4.17 Terms and Elements of Drawings Students were Familiar with

Terms or Element	Zaria T.C.		Kufena T.C.		Total
	Class 1	Class 2	Class 3	Class 5	
Perspective	7	8	3	4	22
Tone	-	-	-	-	1
Shading	17	8	9	5	39
Line	-	-	5	4	9
Shape	8	4	13	5	30
Texture	-	-	1	2	3
Form	-	-	2	4	6

From Table 4.17 it was possible to see that out of the 55 students observed from the two schools, thirty-two of them felt they were familiar with perspective. Twenty-two of them felt they were familiar with line. Nine indicated line as the medium they were familiar with, 6 indicated form, while only three indicated texture. No student expressed knowledge about tone.

Table 4.18 Scores of Students on Performance in Drawing

S/No.	Class of		Use of Convention				Total
	Student	Age	A	B	C	D	
1	1	20	2.5	2	2.5	2.5	9.5
2	1	19	-	-	-	-	
3	1	19	-	1	2.0	-	3.0
4	1	18	1.0	2.5	2.5	-	6.0
5	1	18	0.5	0.5	0.5	-	1.5
6	2	18	3.0	4.0	3.5	-	12.5
7	1	17	2.0	2.5	2.5	2.0	9.5
8	1	17	1.0	2.0	1.0	-	4.0
9	1	17	-	2.0	0.5	-	2.5
10	2	17	1.0	-	1.0	-	2.0
11	1	16	-	-	1.0	-	1.0
12	2	16	3.0	4.0	3.0	3.0	13.0
13	2	16	4.0	5.0	4.0	2.0	15.0
14	2	16	3.0	2.0	3.0	-	8.0
15	1	15	-	2.0	-	-	2.0
16	1	15	1.5	1.5	2.0	1.0	6.0
17	1	15	2.0	1.0	2.0	2.0	7.0
18	1	15	2.0	1.0	1.0	1.0	5.0
19	1	15	-	-	-	-	0.0
20	1	15	1.0	1.0	2.0	-	4.0
21	2	15	2.0	3.0	3.0	2.0	10.0
22	1	14	2.0	3.0	2.5	2.5	10.0
23	1	14	2.0	2.0	2.0	-	6.0
24	1	14	3.5	3.0	3.0	2.5	12.0
25	1	14	-	2.0	-	-	2.0
26	2	14	1.5	2.0	2.0	1.0	6.5
27	1	13	-	1.0	2.0	1.0	7.0

Table 4.18 Scores of Students on Performance in Drawing

S/No.	Class of		Use of Convention				Total
	Student	Age	A	B	C	D	
28	2	13	2.0	3.0	3.0	2.0	10.0
29	1	12	-	1.0	2.0	-	3.0
30	1	11	3.0	3.0	3.0	3.0	12.0
31	1	-	4.0	4.0	3.0	4.0	15.0
32	1	-	2.0	3.0	2.0	1.0	8.0
33	1	-	-	1.0	5.0	1.0	2.5
34	3	18	3.0	4.0	2.0	2.0	15.0
35	3	18	-	2.0	-	1.0	3.0
36	3	17	3.5	3.5	3.5	3.5	15.0
37	3	16	2.0	4.0	3.5	1.0	11.5
38	3	16	4.0	5.0	5.0	3.0	17.0
39	3	16	2.5	2.5	3.0	1.0	9.0
40	3	16	2.0	1.0	2.0	1.0	6.0
41	3	15	2.0	2.0	1.0	1.0	6.0
42	3	15	1.5	3.0	1.5	1.0	7.0
43	3	15	2.0	2.0	3.0	-	7.0
44	3	15	2.0	2.0	2.0	-	6.0
45	3	14	4.0	5.0	3.0	2.0	14.0
46	3	14	-	1.5	1.0	0.5	3.0
47	3	14	1.0	3.0	1.0	-	5.0
48	3	13	4.0	4.0	4.0	-	12.0
49	3	13	2.0	2.0	4.5	2.5	11.0
50	5	18	4.0	4.0	4.0	3.0	15.0
51	5	18	4.0	4.0	4.0	2.0	14.0
52	5	18	2.0	3.0	3.0	-	8.0
53	5	18	4.0	4.5	4.5	5.0	18.0
54	5	18	4.5	4.5	4.0	4.0	17.0

Table 4.18 Scores of Students on Performance in Drawing

S/No.	Class of		Use of Convention				Total
	Student	Age	A	B	C	D	
55	5	18	4.5	4.5	5.5	3.0	16.5
56	5	19	4.0	4.0	4.0	1.5	13.6
57	2	-	1.5	1.5	2.0	1.0	6.0
58	2	-	4.0	4.0	3.0	1.0	11.0
59	2	-	2.0	4.0	2.5	0.5	9.0
60	2	-	2.0	2.0	4.0	-	8.0
61	2	-	1.0	3.0	1.0	-	5.0
62	2	-	2.5	3.0	3.0	-	8.5
63	2	-	2.0	2.0	2.0	2.0	7.0
64	2	-	3.0	4.0	2.5	-	9.5
65	2	-	3.0	4.0	3.0	2.0	12.0
66	2	-	3.0	4.0	2.0	3.0	12.0
67	2	-	3.5	4.0	4.5	2.0	13.0
68	2	-	2.0	3.0	3.0	-	8.0
69	2	-	2.0	3.0	3.0	-	8.0
70	2	-	4.0	4.0	4.0	3.0	15.0
71	2	-	3.0	3.5	3.0	-	9.5
72	2	-	2.0	2.5	2.5	-	7.0
73	2	-	1.0	-	1.0	-	2.0
74	5	-	5.0	4.0	5.0	5.0	19.0
75	5	-	5.0	4.0	4.0	4.0	17.0
76	2	-	-	-	-	-	0.0
77	2	-	-	-	-	-	0.0

A = Shape; B = Space; C = Form; D = Balance

Note: Where no ages are indicated = Students of Basawa

T.C. The raw scores for the performance in drawing were then

arranged in a serially descending order. The frequency distribution of this was made and presented in a table, Table 4.19 illustrates this.

Table 4.19 Distribution of scores on performance in drawing scale

Score	Frequency*
19	2
18	1
17	1
16	1
15	4
14	3
13	3
12	6
11	2
10	4
9	5
8	7
7	5
6	7
5	5
4	6
3	6
2	5
0	4
Total	77

* Frequency represents the number of students having that score

4.4 Interview Data

The interview data was simply documented according to the questions asked during the interview. The first question was: What percentage of your student population offer art at the senior secondary school level in your school?. The responses of the Art Teachers concerning this is represented in Table 4.20 below.

Table 4.20 Students' option for art at senior secondary level in the three schools

School	No	Class 5 offer Art	No	Class 4 offer Art
Kufena College	300	15	600	15
Basawa T.C	300	20	450	25
Zaria T.C	600	-	300	-

In Zaria T.C., there were no students offering art in form 4 and 5. This was because those offering art from the two classes were among the students transferred out to Kufena College and other neighbouring schools.

Question: Are there Art teachers in your school?

- (i) How many are they and (ii) What are their qualifications. The answers to this question are shown in Table 4.21.

Table 4.21 Number of Art Teachers per School

School	No	Qualified	Not qualified
Kufena College	2	2	-
Basawa T.C	2	2	-
Zaria T.C.	3	2	1
Total	7	6	1

In response to question 3, How many periods are allocated for art in your school? Response given indicated that in the three schools showed that the time allocated for art was two periods (1 double period) a week at the Junior Secondary school level. The number of periods for the fourth and fifth years varied. In some cases they had two double periods per week, or a double period with an additional single period. The number of periods for each school are shown in Table 4.22 below.

Table 4. 22 Number of Periods allocated for Art in the Three Schools

School	Class	Class	Class
	1 - 3	4	5
Kufena College	2	3	4
Basawa T. C.	2	2	4
Zaria T. C.	2	-	-

Question 3. What percentage of this time do you use to teach Drawing?

None of the Art Teachers could say exactly the number of periods they used in teaching drawing. However, some of them pointed out that as a result of inavailability of materials to teach other aspects of art e.g. painting, modelling and crafts, about half of the time allocated for art was spent on drawing.

Question 4. What methods do you use in teaching Drawing?

Both the teachers and the students were questioned about the methods used in teaching drawing. This method simply involved introducing the lesson by writing out the topic on the board and discussing on it. Explanations and definitions would then be given to the students. The students are then asked to embark on the drawing. While drawing, the teacher would go round, correcting them, and helping them in the areas of their weaknesses. The descriptions given by some of the students when asked to comment about this, confirmed that this was the general method employed by their teachers to teach them drawing.

Question 5. Are there sufficient materials for teaching Drawing in your school? What are these materials?

In response to this questions most of the teachers complained that materials were not supplied to the schools presently. The art teachers of Basawa Teachers' College and Kufena College complained about lack of sufficient paints and brushes to go round the students who were too large compared to the materials available. At Zaria Teachers' College though there was some quantity of paint, the senior art teacher likewise complained that this could not go round.

Other materials like Ink Charcoal, Crayons, Pastel and Conte were simply not available.

Question 6. How often do you assess your students in Drawing?

By the interview it was also discovered that the art teachers assessed the students very often, since continuous assessment was enforced as part of the system of education by the Ministry of Education. Some confessed that they do this on a weekly basis - i.e. after each lesson. While some said they assess their students on a monthly bases, or twice in a month. The following table illustrates the responses of the teachers on this.

Table 4.23 Frequency of Assessment of Students' Work

School	Monthly	Weekly
Basawa T. C.	Yes	At times
	Yes	At times
Kufena College	Yes	Yes
	Yes	At times
Zaria T. C.	Yes	Yes
	Yes	At times
	Yes	At times

Question 8. Have you students ever participated in Art Exhibitions?

All of the art teachers without exception answered on the negative to this. Through their responses it was deduced that the only exhibitions their students had been formally involved in were the works displayed on the art room walls. No major exhibitions had ever been carried out in the school or elsewhere, with the students participating as a body. Responses of teachers to this is presented in Table 4.24 below.

Table 4.24 Participation of Students in Art exhibitions

Types of Exhibition	Kufena	Basawa	Zaria
	College	T. C.	T. C.
Major Exhibition in School	Never	Never	Never
Exhibition Outside School	Never	Never	Never
Display of Art Works in Art Room	Yes	Yes	Yes

7. In response to the question whether the teachers thought that the students perform well in drawing. Most of the teachers felt that their students do not perform as they should in the subject. Table 4.25 presents their opinion on this.

Question 9. What do you think of your students' performance in Drawing? Do they perform well or poorly?

Table 4.25 Opinion of Seven Art Teachers about performance in students in Drawing

Category of Response	No
1. Perform very well	-
2. Perform well	1
3. Perform averagely	2
4. Do not Perform well	3
5. Perform very poorly	1
Total	7

Question 10. What do you think are the factors that affect the performance of your students in Drawing?

