

A COMPARATIVE STUDY OF AFFECTIVE
AND COGNITIVE DEVELOPMENT
OF FIFTH GRADERS USING
VARIOUS ART FORMS

By

ROBIE TREAT LONDON

Bachelor of Arts

Oral Roberts University

Tulsa, Oklahoma

1979

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
MASTER OF SCIENCE
May, 1983

Thesis
1983
L847c
copy 2



A COMPARATIVE STUDY OF AFFECTIVE
AND COGNITIVE DEVELOPMENT
OF FIFTH GRADERS USING
VARIOUS ART FORMS

Thesis Approved:

Audrey Cannon Oaks

Thesis Adviser

Leonard Trope

Russell Olson

Norman N. Durham

Dean of Graduate College

PERFACE

This study is concerned with determining whether or not varying amounts of exposure to art will affect the cognitive and affective development of students in the fifth grade. A post-test is used to compare three fifth grade classes. Statistical analysis includes Chi-Square analysis as well as one-way analysis of variance.

The author wishes to express her great appreciation to her major adviser, Dr. Audrey Oaks, for her patient guidance and help throughout this study. Special appreciation also goes to Dr. Vernon Troxel for his step-by-step assistance in the statistical analysis of this study. Appreciation is also expressed to the third committee member, Dr. Russel Dobson, for his expertise.

A note of thanks is given to Mr. Denis Clark, principal of Garfield Elementary School, for allowing me to re-arrange schedules and conduct this study in his building. Special thanks go to my fellow teachers, Mrs. Kathy Kerr and Mrs. Virginia Williams, for volunteering their classes for use in this study.

Finally, special appreciation goes to my parents, Mr. and Mrs. Robert Treat, and to my husband, Lloyd, for their continued support and encouragement throughout my graduate program.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Problem Statement	1
Purpose of the Study.	2
History of the National Assessment of Education	2
Hypotheses.	3
Definitions	4
II. REVIEW OF LITERATURE	5
Artistic Aesthetic Development.	5
Artistic Cognitive Development.	7
Survey of Other Art Tests	8
Summary	9
III. METHOD AND PROCEDURE	10
Population.	10
Treatments.	11
Instrumentation	13
IV. EXPERIMENTAL DESIGN AND STATISTICAL ANALYSIS	14
Information-Related Questions	14
Experience-Related Questions	16
Opinion-Related Questions	21
Summary	23
V. CONCLUSIONS, SUMMARY, AND RECOMMENDATIONS.	24
Conclusions	24
Summary and Recommendations	24
A SELECTED BIBLIOGRAPHY	25
APPENDIXES.	27
APPENDIX A - EXHIBITS.	28

Chapter

Page

APPENDIX B - NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS-ART	29
APPENDIX C - STUDENT RESPONSES.	38

LIST OF TABLES

Table	Page
I. Analysis of Variance for Informational Items	15
II. Difference Among Means of Informational Items.	15
III. Analysis of Variance for Experience Item 7	17
IV. Chi Square Analysis for Drawing Experience Item 8a.	18
V. Chi Square Analysis for Painting Experience. Item 8b.	19
VI. Chi Square Analysis of Collage Experience Item 8c.	20
VII. Chi Square Analysis of Carving and Model Experience Item 8d.	21
VIII. Analysis of Variance for Opinion-Related Items	22
IX. Difference Among Means of Opinion-Related Items.	22
X. Cognitive Student Response Comparison	39
XI. Cognitive Student Responses - Group 1.	44
XII. Cognitive Student Responses - Group 2.	45
XIII. Cognitive Student Responses - Group 3.	46
XIV. Affective Student Responses - Group 1.	47
XV. Affective Student Responses - Group 2.	48
XVI. Affective Student Responses - Group 3.	49

CHAPTER I

INTRODUCTION

This study was done in the hope of comparing ways in which children learn about art. Through this research the author was interested in discovering a method of instruction in the area of Art which would help students gain a lasting appreciation for the arts and would expose them to many fine artists.