The answers given in response to this to question show that most teachers attributed this to the attitudes of students towards the subject represented by their attendance to lessons. Some said it could not be due to lack of materials since pencils only were being used for drawing. Some thought it was just due to lack of talent or interest in drawing. Responses are enumerated in the following table.

Table 4. 26 Art Teachers' Opinions about Problems Affecting the Performance of students in Drawing

- | |
|------------------------------------|
| 1. Lack of interest in the subject |
| 2. Lack of talent |
| 3. Non-attendance off lessons |

9. In general response to the question - What problems do you encounter in teaching drawing? All the teachers expressed that communication was the major problems encountered in the drawing class. A Zaria Teachers' College especially, the art teacher complained that he had to explain so much because of language barrier (i.e. English). The art teachers generally commented that it took time to teach a particular topic because of this problem. Most of them also mentioned the lack of facilities such as drawing boards and even art room. The complaint about this was that the single art rooms allocated for art were not sufficient for the entire school. Attitudes of students was also mentioned as one major problem of this subject. These are enumerated as follows:

1. Communication
2. Allocation of time
3. Lack of facilities e.g. art room, drawing board, etc.
4. Non-chalance of students towards the subject.

CHAPTER 5

RESULTS5. Analysis of Data

5.1 The data collected during the investigation and treated under the separate instruments, formed the basis for the analysis. The analysis followed the order of itemized issues which formed the research question. The responses were analyzed as follows:

5.1.1 To derive the attitudes of students towards drawing, the scores from all items were further categorized under three groups: Positive Negative, and Neutral depending upon the range of the scores (as presented in Figure 1 Chapter 3). A summary of these scores are shown in Table 5.1 below.

The distribution of scores presented in Table 5.1 shows that the margin between the positive and negative attitudes was very wide for a total of 19 out of the 25 items (noted by the asterisk sign). Majority of responses to these particular items were positive, while for only two of the items (noted by the sign) responses were negative. The inference drawn from this was that students have a positive attitude towards drawing as a subject.

Table 5.1 Summary of All Categories of Responses Per Item

Item	Positive	%	Negative	%	Neutral	%
1	123	96.9	3	2.0	2.4	0.8
2	118	92.9	5	3.9	5.0	3.9
3	63	50.0	53	42.1	10	7.9
4	79	61.7	33	25.8	16	12.5
5	95	74.8	20	15.7	12	9.4
6	80	62.5	35	27.3	13	10.1
7	33	26.8	85	69.1	7	5.7
8	56	43.7	49	38.3	23	17.9
9	69	53.9	49	38.3	10	7.8
10	105	82.0	14	10.9	9	7.0
11	68	53.1	38	29.7	22	17.1
12	85	66.9	26	20.5	16	12.6
13	94	74.0	23	18.1	10	7.8
14	68	53.5	39	30.7	20	15.7
15	49	38.9	48	38.1	29	23.0
16	93	73.8	25	19.8	8	6.4
17	66	52.4	41	32.5	19	15.1
18	81	63.8	28	22.0	18	14.2
19	104	82.5	11	8.7	11	8.7
20	91	73.4	20	16.1	13	10.5
21	104	82.5	15	11.9	7	5.5
22	91	72.2	23	18.2	12	9.3
23	103	81.1	15	11.8	9	7.1
24	40	31.5	72	56.7	15	11.8
25	103	81.1	12	9.4	12	9.4

The range of scores of individuals in rank order showing the number of respondents who fall within positive and negative

side was also drawn to illustrate this. Table 5.2 illustrate this.

Table 5.2 Range of all Scores of Repondents

Scores	Frequency	Percentage (%)
120 - 125	1	8
115 - 119	-	-
110 - 114	-	-
105 - 109	9	7
100 - 104	5	3.9 Positive Attitudes
95 - 99	20	15.6
90 - 94	21	16.4
85 - 80	23	17.9
80 - 84	12	9.4
75 - 79	16	12.5
70 - 74	13	10.2
65 - 69	5	3.9
60 - 64	-	- Neutral Attitudes
56 - 59	2	1.5
50 - 54	-	-
45 - 49	1	8
Total 128	100	

The distribution of range of scores in Table 5.2 shows that out of a total of 128 respondents, 107 (84%) had scores on the positive side of the attitudes scale. Twenty-one respondents (i.e. 6%) fell on the neutral side, that is between 26 - 75 points. No respondents fell between 0 - 25 that is the negative side of the attitude scale. It was also

inferred from this that students have generally positive attitudes towards drawing.

5.2 Attitudes of Students Towards Drawing as an Activity

A review of the reactions of students to items that covered this particular category shown in Table 3.14 revealed that majority of the respondents found drawing to be either interesting or enjoyable. The response to three of the items that is, Item 2, 6, and 21 presented in Table 4.1 were definitely positive with a wide margin between the positive and negative attitudes. In Item 8 the response was also positive though the margin between the positive and negative attitudes was not wide. Reactions to Item 7 were however, negative. Table 5.3 illustrates the responses of respondents to these items.

Table 5.3 Attitudes Towards Drawing as an Activity

Item	Positive	%	Negative	%	Neutral	%
2	118	92.9	5	3.9	5	3.9
6	80	62.5	35	27.3	13	10.1
7	33	26.8	85	69.1	7	5.1
8	56	43.7	49	38.3	23	17.9
21	104	82.5	15	11.9	7	5.5

The inference drawn from this data was that students have a positive attitude towards the activity (actual process) of drawing, since the scores of majority of the respondents (with the exception of response to item 7 only) indicated positive attitudes.

5.3 Attitudes of Students Towards Finished Drawings

The responses of students to items concerned with this particular category that is, items 22, 23, and 25 were all positive with a great difference between those who had a positive attitude and those who did not. Table 5.4 presents the reactions of students according to the different categories of responses.

Table 5.4 Attitudes of Students Towards Finished Drawings

Item	Positive	%	Negative	%	Neutral	%
22	91	72.2	23	18.2	12	9.4
23	103	81.1	15	11.8	9	7.1
25	103	81.1	12	9.4	12	9.4

It was inferred from these responses that students have a positive attitude towards finished drawings (i.e. drawing as a product).

Table 5.5 Students' Evaluation of Drawings in Terms of General Contribution

Item	Positive	%	Negative	%	Neutral	%
13	94	74.0	23	18.1	10	7.8
14	68	53.5	39	30.7	20	15.7
18	81	63.8	28	22.0	18	14.2

Table 5.6 Students' Evaluation of Drawings in Terms of Contribution to Education

Item	Positive	%	Negative	%	Neutral	%
9	69	53.9	49	38.4	10	7.8
16	93	73.8	25	19.8	8	6.4

Table 5.7 Students' Evaluation of Drawings in Terms of Value to the Individual

Item	Positive	%	Negative	%	Neutral	%
10	105	82.0	14	10.9	9	7.0
12	85	66.9	26	20.5	16	12.6
18	81	63.8	28	22.0	18	14.2

From tables 5.5, 5.6, and 5.7 it could be seen that majority of the respondents fell under the positive attitudes. That is, the opinion of students about drawing in terms of it's general contribution, value to education, and value the individual was positive. The difference between the positive and negative attitudes was clearly a wide one in most cases as illustrated by the tables.

5.5 The relationship Between Ages of Students and their Attitudes

To determine whether any relationship existed between the ages of respondents and their attitudes, two comparisons were made. First of all, a comparison using ages indicated and the corresponding scores on the attitudes scale for those

individuals were made.

Table 5.8 Ages and Corresponding Scores on
Attitudes Scales of Combined Samples

Age	Frequency	Mean scores
20	1	84.0
19	4	78.5
18	15	87.3
17	15	89.2
16	11	85.2
15	16	88.3
14	15	85.0
13	9	87.0
12	4	95.0
11	1	91.0
10	1	81.0
Total	92	951.5

In figure 2, the values are clustered in a downward sloping manner. A dotted line was drawn across the value to further illustrate this. It was inferred from the graph therefore that the relationship between age and attitudes of all respondents was a negative one, (it should however be noted that all scores on the attitudes scale of the respondents were positive, that is, they fall above 75 points).

2. To determine the extent of the relationship between age and attitudes, the coefficient of correlation was worked out using the Pearson's product-moment correlation. This is presented in Table 5.9 below.

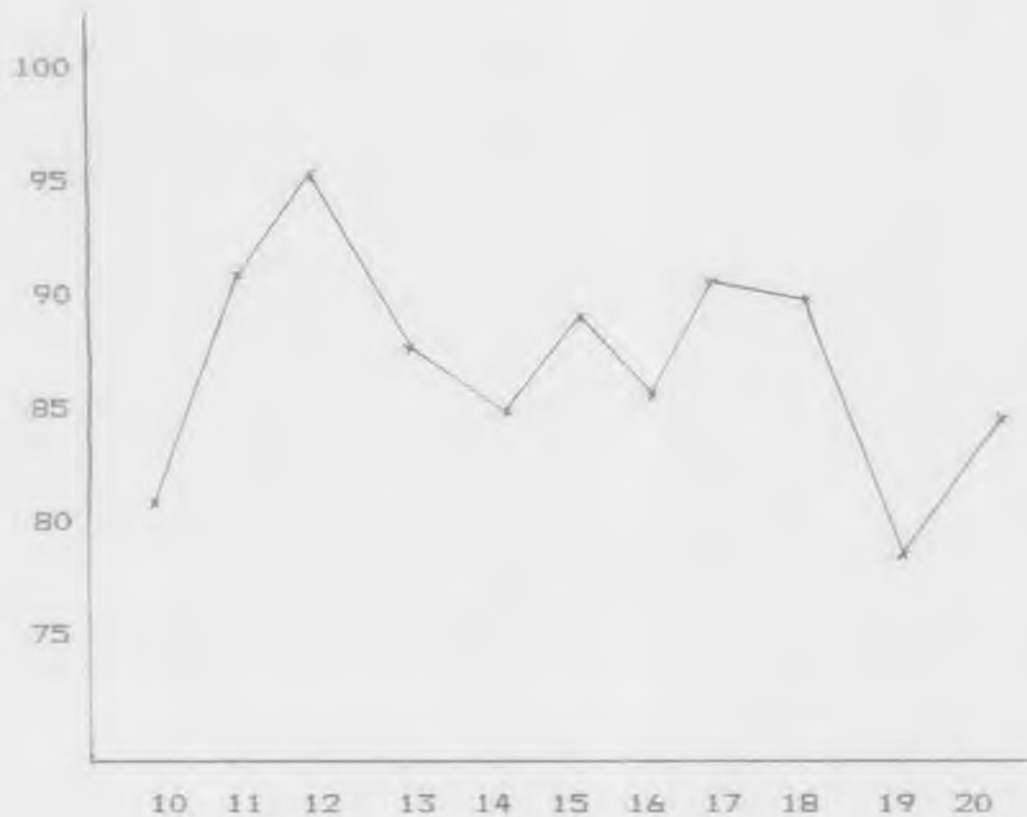


Figure 2 Relationship Between Age and Attitudes of All Respondents.