Problem Statement

The National Assessment of Educational Progress (NAEP) began its research in 1969. This federal government program, whose main purpose is to monitor the progress of school children in all areas of education, is funded by the National Institute of Education (NIE). Periodically the NAEP conducts surveys administered to representative groups of students across the United States. There are four groups of students included in these surveys, composed of nine year-olds, 13 year-olds, 17 year-olds and adults, ages 26-35. These surveys include all areas of the curriculum.

The initial art survey was completed in 1970 and was followed by two additional surveys in 1974-75 and again in 1978-79. After comparing surveys, it was determined that student responses to works of art were narrow, shallow and uninformed. From the literature, it was found that many experts appear to agree that greater exposure to art is likely

to increase both knowledge and sophistication of the student.

Purpose of the Study

The purpose of this study is to determine if there is a significant difference in knowledge and attitude of students who have experienced differing amounts and types of exposure to the Visual Arts.

This study was considered important in as much as Art Education is a required part of the curriculum in many elementary schools. Exposure to artistic expression is an important part of a child's culture and appreciation of the Arts.

History of the National Assessment of Education

In developing the survey, a set of objectives was assembled that a group of educators felt students should be achieving through their education. The objectives were then given to a committee, who organized them into questions or exercises, designed to measure student educational achievements. Finally, subject matter specialists and measurement experts scrutinized the objectives for additional revisions. The exercises and questions were then administered to a representational sample group. Following the administration, collection, scoring and analysis of the assessment, the NAEP published a report and distributed the results to the public.

The present study deals specifically with the art portion of the NAEP. This assessment measures three different aspects of art education, namely, the psychomotor ability of the student to produce art; the knowledge or cognitive development of the student related to art;

and the attitudinal or affective development of the student in art.

The cognitive portion of the survey dealt with three major concerns which are:

1. recognition of art elements,
2. knowledge of art history,
3. criteria for aesthetic judgment,

The affective portion of the survey also dealt with three major concerns which are:

1. the importance of art to the student,
2. student time spent in art activities,
3. student response to types of art.

Due to budgetary problems, the psychomotor aspect of the survey, which included drawing and painting, was deleted after the initial survey (8).

Hypotheses

The basic research question for this study was formulated to determine whether the viewing of art prints would yield more favorable results than not viewing them and whether both viewing and discussing the prints would be superior to the other two treatments.

The writer's intuition called for the visual/auditory treatment to be superior to the visual only treatment and for both to be superior to the control treatment. However, the absence of compelling empirical or theoretical evidence resulted in the decision to use non-directional research hypotheses. The 0.05 level of confidence was used in testing for statistical significance.

Definitions

Affective is a term which is generally used when referring to feelings, values, emotions, and attitudes.

An art attitude is a learned and relatively enduring evaluative system of affective predispositions held toward art referents.

Artistic aesthetic development is a feeling of pleasure or displeasure toward art which develops due to different experiences.

Artistic cognitive development is knowledge which develops due to different experiences in the area of art.

Cognitive is a term which is used when referring to knowledge.

A control group is a group of students that receives no exposure to any treatment, in this case, art.

Lecture is a teacher-led discussion within the classroom about the different fine art prints.

A post-test is a survey which is given after exposure to artistic pieces is completed.

Psychomotor is a term used to refer to skill and ability.

Visual contact indicated displayed pieces of art work such as prints of famous paintings.

CHAPTER II

REVIEW OF LITERATURE

Affective and cognitive learning develops differently within each person. As individuals go through life, they develop their attitudes and knowledge based on their experiences. Eisner (9) indicates that researchers in art education have spent a great deal of time investigating the cognitive domain of creativity, but not as much research has been done concerning student attitudes toward art. Feldman (10) considers the arts so important that they should be included in any valuable learning experience.

Artistic Aesthetic Development

Exposure to the arts and working on art projects, according to Plummer (18), does increase aesthetic sensitivities. As an individual has different experiences in the area of art, he will have feelings of pleasure or displeasure. Future artistic attitudes which develop as a result of these experiences may be based on those very feelings of pleasure or displeasure (15).

Attitudes may change as one matures. With each new experience comes another set of feelings. These may be either positive or negative depending on the individual perception of the experience (6, 16).