Table 5.9 Correlation Between Ages and Attitudes of
Combined Samples

Age	Mean Attitude score	dx	dy	dx ²	dy ²	dxdy
20	84	5	-2.4	25	5.76	12.0
19	78.5	4	-7.9	16	62.4	-31.6
18	87.3	3	0.9	9	0.81	2.7
17	89.2	2	2.8	4	7.84	5.6
16	85.2	1	-1.2	1	1.44	-1.2
15	87.3	0	0.9	0	0.81	0
14	85	-1	-1.4	1	1.98	1.4
13	87	-2	0.6	4	0.36	-1.2
12	91	-3	8.6	9	73.9	-25.8
11	95	-4	4.6	16	21.1	-18.4
10	81	-5	-5.4	25	29.1	27.0

$$\Sigma x = 165$$

$$n = 11$$

$$\bar{x} = 15$$

$$\Sigma y = 950.5$$

$$\bar{y} = 86.4$$

The correlation was computed using Loveday (1988) formulae for computing the Pearson's - product moment correlation as follows:

$$r = \frac{\Sigma x.y}{\Sigma x^2 \Sigma y^2} = \frac{-4.6}{3.16x} = -0.32$$

The coefficient of correlation derived from this was $r = -0.32$. From the negative sign it was implied that the

relationship between Age and Attitudes of this sample is a negative one. Judging also from the value of the coefficient the relationship is a weak one.

The correlation between Age and Attitudes of students belonging to the adolescent stage only was computed as shown in Table 5.10 below.

Table 5.10 The relationship Between Age and Attitudes of Adolescents

x	y	Score				
		dx	dy	dx ²	dy ²	dx.dy
17	89.2	2	2.5	4	6.25	5
16	85.2	1	-1.5	1	2.25	-1.5
15	87.5	0	0.6	0	0.36	0
14	85.0	-1	-1.7	1	2.89	1.7
13	87.0	-2	-0.3	4	0.09	0.18
E=75	E = 433.7			10	11.84	4.18

The coefficient derived from this was 0.39 since the value derived was positive, it was inferred that there is a positive relationship between age and attitudes for the adolescents of this sample.

5.6 Performance in Drawing

The analysis for this was based on the range of scores derived from the raw scores of students observed in the drawings (presented in Table 4.17). The range of performance is presented in Table 5.11. On the whole, 27 (35.0%) students scored above average, while 50 (64.9%) performed

below average. The inference drawn from this was

Table 5.11 General Ranges of Performance of Students observed

Range of Scores	Frequency	Percentage
16-19	5	6.5 Above Average
10-15	22	28.6
5-9	28	36.4
0-4	22	28.6 Below Average

that majority of the students do not perform well in drawing.

5.7 The Relationship Between Age and Performance in Drawing.

The analysis for this was based on a comparison of the raw scores of the two variables, and the analysis of correlation using the Pearson's product-moment correlation.

Table 5.12 Ages and Scores of Students in Performance in Drawing Score for the Two Schools

Age	Performance	Frequency
20	9.5	1
19	2	1
18	14	7
17	11	7
16	17.5	9
15	5	11
14	7	8
13	9	4
12	3	1
11	12	1



Figure 3 Relationship Between Age and Performance in Drawing of Students Observed

From the graph (i.e. Figure 5) it could be seen that to an extent, a positive relationship could be inferred, since the values generally sloped upwards. For the adolescent stage particularly (indicated by the thickened lines) the relationship was certainly positive.

Table 5.13 Correlation Between Age and Performance
"Drawing of Students Observed"

Age	Drawing score	dx	dy	dx ²	dy ²	dx.dy
20	9.5	4.5	0.1	20.25	0.01	0.45
19	2	3.5	-7.4	2.25	54.7	-25.9
18	14	2.5	4.6	6.25	21.1	11.5
17	11	1.5	1.6	2.25	2.5	2.4
16	17.5	0.5	8.1	0.25	65.6	4.05
15	5	0.5	-4.4	0.25	19.3	2.2
14	7	15	-2.4	2.25	5.7	3.6
13	4	2.5	-5.4	6.25	22.1	13.6
12	3	3.5	-6.4	12.25	40.9	22.4
11	12	4.5	2.6	20.25	6.7	11.7

$\Sigma x = 155.6$; $n = 10$; $\bar{x} = 15.5$; $\Sigma y = 94$; $\bar{y} = 9.4$; $\Sigma dx^2 = 82.5$
 $\Sigma dy^2 = 245.81$; $\Sigma dx.dy = 22.4$

From the correlation analysis the coefficient of correlation (r) derived was 0.18. This meant that a relationship exists between the two variables - age and performance in drawing. It also meant that the relationship was positive, but a weak one since the value 0.18 is nearer the zero point (i.e. the point where it could be said that there is no relationship).

5.8 The Relationship Between the Attitude of Students and their Performance in Drawing.

The scores of 68 of the students observed both in the drawings and their corresponding scores from the attitudes

scale were used for the analysis to determine the relationship between these two variables 5.14 below illustrates the comparison made.

Table 5.14 Scores of Students on Attitudes Scale and Corresponding Score in Drawing

Scores of Drawing	Scores on Attitude	Frequency
19	102	1
18	80	1
17	85	3
16	66	2
15	92	3
14	96	2
13	81	5
12	88	5
11	93	2
10	100.3	3
9	80	4
8	85.8	7
7	99	4
6	86	8
5	85	3
4	68	1
3	88.6	5
2	90.4	5
1	87	4
Total	1654.1	68

Figure 4 illustrates this relationship



Figure 4 Relationship Between Attitudes and Performance of Students Observed

The values of these variables fluctuated up and down as could be seen from the graph. However, a positive relationship was inferred since the values slightly sloped upwards; a dotted line was drawn across some of the values to show the direction of the values on the graph. Table 5.17 below shows the analysis of the correlation between the two variables.

Table 5.15 Correlation Between Attitudes and Performance scores in Drawing of Students Observed

Performance in Dr. score	Att. Score y	X-X dx	Y-Y dy	dx^2	dy^2	$dx \cdot dy$
19	102	9	15.1	81	228.00	0.9
18	80	8	7.9	64	4.76	-55.2
17	85	7	-1.9	49	3.6	-13.2
16	66	6	-20.9	36	436.8	-125.0
15	92	5	5.1	25	26	25.5
14	96	4	9.1	16	82.8	36.4
13	81	3	-5.9	9	34.8	-17.7
12	88	2	1.1	4	1.2	2.2
11	93	1	6.1	1	37.2	6.1
10	100.3	0	13.4	0	179.5	0.0
9	80	-1	-6.9	1	47.6	6.9
8	85	-2	1.9	4	3.6	3.8
7	99	-3	12.1	9	146.4	-36.3
6	86	4	-0.9	16	0.81	3.6
5	85	5	-1.9	25	3.61	9.5
4	68	6	-18.9	36	357.1	173.1
3	88.6	7	1.7	49	2.89	11.9
2	90.4	8	3.5	64	12.85	-28.0
1	87	9	0.1	81	0.01	0.9
$n = 19$	$\Sigma x = 190$	$\Sigma y = 1552.3$	$\Sigma dx = 570$	$\Sigma dx^2 = 1652.2$	$\Sigma dy^2 = -15.6$	
$\bar{x} = 10$	$\bar{y} = 81.7$					

The correlation coefficient derived between these two variables was -0.81 . This implied that a negative relationship existed between the attitudes scores and performance

scores. The relationship was however, very strong since 0.81 is a point near 1.

10. The relationship between the class of students, and their attitudes, as well performance in drawing. In order to determine the relationship in question, comparisons were also made between the classes of the students and their scores on the two scales. Tables 5.16, 5.17 and 5.18 illustrate the relationships as follows:

Table 5.16 The Relationship Between the Class of a Student and his Score on Attitude Scale

Class	Kufena	Basawa	Combined
5	87.2	-	87.2
4	71	91.05	81
3	88	50.9	69
2	95.5	-	95.5
1	88	89	88

The scores plotted against a class are the mean scores for that class derived from the raw data. The graph drawn to illustrate the relationship is presented in Figure 5 below.

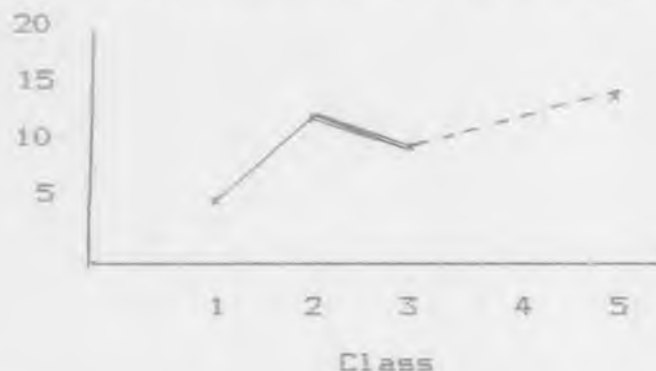


Figure 5 Relationship Between Classes and Performance of Students in Drawing.

The relationship portrayed by figure 5 is a negative one. The higher values are found among two classes that is, classes 2 and 3. The scores for the junior classes that is, form 1, 2, and 3 were lower than those for the most senior classes. To further determine the extent of the relationship, the correlation for these two variables was computed, shown in Table 5.17.

Table 5.17 Correlation Between the Class of a Student and His Attitude

Class	Mean Attitude					
	Score	dx	dy	dx ²	dy ²	dx.dy
x	y					
5	87.2	2	1.3	4	1.69	2.6
4	81	1	-14.9	1	222.00	-14.9
3	69	0	2.1	0	4.4	0.0
2	95.5	-1	9.1	1	82.8	-9.1
1	88	-2	2.1	4	4.4	+4.2

$$E_x = 15 \quad E_y = 420.4 \quad E = 10 \quad E = 315.2 \quad -12.3$$

$$n = 5$$

$$\bar{x} = 3$$

$$r = 0.23 \quad r^2 = 6.05$$

The coefficient derived, $r = -0.23$ revealed that the relationship between the class of a student and his attitudes was negative; from the coefficient it was possible to see that this was a weak negative relationship.

Table 5.18 The Relationship Between Class and Performance in drawing of Students Observed

Score	Class 1	Class 2	Class 3	Class 5
20	-	-	-	-
19	-	-	-	1
18	-	-	-	1
17	-	-	-	1
16	-	-	-	1
15	1	-	2	1
14	-	-	2	0
13	-	2	1	2
12	2	3	4	-
11	-	-	2	1
10	1	2	1	-
9	2	-	4	-
8	1	1	4	1
7	2	-	3	-
6	2	-	3	-
5	1	-	3	-
4	2	-	0	-
3	4	-	2	-
2	3	2	1	-
1	1	-	-	-
Total	n = 22	n = 10	n = 32	n = 9
Mean scores	= 4.56,	10.75	8.75	14.40

The mean scores for each class was worked out and used in plotting the graph shown below:



Fig 6 Relationship between class and attitudes of students

The distribution in Table 5.19, and Figure 8 presents a positive relationship. The values generally ascended in an upward sloping manner. The lowest class that is, form 1, had the least scores on the performance scale, while the values for performance generally increased as the classes go up. This indicates that there is a positive relationship between classes of students and performance in drawing. The correlation for these two variables is shown in Table 5.17 below.

Table 5.17 Correlation Between the Class of a Student and *Performance in Drawing*

Class Attitude score						
x	y	dx	dy	dx ²	dy ²	dx.dy
5	87.2	2	1.3	4	1.69	2.6
4	81	1	-14.9	1	222.00	-14.9
3	69	0	2.1	0	4.4	0.0
2	95.5	-1	9.1	1	82.8	-9.1
1	88	-2	2.1	4	4.4	+4.2
Σ	Σ	Σ	Σ	Σ	Σ	Σ
E = 11	E = 38.46	= 8.74	50.48	18.55		

$$\bar{x} = 2.75 \quad \bar{y} = 9.60$$

$$\bar{n} = 4$$

$$S_{xy} = 18.55 = 4.64$$

$$S_x = 8.74 = 1.47$$

$$44$$

$$S_y = 50.48 = 3.55$$

$$4$$

$$r = \frac{4.46}{1.47 \times 3.55} = 0.68$$

$$1.47 \times 3.55$$

The coefficient derived was 0.68. This implied that there is a strong positive relationship between the two variables (that is class and performance in drawing).

The correlation Between Class and Age.

The correlation Between Age and Class was also computed as presented in the following table.

Table 5.20 Relationship Between Class and Ages of All Respondents

Class	Age					
x	y	dx	dy	dx ²	dy ²	dx.dy
5	17.6	2	-6.64	4	44.08	-13.28
4	11	1	-13.24	1	???.??	-13.24
3	63.39	0	63.39	0	1532.7	0.0
2	15	-1	15	1	85.37	-9.24
1	14.25	-2	14.25	4	99.80	-19.98
E = 15	121.24	E = 38.46	10	1937.15	-55.74	
n = 5	$\bar{y} = 24.24$	$\bar{x} = 3$				

The coefficient derived was $r = -0.30$. This coefficient implied that the relationship between age and class was a

weak negative one.

5.3 A regression analysis of the correlations was made: This involved a comparison between the correlation coefficients to determine which of them was most related with performance in drawing and the extent of the relationship. Tables 5.21 and 5.22 respectively presents a summary of the regressions and covariance shared among the variables.

Table 5.21 Correlation between Age, Attitudes, Class, and Performance in Drawing of Students Observed

Variables	Correlation Coefficient Derived	Nature of Relationship
1 Age/Attitudes	$r = -0.32$	Weak Negative
2 Class/Attitudes	$r = -0.20$	Weak Negative
3 Age/Class	$r = -0.32$	Weak Negative
4 Age/Performance	$r = 0.18$	Weak Positive
5 Class/Performance	$r = 0.68$	Strong Positive
6 Attitude/Performance	$r = -0.81$	Strong Negative

Using the method of Loveday (1958, op cit), the covariance shared between the various variables was computed using formula.

$$r^2 = \frac{(dx dy)^2}{n}$$

The coefficients derived were presented in Table 5.22 below.

Table 5.22 Covariance Shared Among the variable, Age, Class Attitudes and Performance

Variables	Covariance Coefficient Derived
1 Age/Attitudes	$r^2 = 19.89$
2 Class/Attitudes	$r^2 = 6.05$
3 Age/Class	$r^2 = 11.39$
4 Age/Performance	$r^2 = 5.01$
5 Class/Performance	$r^2 = 21.5$
6 Attitude/Performance	$r^2 = 38$

From these two tables, certain inferences were made:

1. With reference to the analysis on general scores of students on the attitude scale (see table 5.2), that is, 107 (83.6%) of the total respondents had a score on the positive side of the attitude scale, while 21 (16.4%) fell on the neutral (or below average) side of the same scale. Judging from the coefficient derived for 1: Relationship between age and attitudes, $r = -0.32$, and 2, class and attitudes, $r = -0.20$, it could be said that for both the majority (107 i.e. 83.6%) who had positive attitudes, age and class did not have much influence upon their reactions.

2. Judging from the correlation coefficients for 2, $r = -0.20$; 3, $r = -0.32$ and 5, $r = 0.68$. Class was considered as being most related with performance in drawing. The coefficient $r = 0.68$ suggested a strong positive relationship, and was the highest value among the three coefficients. The coefficient r^2 derived for this particular relationship (class and performance) suggested that 21.5% of the variance in class of students accounted for the differences in performance. Referring to Table 5.13 (general range of scores of

students observed in drawing), it was possible to see that 27 (35.1%) of the total students observed scored above average, while 50 (64.9%) scored below average. A breakdown of the 27 who scored above average revealed that 7 (77.8%) of these came from the fifth year, 12 (37.5%) from the third year, 5 (50%) from the second year, and 3 (13.6%) from the first year. Referring also to Table 5.21, it could be seen that class five (5) was the most positively related with performance, since the average performance for that class was the highest among the values for all the classes. The performance of class two was next to that of fifth year, with 10.75 as average performance. Table 5.23 (below) presents this comparison.

Table 5.23 Percentages in performance in Drawing of Students who scored above average

Class	No. of students scoring > average	Percentage Per Class	*Overall Percentage
5	7	77.8	26
3	12	37.5	44.4
2	5	50.0	18.5
1	3	13.6	11

*Percentage per class referred to the percentages of scores per students' class, while overall percentage referred to the percentage of the number of students out of the total number of students observed.

The relationship between age and performance was considered next to class in terms of being most related with performance in drawing. The reason for this inference was that the

correlation coefficient ($r = 0.18$) revealed positive relationship even though it was rather a weak one. The variance shared by these two variables $r^2 = 5.1$ suggested that only 5.1% difference in performance accounted for by

The relationship between attitudes and performance though a very strong one was a negative one, and as such could not be considered a significant relationship. The covariance (r^2) shared by the two variables attitudes and performance, $r = 0.38$ implied that 38% of the performance in drawing was accounted for by an equal percentage of variance in attitudes.

CHAPTER 6

DISCUSSION6.1 Findings

Based on the context of the research questions and the responses from the respondents some inferences were drawn as stated below:

6.1.1 What are the general attitudes of students towards drawing generally as a subject

FINDINGS

It was found that majority of the students feel positively about drawing as a subject. Most of the respondents had a score on the positive side of the attitude scale. During the observation many of the students expressed that they liked drawing, or find it interesting. The opinion poll of most of the students was that drawing was valuable. In verbal expressions supporting this during the observation, some of them claimed that drawing contributes to learning other subjects especially the science subjects. Some of the respondents explained this in terms of the diagrams used in those subjects. Most of the respondents (in the questionnaires) also supported this view. Only a relatively few did not feel very positively about drawing. No student was found to feel quite negatively about drawing.

Research Question 2.

6.1.2 How do students react towards drawing as an activity?

FINDINGS

Respondents were found to have divided opinions about this item. Responses made in the questionnaires indicated

that students find drawing an enjoyable activity. Many of them for instance, felt that they should indulge in drawing, since they by implication disagreed that it should only be for those who were highly talented. Interestingly also, majority of them felt that drawing should only be for those children at the primary and nursery schools. It was discovered from the observation that many of them find the actual activity of drawing a difficult one. Many of the students observed confessed that they love to draw, but simply cannot draw as a result of difficulty involved in the process. Only a few students among those observed, felt that the actual process of drawing was not a difficult one. The performance of the students observed during the drawing exercise was an evidence of these divergence of opinions. Nevertheless, most of the drawings though lacking in some conventions expected of them, showed an obvious attempt at expression of emotions, and whatever ideas the students had in mind. Based on this it could be said that some of the drawings were quite creative. However, it was also discovered that a quite large number of the students resorted to copying and tracing. Quite many of them engaged the use of rulers and other instruments to aid them in their drawings. Some of the drawings collected both during the observation and from some students not observed revealed this fact.

Research Question 3.

6.1.3 What are the reactions of students towards finished drawings?

FINDINGS

The reactions of students both in the questionnaires and the observation revealed that students generally admire

finished drawings. Majority of respondents indicated that they liked their own drawings and the drawings of their classmates as well as those of other artists. Only a few students responded negatively to this particular item. It was also observed that during the observation, the students showed keen interest and excitement towards the drawings exhibited. Based on these evidences therefore, it was obvious that most students react positively towards finished drawings.

Research Question 4

6.1.4 Are the attitudes of students related to their ages
(that is, developmental stages)?

The investigations carried out established that there was no definite relationship between the attitudes of respondents and their age factor (developmental stage). There was no set pattern found among the responses of students who belong to a particular stage of development with reference to their attitudes.

6.1.5 Research Question 5

How do students perform generally in Drawing?

FINDINGS

The performance of students was inferred both from the students' reactions during the observation, the students' scores in the drawing exercise and the scores of students not observed. The investigation established that most of the respondents did not perform well in the drawings. The drawings were generally lacking based on the four point criteria used for assesment. Majority of the drawings were lacking in details, in use of tone and the general

arrangement of objects within the picture that is, the composition was also generally poor. Only a few of the students drawings collected (especially those of the fifth year students) showed conscious attempt, at good composition in terms of proper employment of perspective, and application of tone by way of shading, and arrangement of objects within the picture.

6.1.6 Research Question 6

Does the performance of students in drawing correspond with their developmental stage?

FINDINGS:

It was discovered from the study that there is a relationship between the age factor (developmental stage of students and their performance in drawing. That is, drawing of older students were more advanced than those of the younger students. A review of the statistics employed to assess the relationship between these two variables revealed that the relationship though positive, was a weak one.

6.1.7 Research Question 7

What is the role of teaching techniques on the performance of students in drawing?