Morris and Stuckhardt (16) believe attitudes have six different characteristics which are:

1. Attitudes are affective evaluative concepts which give rise to motivational behavior,
2. Attitudes are learned,
3. Attitudes have specific social referents,
4. Attitudes are relatively stable and enduring,
5. Attitudes vary in quality and intensity,
6. Attitudes are often interrelated, (p. 25).

It is the desire and duty of teachers to instill a positive feeling in their students. If the teacher can create a positive attitude, Morris and Stuckhardt (16) believe that it will be relatively stable and lasting. If an individual has a positive attitude toward art, he will be more likely to put his knowledge to work. Things which a student has a negative attitude about tend to be forgotten. If an individual has had a favorable experience in the past, the possibility increases that he will learn more about the subject in the future. It is toward this objective that all teachers should strive (14).

Several elements are involved when one tries to measure attitudes about art. These elements are all interrelated. Cook (4) lists these factors as involving the:

1. self concept of the student,
2. learning environment,
3. inherent interests of the student,
4. interest and self concept of the teacher,
5. motivational skills of the teacher,
6. sense of accomplishment of the student, (pp. 15-16).

Artistic Cognitive Development

In order for educators to take advantage of student curiosity and observation skills, thought must be given to how students perceive an object when they are in an instructional environment (10). As students are exposed to different art objects, they relate each one to a previous experience. They base their judgment about the object on those previous experiences (2, 15).

In order for students to become good judges of art they must learn to 'read the language of art'. This judgment or artistic criticism brings many elements together in the form of realities. Feldman (10) categorizes these realities as the:

1. physical reality of art objects (whether in the original or the reproduction).
2. reality of sensory stimuli that reach us from the art object.
3. reality of the universe represented or symbolized by the art object.
4. reality of our feelings and responses to the physical object, the sensory power of the object, the world represented by the object, and the simultaneous combination of the foregoing (p. 21).

It is the responsibility of educators to increase the cognitive development of students in the arts as well as in other areas. Many people, including educators, often refer to art as a 'doing process', not as knowledge. Often if non-artists give credit to art as involving knowledge, it is just knowledge in the area of artistic technique, and little more (10). If individuals are given the advantage of experiencing art, they are frequently able to apply this to other areas of their lives. When this happens, these students may be able to express themselves in ways that would be unique (17).

Plummer (18) feels that aesthetic experience is the basis for future learning. Aesthetic experience can be broken down into three areas. The first of these is content. Content allows art to become meaningful. Just how meaningful an art object is depends on the previous experiences an individual has had. In order for children to develop positive feelings and knowledge about the field of art, they must have previous experiences to draw upon.

The second area which Plummer describes is visual concepts. These concepts are also dependent on experience. A student will more clearly understand an art object or concept if he has had some previous contact.

The third area of the aesthetic experience involves the ability of a child to be creative. The more experience a child has, the greater his potential to create.

Survey of Other Art Tests

Reviews of the literature revealed the existence of very few art tests. Among those which have been published, Oscar Boros' (3) The Seventh Mental Measurement Yearbook lists only four which assess art development. These are as follows:

1. The Meier Art Tests by Norman Charles Meier,
2. Art Vocabulary Test by R. H. Silverman, R. Hoepfner, and M. Hendricks,
3. National Teacher Examinations: Art Education by Educational Testing Services,
4. The Undergraduate Record Examinations: Art History Test by Educational Testing Services (pp. 521-522),

A review of Meier's Art Aesthetic Perception Test states that

reliability data was not given with the test. Test validity was just 'inferred' and there were no correlations to other tests given. The overall data was not clarified in the preliminary manual (20).

Both the National Teacher Examination and the Undergraduate Record Examination deal only with college students and teachers. The National Assessment of Educational Progress tests students of all ages. According to Boros (3), the NAEP art test is by far the most comprehensive of all the previously listed tests (8).

Summary

Many art researchers agree that experience is the key to sensing, understanding, feeling and learning about art. It is the starting point from which all students will hopefully grow. The more exposure a student has to art, the better he is able to express himself and be aware of his feelings.