FINDINGS:

The interviews revealed that almost all of the art teachers of these three schools were trained art teachers. Almost all of them were graduates having Bachelor of Arts Degree in Art. The investigation revealed that there are sufficient teachers in the three schools, and there was no problem of overload however, it is questionable whether this situation obtains in schools outside the scope of the present findings. Based on the present findings derived from the

interviews, the art teachers in these schools use one major method for teaching drawing. They use the Direct Activity method more than any other method of teaching art. In some cases notes were given to students, most especially in the senior classes. Though no particular analysis was used to determine the extent of the relationship between teaching techniques of individual teachers and students' performance in drawing, there was evidence to show that a difference existed among the classes of students in terms of their performance. This inference was drawn from the scores and their awareness level about drawing of the students. Those students in the senior classes appeared to know more about drawing than those in the lower classes. It was deduced from this that teaching may have been determining factor on the differences in the performance of students. In this case, the difference was implied to come from the amount of teaching which the students had been exposed to.

6.1.8 Research Question B

How does the availability of materials affect students' performance in drawing?

FINDINGS:

The investigation showed that there was a general lack of facilities in all of the three schools. This was confirmed by the either totally or nearly empty stores shown to the investigator. The art teachers confessed that apart from pencils, crayons were being used in the drawing classes due to unavailability of materials. The problem was so acute that even paper was no longer being supplied for drawing, as such students have to improvise by providing their own drawing books. The teachers revealed that, some of the students often came to school without any materials to use

in the drawing classes. The fact that the students showed ignorance about the use of any other media (apart from pencils and crayons) for drawing during the observation is also an indication that they were not familiar with those materials.

The interviews also revealed that the art rooms were not sufficient for the total population of students offering art in the schools. As a result of this, some of the students hardly used the art rooms, especially at the junior level. Responses of the art teachers also showed that exhibitions rarely took place because the schools were not privileged to hold comprehensive exhibitions except the occasional display of examination works of final year students, or those art works considered of outstanding standards.

6.1.9 Research Question 9

Does the class of a student have any relationship to his attitudes and performance in drawing?

FINDINGS:

It was discovered that the attitudes of students have no relationship with the classes of those students, whereas a relationship was found to exist between the classes of student and their performance in drawing. It was particularly observed that the placement of students in classes in the three schools was not determined by their ages.

6.1.10 Research Question 10

What is the extent of the attitudes of students on his performance in drawing?

A positive relationship was found to exist between the attitudes of students, and their general performance in

drawing. The relationship was however a weak one as suggested by the statistical analysis carried out to test this.

6.2 Interpretation of the Findings

The interpretation of the findings is an attempt to explain the results of the study in terms of questions raised about the validity of the study based on the methods used for the investigations, and other extraneous factors that may have influenced the results.

From a review of the responses of the subjects it was possible to see that as much as possible, students were consistent in their responses under each instrument used. From a review of the questionnaire response, it was noticed that only a few students responded both on the affirmative and on the negative on the same issues. The fact that majority of the respondents consistently had positive scores in almost all items is proof to this. It showed that questions were generally well understood by the respondents and that the responses were their opinions on the statements. It cannot be ruled out however, that some of the responses might have been due to a lack of understanding of the statements as contained in the research instrument. Although, this may not be assumed as the fault of the instrument, it may be due in part to the maturation level of the respondents, or also to any other factor beyond the scope of this study.

For instance, lack of information such as ages of many respondents which they failed to include in some cases, may have in no small way affected the results of the study. Also, inability to follow the proposed plans for allocation of subjects according to the various classes in the samples, which resulted in the loss of some subjects may also have

influenced on the findings.

It was noted that the observation was quite simple enough and students were not under any tension. They were allowed to move freely or even discuss if they wished to. The effect of the observer was neutralized as much as possible, since the taking of field notes usually considered to be normally distractive was minimized as a result of the fact that some of the personal information about students were recorded by them on their drawing papers. From this it could be argued that the results of the drawings could not have been as a result of testing. It was more of deficiency on the part of the students. This was supported by the fact that a positive relationship was discovered between the classes of students and their performance in the drawings. It was however, considered that the method used in determining the knowledge level of subjects about drawing may have been inadequate which may have also influenced the results.

Generally, the maturation factor was considered as also being influential on the responses of the subjects. The level of maturity or lack of it may have influenced the responses of some of the respondents in the questionnaires. The attitudes of respondents were found to be negatively related to age and this was interpreted to mean that increase or decrease in age will invariably result in decrease or increase in attitudes of the respondents. Judging from the results, the extent to which this relationship could be taken seriously was so low that it could as well be regarded as a non-existence relationship. From the results the influence of age could be interpreted to mean that for the majority who had positive attitudes and the minority who had neutral attitudes, only 25.5% of the total attitudes happened as a result of increase or decrease in age (see Table 5.23). In

that case, 74.5% of the causes of attitudes for this particular sample could be considered to be as a result of other factors apart from age. Why did age not correlate positively with attitudes? Could it be that the questionnaire had not included enough parameters to measure and test the effect of age on the attitudes of respondents?

It is rather difficult to give plausible explanation on this. Age was also found to be negatively related with the classes of students. The reason for the negative correlation between age and attitudes may as well have been the same that age and class were negatively related, though this is debatable. The findings for the relationship between age and performance in drawing were however positive. This finding could be interpreted to imply that increase (or decrease) in age would result in increase (or decrease) in the performance of students in drawing. The results from the covariance suggested that the extent of the positive influence of age on performance was rather small, that is 21.1% of the total performance could be considered to be as a result of difference in age. Why then, was age not strongly related with performance in the students drawings and why was performance related to age while attitudes were not? The results of the investigation suggest that the weak correlation between age and performance may be regarded as being caused by the fact that class was not related with age, and a host of factors outside the scope of this study. Nevertheless, the fact that performance was better among older students who were mostly in the senior classes suggests that the maturation factor may have influenced the results of the study.

The investigator was convinced that the placement of students in classes also affected the results of this research. The performance of students was found to be

positively related with their class, while their ages and attitudes were not. Regarding the difference between age and class, this was obviously due to the fact that placement of students did not depend upon their ages. The dichotomy between age and attitudes was strange since attitudes are expected to be influenced by experience. The covariance indicated that only 5.1% of the variance was caused by difference in class which implied that 94.9% of the causes of the negative relationship between the two factors was as a result of factors outside the class. The correlation derived was so low that it could almost be concluded that there was not relationship between the two. Considering the positive relationship between class and performance, the only obvious reason that could be given for this was that more of the students who performed better happened to be found in the same classes.

Finally, the researcher was concerned about interpreting the findings that attitudes were generally not related with performance in drawing. Why were the attitudes of students not positively related with the actual performance in drawing of the same students? The attitudes derived from the investigations were quite highly positive, the performance on the other hand was relatively weak compared with the highly positive attitudes of the subjects. One plausible reason which could be given for this occurrence may be the finding that students feel the actual process of drawing is a difficult one. It could be said for those who performed well, that the effects of class which positively related with performance, may have superceded (or cancelled out) the effects of the negative relationship between class and attitudes.

6.3 DISCUSSION OF EDUCATIONAL IMPLICATIONS OF THE STUDY

The findings from this study were found to be either in keeping with or at variance with general existing theories. This discussion attempted to discuss the findings in relation to literature under the major areas reviewed and their implications for educational practice as follows:

6.3.1 According to the educational theorists, performance is an outcome learning. How students perform determines the extent of their learning. The result revealed that though the performance of students were generally weak, some few students performed well in the subject. This suggests that for some of the students, learning had occurred, while for majority, much learning in drawing had not occurred, and there are reasons for these differences.

6.3.2 Factors investigated in relation with CREATIVITY

The study attempted to relate the effects of attitudes and performance on the process, product of drawing. The findings established that differences exist among these three aspects of creativity. It was discovered from the study that students find the actual process of drawing difficult, which was considered as part of their attitudes towards the subject. This finding may explain the findings by Olorukooba (1977 op cit) and Mamza (1983, op cit) that students perform poorly as a result of negative orientations, and also to a great extent the claim by Kaufman (1980, op cit) that adolescents tend to reject drawing and art activities. The number of students found offering art which is considerably small compared with those not offering art also substantiates this view. The findings of Porthmouth also listed in the literature review were confirmed by this study; that is, students

were found to recourse to copying, tracing, and using mathematical instruments to draw, etc. The question is, were this findings implying this behaviour to be a set pattern, or expected behaviour bound to occur with all adolescents in the art class? The researcher was convinced that this behaviour and negative attitudes may be occurring as a result of inadequate coaching and direction given to the students in the drawing class. The remedy to this could be that students should be given more intensive coaching in drawing: time should be given to exposing students to experiences in the basics of drawing such as in those suggested in the syllabus content for drawing. The suggestions of Robertson, and Kaufman, and Wangboje (op cit will be of use in soliciting for solutions to this problem regarding the issue of attitudes as related with the actual process of drawing.

Students were found to like finished drawings. That is (drawing as a product). The finding that students like and admire finished drawings is of advantage in the consideration of their performance. This admiration of drawing was on a large scale (from the results) though it appears it did not influence the students positively in their performance. If students find drawings appealing it would be easier to coerce them towards liking the actual process of drawing, through appropriate methods of teaching. It is also in view of this fact that, though the issue of exhibitions is viewed with mixed feelings, they could be suggested as one possible contribution to the solution of this problem. The idea behind this is that when students see finished drawings in an organised exhibition it may challenge, stimulate, and inspire them towards having increased interest for drawing, and inspire them towards producing better drawings for themselves.

6.3.3 Factors affecting performance in drawing

The investigations were more confined to certain areas only from those reviewed such as: McFee's Readiness Factor, Mukherje's Antecedents, Developmental Factors, and Training Factors which covered specifically the age factors as variables affecting learning in drawing. The findings confirmed to a great extent most of these theories as discussed below:

The investigations specifically revealed that older students generally performed better in drawing than the younger ones. This finding refuted the claim of Madge and Weinberger, and Eisner that drawing skills tend to be arrested at about adolescence. Based on this, it could be concluded that drawing skills will improve rather than decrease with age. This has implications for educational practice which can be dealt with by the appropriate manipulation of students' ages. The effects of teaching (treated under training factors) on the performance was an obvious one. The results suggested that this factor had a positive effect on the drawings of students. Evidently, however, the extent of this was rather small which leaves much to be desired on the part of teachers, since most of the the junior students still had problems with their drawings. The findings confirmed Murherje's claim that training will improve learning outcomes, and that of McDill and Eckland that the influence of the teacher would improve performance. This leads to the conclusion that teacher motivation is therefore very vital to the performance of students in drawing; as Kaufman, and Wangboje suggested that it is the role of the teacher to give guidance to students taking into consideration their various problems.

6.3.4 The effects of attitudes of adolescents in their drawings

The study established that students did not have altogether negative attitude (as discussed in 6.5.2 above). This finding is therefore at variance with some of the claims put forward in the literature. To an extent, the findings that students generally have positive attitudes towards drawing as a product, and conceptually (i.e. they admire drawing refuted the claims that adolescents generally do not like, and respond negatively to art. These findings assert the view of Robertson that adolescents may be interested in art. It may be argued that theories about developmental problems cited by Robertson (op cit) and Piaget (op cit) do not actually imply that the attitudes of adolescents would totally negative. This is in view of the fact that adolescents are described, and found to be curious, and show a tendency to exploration. It implies that adolescents may have an interest in those things they explore, and suggests that they may have positive attitudes towards such objects of their interest or curiosity. It should therefore not be unusual if students are found to have positive attitude towards drawing which involves both exploration and expression. Based on this argument, and the evidence from the study it would be improper to conclude that adolescents generally have negative attitudes towards drawing (or in a broader sense, art). The implications for this finding have been discussed in Section 6.3.2.

The success of the drawing lesson depends upon the way the students respond to it. Since drawing is basically concerned with representation of images in the environment, the way a student perceives the environment in turn depends upon the guidance he receives. This is in line with Ajayi's

(1982, op cit) claim that learning in art has to do with perception (seeing and understanding) of the environment.

The inavailability of drawing materials discovered by this study contributed to the problem of teaching drawing. It was also a confirmation of the observations of Ajidahun, and Mamza cited in the introduction, that one of the problems facing art teaching in the secondary schools are art materials. Many activities are suggested for drawing such as drawing with water color, poster color, gouache, ink and pen, charcoal, and pastels, etc. It would be necessary to note that the use of proper tools, equipment, and materials is one of the objectives of art education. This goes a long way in support of the need for implementation of proper art materials used for drawing. The investigator was convinced that without these materials, it would be difficult for students to have a complete experience of drawing. This will in turn present a handicap for the art teachers since many lessons would be left untreated. The implications for this are that it would be difficult to obtain desirable results in performance from students. In view of this, it is necessary that certain measures be taken which will require the co-operation of both the art teachers, as well as the Government and school authorities. The contribution of the latter should be by way of supplying the secondary schools with adequate materials, and giving the opportunities for them to go for excursions and exhibitions which will expose the students more to drawing.

In addition to this, the time allocated for art as revealed by the findings, was also contributive to the relatively poor performance of students in drawing. The time is inadequate in view of the fact that it has to be shared between teaching, drawing, and other aspects of art. As

such, it would be necessary for the periods of art to be increased in number, more than the present double periods a week per class.

The performance of students was found to relate positively with their class. The placement of students in classes therefore carries implications for their performance. In Nigeria, the problem of placement of children in schools is to an extent beyond the scope and control of the individual school authorities. One of the reasons is because children are not sent to school at the same age. With regards to the importance of age, educators have suggested that learning should proceed in a logically sequential manner, that is, from simpler tasks to more difficult ones; and that age and level of development of children should be taken into consideration while preparing teaching materials. The ideal situation should therefore be that students are placed in classes according to their ages, so that children of the same age are in the same class, if it can be helped. The idea behind this suggestion is that it will enable giving more attention to the children, and will enhance the assessment of students at their own level of cognitive development. The solution to this problem will however depend upon the co-operation and orientation of the entire society.

CHAPTER 7

SUMMARY AND CONCLUSIONS7.1 Summary

At the on set of this study, the problem of learning in drawing was conceived to be in the area of performance. It was believed that secondary school students either perform well or poorly in drawing and that this is as a result of a host of factors. Some of these factors were considered in order to discover their influence on the issue of performance. In stating the problem, certain questions were asked as follows: the present investigator wished to know whether students' attitudes, age, and training factors affect the students' performance in drawing. What formed the background of the study was the researcher's interest in students' performance in drawing. Previous studies which focus on similar problems were extensively discussed in the literature review. Factors affecting learning, and creativity specifically formed part of the discussion for its relevance in the consideration of finished drawings. Cognitive development was discussed as a factor that influences the behaviour and performance of people in learning subjects; attitude theories were considered in order to set a conceptual frame work for the investigation about attitudes of the students in relation to the problem; the role of the teacher was described to determine his influence on adolescents in drawing classes; and various methods of some studies on attitudes and performance in drawing in order to provide a guide for the present investigation.

To find out what type of attitudes students have towards drawing an attitude scale questionnaire was prepared and administered on some students in Zaria town. To determine

the performance of students in drawing, some students were observed while drawing. A scale was drawn to assess the performance of the students in their drawings. The students were asked questions to determine how much information they had about drawing. Interviews were also carried out to supplement the information derived from the two methods above to provide information concerning the extent of Teacher motivation, and provision of facilities for drawing (as an aspect of the training factor). In the analysis of data collected comparison (using statistics), and description of situations through which inferences and the conclusion of the study were made.

In view of the issues raised from the discussion and limitations of this study, the following recommendations and suggestion for further research were made.

7.2 Conclusions

Based on the analysis of the data of this study, the following conclusions have been derived that:

1. Students have positive attitudes towards drawing, but this is only as at a conceptual level (i.e. students admire drawing).
2. Students find drawing useful to education, the individual and life generally.
3. Students find drawing nevertheless, a difficult activity.
4. Majority of students do not perform well in drawing.
5. The drawings of adolescent students, to a small extent corresponds with their developmental stage.
6. The performance of students in drawing, is affected by both their attitudes towards the subject, age factor and training factors.

7.2 Recommendations

The following are recommended based on the results of the findings:

1. The teaching of drawing as an aspect of art should be given due priority. There seems to be no justification whatsoever for the continued use of one double period per week. As such, more time should be allocated for the teaching of art, that is, at least four periods per class in a week. This will give the art teacher more time to devote to drawing. Under the Directed activity method Art teachers should spend more time coaching students in the basics of drawing, such as observation of lines, and relating the function of lines to natural and man-made objects, should be emphasized at the beginning of the art course. Other areas such as application of tone, and perspective drawing should be emphasized later (as suggested by the syllabus for art) to enable students to find the lesson demanding and interesting. In order to improve the informational level of students in drawing, students should be given notes on the various topics treated, which they can refer to, since at this level they may forget if the lessons are based on mere discussion.
2. It is necessary that students should be introduced to the use of all media employed in drawing. From an economic point of view, it may not be feasible for the Government to provide all art materials since they are now either scarce or very expensive. In view of this, the use of local materials should be emphasized among art teachers. Higher Institutions could contribute to this by including lectures on improvisation of art materials in their curriculum (or as special projects within the practicals).

Where this is not feasible, the Government Educational Resource Centre should hold workshops on improvisation of local materials used in drawing, for all secondary school art teachers from time to time. The art teachers should in turn involved the students in these. By so doing, it is hoped that this will go along way in solving the problem of students experience of materials used in drawing. Some examples of simple improvised materials used for drawing are given below.

1. Charcoal

There are several ways that can be used in preparing this:

- i) By burning some fire stick in a closed tin over an open fire.
- ii) Charcoal for drawing can also be derived from wood fire used for burning pottery.

This can be easily made by students for their own use.

2. Paint, Brushes and Pens

Improvised brushes and pens can be prepared from a slice of wood of suitable size. To make a brush, the end of the stick is either chewed or beaten to create the bristles. These can be made from bamboo, papyrus, elephant grass or any other local wood. The tip of the brush is then trimmed to create a good finish. The other end of the brush could made into a pen by slicing the end of the stick. Different sizes of brush would depend upon the width of the stick, while the sizes of the pen would depend upon how sharp the end is cut e.g. a broad flat end will result in a bigger pen, or tapered to a thin end to create a thinner pen, etc.

3. Ink and Paint

This may require a little amount of money. Notwithstanding, students could be made to contribute towards this by collecting small amounts they can afford in groups to buy quantities of these materials. Local ink for example, ink use by koranic mallams, and local dyes used at the traditional dye-pits could be used. The possibilities of exploring with laundry blue, and colours from herbs should also be explored.

4. Paper

The use of old newspapers could be encouraged. Art teachers may also take initiative to acquire cut-offs from printing companies.

5. It may not economically feasible for students to attend excursions and exhibitions outside the school. As such exhibitions could be staged by art teachers in the schools. Art teachers of all schools within an area could either hold a one-man or an all-staff exhibitions of drawings in their own schools, or co-operate to organise exhibitions from one school to the other. In addition to this, practising artists outside the school could be invited to hold exhibitions from time to time (if they are willing to at their own expense), in order to expose the students to drawing on a larger scale. This will stimulate and inspire students towards better performance in drawing. They should also be taken outside the school from the time to time to view exhibitions of other artists.

7.3 Suggestion for Further Research

1. Replication studies of this study could be made, using a larger sample or alternative instrument, and statistical methods in order to derive more information on the influence of the three factors studied (that is, Attitudes, Age, and training) on the performance of students in drawing.
2. Studies could be made to discover factors influencing the attitudes of students towards drawing.
3. Specific aspects of the learning process of drawing e.g. observation, imagination could be examined in terms of contribution to the learning of drawing by future researchers.
4. Representational patterns of adolescent with specific reference to drawing could be studied as a contributive factor towards understanding the learning of drawing by adolescents.
5. How students react towards aspects of drawing e.g. Landscape Drawing, Still-life Drawing could be documented by future investigators.
6. A similar study could be made using two observations carried out over a period of time (i.e. Pre-test, Post-test) to discover the effects of teaching on the performance of students in drawing.
7. A study could be carried out to discover the effect of other factors not treated by this study i.e. socio-economic and socio-cultural factors on performance in Drawing of Secondary School Students.

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- 12 Drawing helps you feel your emotion
- 13 Students should not waste their time drawing, it is just
play
- 14 Drawing is good for everybody
- 15 The drawing lessons are normally boring
- 16 Drawing can help you learn other subjects better
- 17 Those things taught within drawing are difficult to
understand
- 18 Drawing helps you understand life better
- 19 Drawing is of benefit to learning other aspects of art...
- 20 Drawing is valuable to man
- 21 Drawing is a useless activity
- 22 The drawings made by classmates are often interesting....
- 23 Your own drawings are also often good and interesting....
- 24 You are not interested in drawing now more than before...
- 25 The drawings of artists are interesting and
inspiring.....
-

1. Give a definition of drawing (that is, what do you understand drawing to mean?).
2. Briefly explain why you participate in drawing activities.

APPENDIX II

OBSERVATION OF STUDENTS' ATTITUDES TOWARDS DRAWING
(M. A.) ART EDUCATION RESEARCH
OBSERVATIONAL GUIDE

Name of artist and sex

Date of execution of work

(a)

(b) Description of work e.g. medium:

ii) Style e.g. How is it carried out?

iii) Use of elements - Shape, Form, Space and Balance
 (General composition).

Chronological sequence of execution:

Judgemental Comment:

A. Liking (denoted by happiness, pleasure, admiration for work, etc.

B. Disliking (depicted by sadness, displeasure, anger, irritation at work, etc.

C. Neutrality.

Other comments on students attitude.

Key question 1. Do you like Drawing? Why/Why not?