The Second Assessment of Art 1978-79, published by the National Assessment of Education Progress, samples the largest representational group of students over an extended period of time and provides the most comprehensive data analysis of the educational level students have attained.

CHAPTER III

METHOD AND PROCEDURE

The Science Research Associates (SRA) Achievement Test was administered to all students of the fifth grade. The highest achievers were placed in an accelerated class. This group of students was not included in the present study. All remaining students were randomly assigned to other fifth grade classes. Of these remaining five groups, three of them were selected for this study. The non-accelerated groups included students with different abilities ranging from as low as primary levels to high school levels.

Population

The subjects involved were ten and eleven year-old boys and girls in the fifth grade at Garfield Elementary School in Sand Springs, Oklahoma. They were all in classrooms of approximately 24 students. These students all participated together in Physical Education, Music, and a recess period.

Many of these students come from lower socio-economic environments. This information is based on the large number of students who were on government sponsored lunches.

Sand Springs is an industrial community of 13,246 population. Due to the industrial nature of this town, families move frequently. Many of the students in the schools may not remain for more than a few months

at a time.

Treatments

The three groups that were selected were divided into Group I, Group II, and Group III. Group I was a visual contact group and was exposed only to fine art prints. Group II was a visual contact/lecture group and was exposed to fine art prints and teacher-led discussions. Group III was a control group that received neither visual contact nor lecture.

During the Spring of 1982, one weekly visit was conducted in each of the three classrooms. A 45-minute art lesson was presented in which students were actively involved. The lessons were the same for each of the groups. The presentations were the same as well as the available materials.

The lessons which were presented included the following subjects: two forms of print making, blotto prints and potatoe prints, paper sculpture, bread sculpture, still life drawings, architectural drawings, crayon etchings, water color paintings and geometric configurations. Many of the students expressed an interest in the art activities both during the study and after the completion of the study.

In addition to the weekly art lessons, Group I had a print on exhibit each week. Students in this group were requested to look at each print, however, no discussion was conducted.

In addition to the weekly art lessons, Group II also had a famous print on display each week. At some time during that week a short lecture-discussion took place concerning the work of art. The various aspects of design and technique were identified by the teacher. Some

of those aspects included depth, volume, center of interest, paint application techniques, mood, color, clarity of the forms, and subject matter analysis. The students then expressed their own feelings about the prints and explained why they liked or disliked them. This structured discussion usually took about 15 minutes, although it was observed that students made additional comments later in the week as they took time to examine the prints more closely.

Group III was the control group and saw no prints and had no teacher-led discussion. The only input they received was the weekly art lesson.

At the conclusion of the nine week study, all three groups were administered a survey published by the National Assessment of Educational Progress entitled the Second Assessment of Art 1978-79, (Released Exercise Set # 10-A-25). The 10 and 11 year-old fifth graders in the study were given the same questions that the nine year-olds were given in the original study conducted by the NAEP. The original assessment was divided into four age groups and the nine year-old group was the closest in age to the fifth grade students.

In order to comply with copyright laws, students were not provided with individual pictures as were seen in the original assessment (Appendix B). Each question was read orally. When a question involved the use of pictures, they were shown on an opaque projector. This process allowed the students to view the prints with ease.

When the testing process was completed, the scores were calculated and the responses charted (Tables XI - XVII).

Instrumentation

The post-test administered in this study was designed to measure student knowledge of works of art as well as to compare student experiences and feelings in regard to art. The test had content validity as it met the criteria for face validity and sampling validity.

The post-test was employed to determine any differences which might have developed as a result of the study. The mean post-test score of each group on each part of the survey was compared with the mean scores on that part for each other group.

CHAPTER IV
EXPERIMENTAL DESIGN AND
STATISTICAL ANALYSIS

This experimental research is of a factorial design in as much as there are two independent variables, i.e. visual reinforcement and lecture. The assessment which was administered to the groups was composed of three types of questions:

1. Experiences of students,
2. Information about art products,
3. Opinions of students.

Information-Related Questions

Some ten items were clustered together and referred to as informational items. These items, 1, 2, and 21-28, each had a set of student responses. These responses were either right or wrong. If the response was correct, the score 1 was given. If the response was incorrect, no score was calculated. The total scored responses ranged from 1 to 5 with a mean of 2.75 for Group I. The scored responses for Group II ranged from 1 to 8 with a mean of 4.9. The scored responses for Group III ranged from 0 to 6 with a mean of 1.7. A one-way analysis of variance was used to determine the statistical significance of the differences as seen in Table I.