APPENDIX III

Table 4.3 Total Scores on all Items

Item 1					Item 2				
Response	KC	BTC	Total	%	Response	KC	BTC	Total	%
A	43	26	69	55	A	41	18	59	46
B	20	34	54	42	B	20	39	59	46
C	1	0	1	1	C	5	0	5	4
D	3	0	3	2	D	1	3	4	3
E	0	0	0	0	E	1	0	1	1
Total	67	60	127	100	Total	68	60	128	100

Item 3					Item 4				
Response	KC	BTC	Total	%	Response	KC	BTC	Total	%
A	10	6	16	12	A	20	16	36	28
B	15	22	37	30	B	13	30	43	35
C	5	5	10	8	C	15	1	16	12
D	25	17	42	33	D	15	12	27	21
E	11	10	21	17	E	5	1	6	4
Total	65	60	126	100	Total	68	60	128	100

KC stands for Kufena College

BTC stands for Basawa Teachers' College.

Item 5					Item 6				
Response	KC	BTC	Total	%	Response	KC	BTC	Total	%
A	31	18	49	20	A	3	5	8	4
B	24	22	46	36	B	7	15	22	18
C	6	6	12	9	C	8	5	13	10
D	0	10	10	8	D	27	26	53	41
E	2	8	10	8	E	18	9	27	22
Total	68	59	127	100	Total	68	60	128	100

Item 7					Item 8				
Response	KC	BTC	Total	%	Response	KC	BTC	Total	%
A	23	18	41	33	A	10	10	20	34
B	22	22	44	35	B	19	17	36	48
C	4	3	7	5	C	16	7	23	7
D	12	5	19	16	D	18	24	42	6
E	7	7	14	11	E	5	2	7	5
Total	68	55	123	100	Total	68	60	128	100

KC stands for Kufena College

BTC stands for Basawa Teachers' College.

Item 9					Item 10				
Response	KC	BTC	Total	%	Response	KC	BTC	Total	%
A	9	8	17	13	A	28	15	43	34
B	12	20	32	25	B	26	36	62	48
C	9	1	10	8	C	5	4	9	7
D	19	19	38	30	D	3	3	6	5
E	19	12	31	24	E	6	2	8	6
Total	68	60	128	100	Total	68	60	128	100

Item 11					Item 12				
Response	KC	BTC	Total	%	Response	KC	BTC	Total	%
A	9	7	16	13	A	20	23	43	34
B	14	8	22	17	B	26	16	42	33
C	13	9	22	17	C	8	8	16	12.5
D	18	19	37	29	D	9	7	16	12.5
E	14	17	31	24	E	5	5	10	8
Total	68	60	128	100	Total	68	59	127	100

KC stands for Kufena College

BTC stands for Basawa Teachers' College.

Item 13					Item 14				
Response	KC	BTC	Total	%	Response	KC	BTC	Total	%
A	57	3	10	8	A	12	13	25	20
B	7	6	13	10	B	22	21	43	34
C	7	3	10	8	C	14	6	20	16
D	20	27	47	37	D	17	14	31	24
E	27	20	47	37	E	3	5	8	6
Total	68	59	127	100	Total	68	59	127	100

Item 15					Item 16				
Response	KC	BTC	Total	%	Response	KC	BTC	Total	%
A	10	7	17	13	A	25	17	42	33
B	18	23	31	25	B	20	31	51	41
C	16	13	29	23	C	6	2	8	6
D	20	10	30	24	D	9	8	17	14
E	13	6	19	15	E	7	1	8	6
Total	67	59	126	100	Total	67	59	126	100

KC stands for Kufena College

BTC stands for Basawa Teachers' College.

Item 17				
Response	KC	BTC	Total	%
A	7	6	13	10
B	10	18	28	22
C	17	2	19	15
D	21	25	46	37
E	12	8	20	16
Total	67	59	126	100

Item 18				
Response	KC	BTC	Total	%
A	18	16	34	27
B	22	25	47	37
C	15	3	18	14
D	6	12	18	14
E	7	3	10	8
Total	68	59	127	100

Item 19				
Response	KC	BTC	Total	%
A	27	19	46	36
B	25	33	58	46
C	7	4	11	9
D	4	1	5	4
E	4	2	6	5
Total	67	59	126	100

Item 20				
Response	KC	BTC	Total	%
A	21	15	36	29
B	24	31	55	44
C	8	5	13	11
D	9	2	11	9
E	5	4	9	7
Total	67	57	124	100

KC stands for Kufena College

BTC stands for Basawa Teachers' College.

Item 21				
Response	KC	BTC	Total	%
A	2	5	7	5.5
B	2	6	8	6
C	7	0	7	5.5
D	26	20	46	37
E	31	27	58	46
Total	68	58	126	100

Item 22				
Response	KC	BTC	Total	%
A	16	11	27	21
B	36	28	64	51
C	7	5	12	10
D	5	11	16	13
E	4	3	7	5
Total	68	58	126	100

Item 23				
Response	KC	BTC	Total	%
A	24	11	35	28
B	33	35	68	53
C	4	5	9	7
D	5	6	11	9
E	2	2	4	3
Total	68	59	127	100

Item 24				
Response	KC	BTC	Total	%
A	4	8	12	9
B	13	15	28	22
C	7	8	15	12
D	23	16	39	31
E	21	12	33	26
Total	68	59	127	100

Item 25				
Response	KC	BTC	Total	%
A	44	22	66	52
B	14	23	37	29
C	4	8	12	9.5
D	5	3	8	6.3
E	1	3	4	3.2
Total	59	68	127	100

KC stands for Kufena College

BTC stands for Basawa Teachers' College.

Raw Scores of Zaria Teachers' College Students
on Attitude Scale

Serial No	Score	Age	Class
1	107	18	2
2	104	16	2
3	102	16	2
4	94	16	2
5	89	11	2
6	87	16	2
7	84	16	2
8	76	18	2
9	105	15	1
10	105	14	1
11	100		1
12	99	18	1
13	99	-	1
14	98	15	1
15	98	14	1
16	98	-	1
17	97	19	1
18	96	17	1
19	92	15	1
20	92	-	1
21	92	19	1
22	91	11	1
23	88	19	1
24	87	15	1
25	87	14	1
26	87	15	1
27	87	15	1
28	82	-	1
29	81	13	1
30	68	15	1

MISS

Safiya 171

Actumari



First by first - Down time

Autonomous Risk



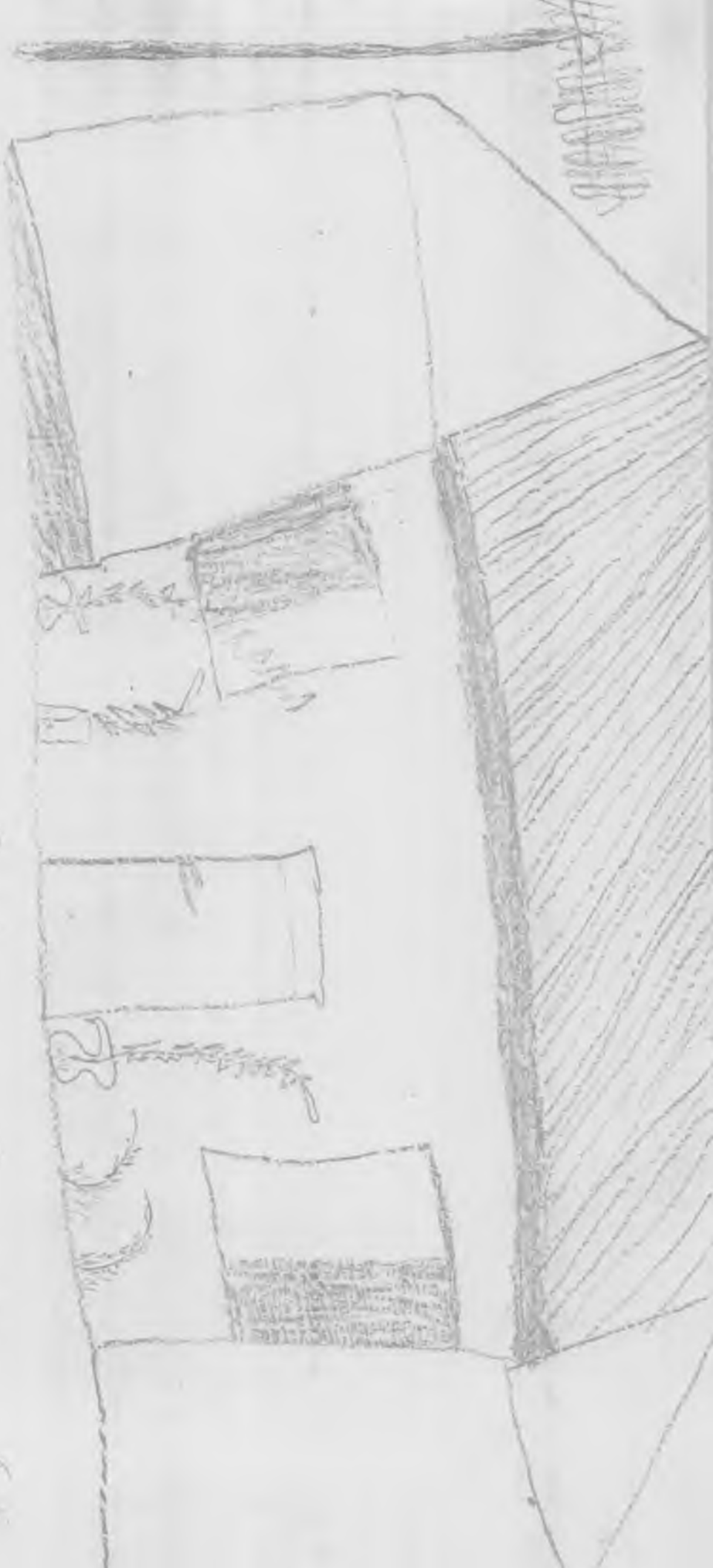
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Flashy
S.B.



Godson Ezuogu 1/4



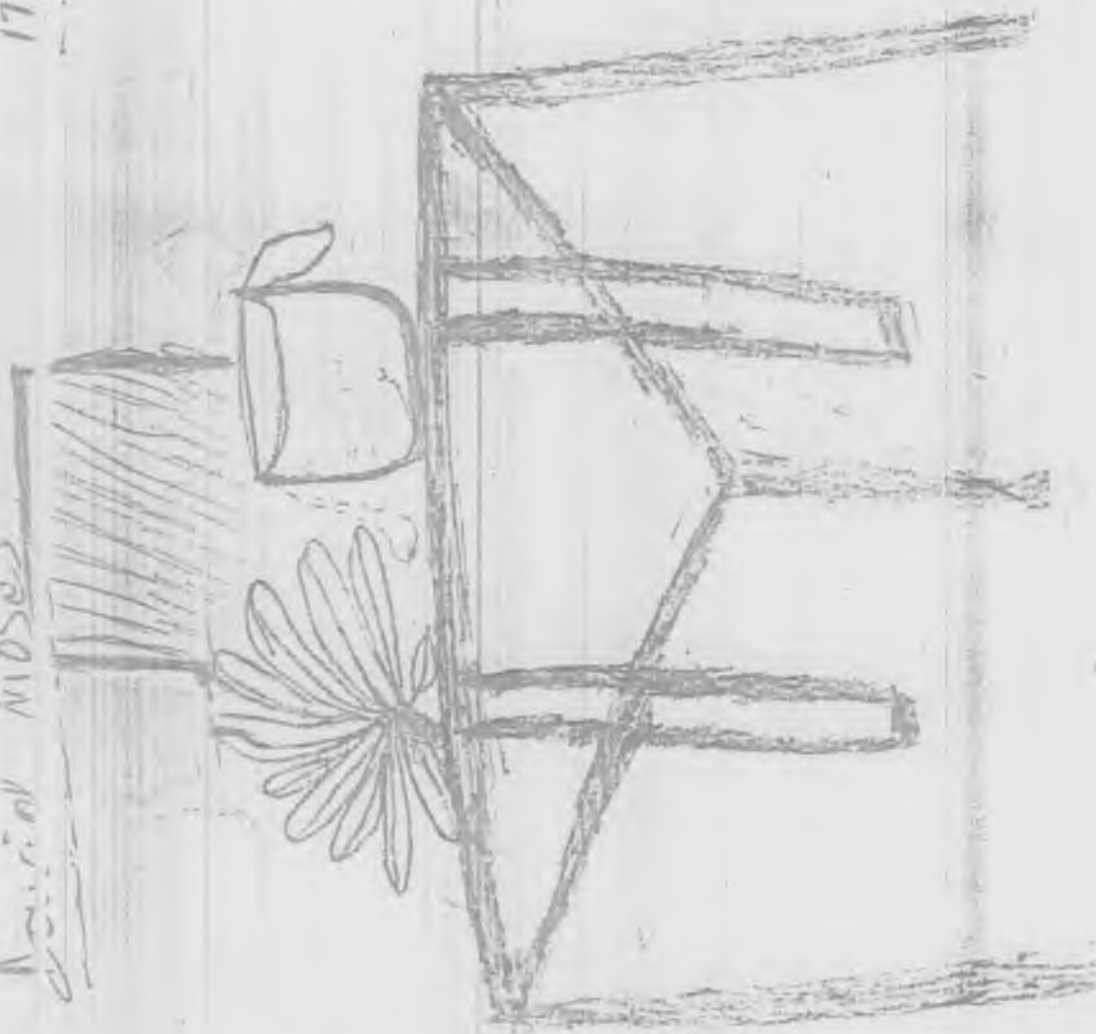
David Moses - Class 20

17 yrs

17 yrs

David Moses

Class 20

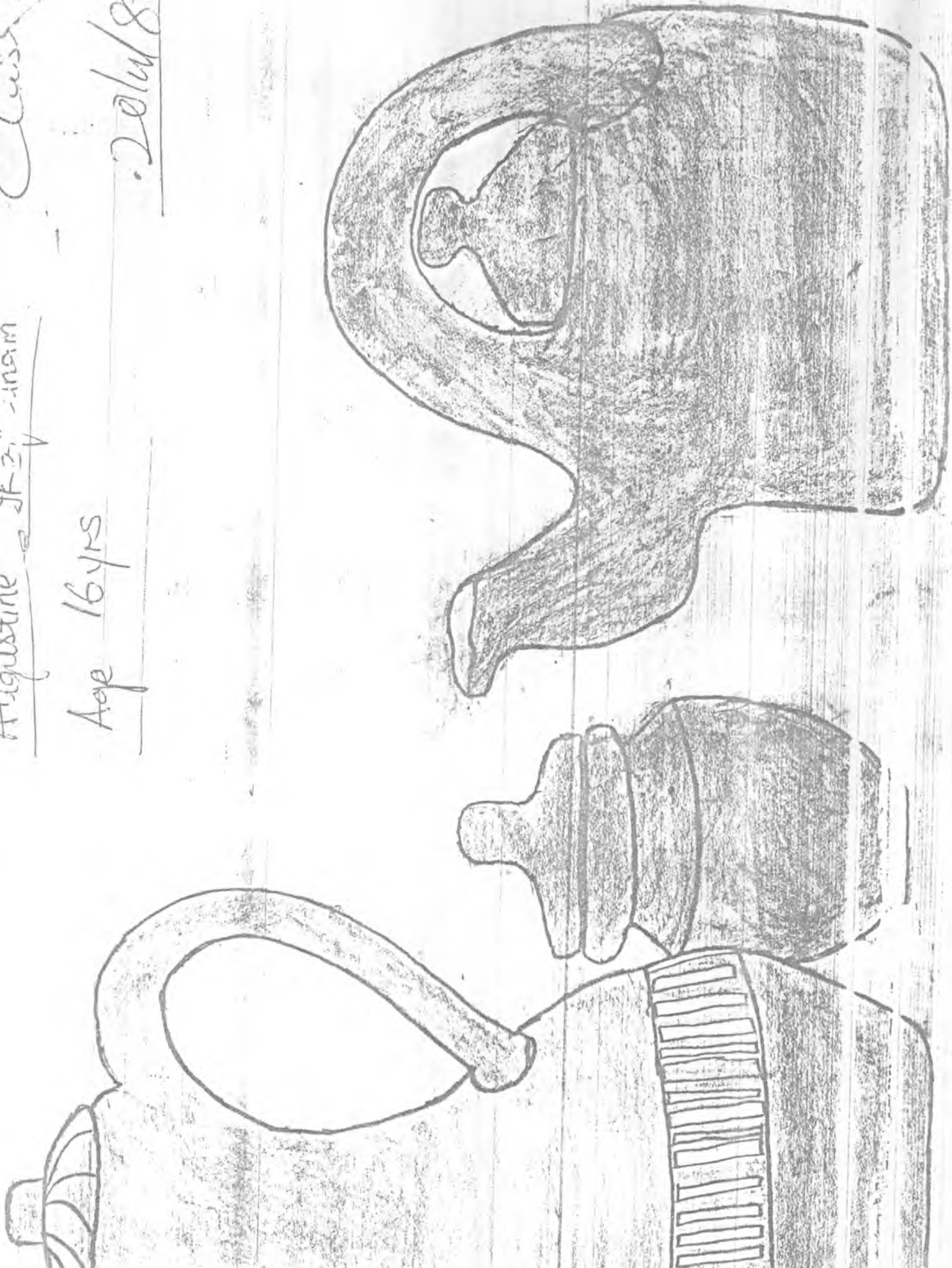


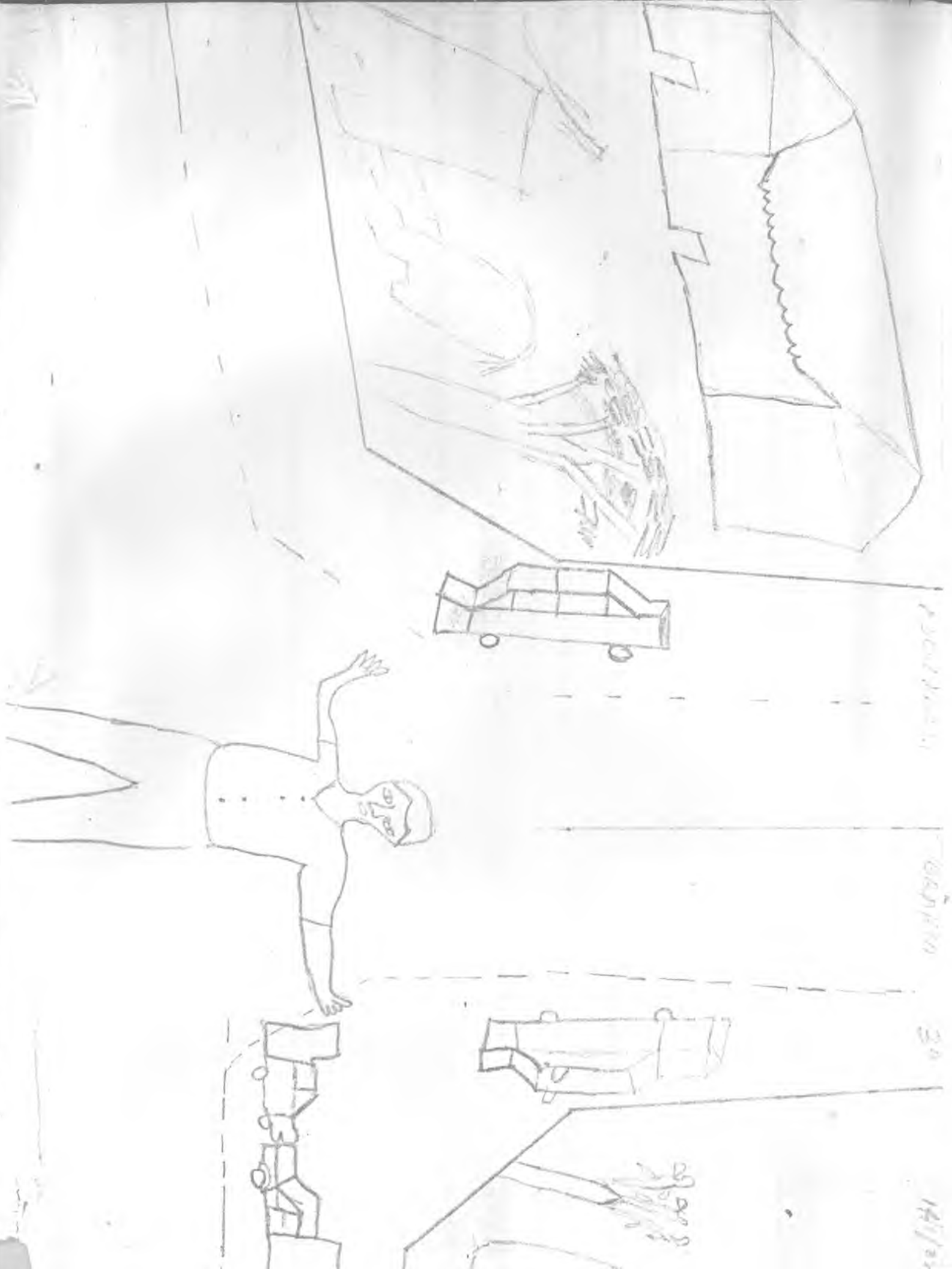
Augustine of St. 2nd - 1100 AD

Age 16 yrs

Clusia

20/1/89





1900/1910

1920/1930

30

1940/1950