TABLE I
ANALYSIS OF VARIANCE FOR INFORMATIONAL ITEMS

Source of Variance	Summary of Sources	Degrees of Freedom	Mean of Squares	F
Between Groups	128.58	2	64.29	5.05
Within Groups	878.42	69	12.73	
Total	1,007.00	71		

In order for F to be a significant difference, the value must be greater than 3.14. In this case, F is greater than 3.14.

The difference among the means of responses are seen in Table II.

TABLE II
DIFFERENCE AMONG MEANS OF INFORMATIONAL ITEMS

Group	\bar{x}_1	\bar{x}_2	\bar{x}_3
$\bar{x}_1 = 2.75$		2.17	1.04
$\bar{x}_2 = 4.92$			3.21
$\bar{x}_3 = 1.71$			

Since F was greater than 3.14, Tukey's Honestly Significant Difference test was applied to the differences between the means of the scores.

$$\text{HSD} = q_{\alpha} \sqrt{\frac{sw^2}{n}} = 3.40 \sqrt{\frac{12.74}{24}} = 3.40 \sqrt{.5308} =$$

$$3.40 \times .73 = 2.48$$

The only statistically significant difference was between Groups II and III. In order for the difference to be significant, it must be greater than 2.48. Substantial differences between Groups I and III and between Groups I and II did exist; but they were not statistically significant. The means of the three groups fell as expected with Group II having the greatest score, Group I falling next, and Group III scoring the lowest.

Experience-Related Questions

The experience-related questions were items 7 and 8. The scores from these questions had to be tested for statistical significance in two ways.

Question 7 was tested using a one-way analysis of variance. The range responses for this question was 1 to 5, five being the most desirable response. The following Table III is a summary of the data used in making the F -test.

In order for F to be significant, the value must be greater than 3.14. It is not, therefore, no statistically significant differences existed among the three groups in terms of visiting art galleries and museums.

TABLE III
ANALYSIS OF VARIANCE FOR EXPERIENCE ITEM 7

Source of Variation	Summary of Squares	Degrees of Freedom	Means of Squares	F
Between Groups	1.86	2	.93	0.73
Within Groups	88.08	69	1.28	
Total	89.94	71		

The other set of experience-related questions dealt with how much time students spent painting or drawing or doing art-related activities outside of school. These items were 8a, 8b, 8c, and 8d. The student response choices to these questions were Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Each response was given a score, with five being the most desirable response and one being the least desirable response. A chi square analysis using two degrees of freedom was used for each of the four questions. A 0.05 level of significance was used in rejecting the null hypothesis.

The following statistical analysis of item 8a, Table IV, indicates that there were no statistically significant differences among the three groups in terms of the number of students drawing and not drawing away from school.

TABLE IV
CHI SQUARE ANALYSIS FOR DRAWING
EXPERIENCE ITEM 8a

Group	Yes	No	
I	o 21 e 20.28	o 3 e 3.72	24
II	o 18 e 20.28	o 6 e 3.72	24
III	o 21 e 19.44	o 2 e 3.56	23
	60	11	71
	$\chi^2 = 2.63$ p 0.05		

The following statistical analysis of item 8b, Table V, also indicates that there were no statistically significant differences among the groups in terms of the number of students who were painting or not painting away from school.

The statistical analysis of item 8c, Table VI, provides no evidence of any difference between the groups in terms of their experience in making collages away from school.

The final question involving art experience, item 8d, Table VII, indicated that no statistically significant difference existed among the three groups in terms of carving and making models away from school.

TABLE V
CHI SQUARE ANALYSIS FOR PAINTING
EXPERIENCE ITEM 8b

Group	Yes	No	
I	o 20 e 17.67	o 4 e 6.33	24
II	o 18 e 17.67	o 6 e 6.33	24
III	o 15 e 17.67	o 9 e 6.33	24
	53	19	72
$\chi^2 = 2.72$ p 0.05			

TABLE VI
 CHI SQUARE ANALYSIS OF COLLAGE
 EXPERIENCE ITEM 8c

Group	Yes	No	
I	o 13 e 9	o 11 e 15	24
II	o 7 e 9	o 17 e 15	24
III	o 7 e 9	o 17 e 15	24
	27	45	72
	$\chi^2 = 4.27$ p 0.05		

TABLE VII
CHI SQUARE ANALYSIS OF CARVING AND
MODEL EXPERIENCE ITEM 8d

Group	Yes	No	
I	o 17 e 15.67	o 7 e 8.33	24
II	o 16 e 15.67	o 8 e 8.33	24
III	o 14 e 15.67	o 10 e 8.33	24
	47	25	72
	$\chi^2 = .8580$ p 0.05		

Opinion-Related Questions

Items 3-6, and 9-21 all deal with the opinions of each student. Eighteen items were grouped together and referred to as opinion items. The student responses were all given a score. The most desirable answer was given a 5 and the least desirable answer was given a score of 1. The responses ranged from 42 to 68 with a mean of 54 for Group I. The responses Group II ranged from 41 to 78 with a mean of 58.29. The responses for Group III ranged from 39 to 62 with a mean of 51.37. A one-way analysis of variance was used to determine statistical significance as seen in Table VIII.

TABLE VIII
ANALYSIS OF VARIANCE FOR OPINION-RELATED ITEMS

Source of Variation	Summary of Squares	Degrees of Freedom	Means of Squares	F
Between Groups	585.19	2	292.60	5.11
Within Groups	3,952.59	69	57.28	
Total	4,537.78	71		

The value of F is greater than 3.14. Therefore, a statistically significant difference did exist. The difference among the mean scores are displayed in Table IX.

TABLE IX
DIFFERENCE AMONG MEANS OF OPINION-RELATED ITEMS

Group	\bar{X}_1	\bar{X}_2	\bar{X}_3
$\bar{X}_1 = 54$		4.29	2.62
$\bar{X}_2 = 58.29$			6.91
$\bar{X}_3 = 51.38$			

Since F was greater than 3.14, Tukey's Honestly Significant Difference test was applied to the means of the scores.

$$\begin{aligned} \text{HSD} &= q_{\alpha} \sqrt{\text{sw}^2} = 3.40 \sqrt{57.28} = 3.40 \sqrt{2.3867} = \\ &3.40 \times 1.54 = 5.24 \end{aligned}$$

There is a statistically significant difference between Group II and Group III. In order for a difference to be statistically significant, it must be greater than 5.24. Substantial differences existed between Group I and Group II and between Group I and Group III, but the differences are not great enough to be statistically significant.

Summary

It was found that statistically significant differences did exist between the groups in only two areas of the study. For the informational items, the scores for Group II showed a statistically significant difference over Group III. For the opinion-related items, Group II again showed a statistically significant difference over Group III. No statistically significant differences among any of the three groups were found for scores secured from the experience-related items.

CHAPTER V

CONCLUSIONS, SUMMARY, AND RECOMMENDATIONS

Conclusions

Students who are given the opportunity to both view and discuss art prints are more likely to possess greater stores of information to respond more favorably to art stimuli than students who only view the stimuli or those who do neither. The more different exposures a student has to art increases the possibility that the student will learn more and be more accepting.

Summary and Recommendations

There was no significant difference between Groups I and II which had some types of stimulation. There was also no significant difference between Groups I and III, Group I receiving some stimulation and Group III receiving none. More significant results between Group I and Group II and between Group I and Group III may be obtained if the study time is extended. The study could be continued for an entire semester or even an entire school year and yield considerably different results.

The total number of students would be a factor to consider altering. This study was based on only 72 students, which is a rather small representative group. If a greater number of students were used, the results could well yield more significant findings.

A SELECTED BIBLIOGRAPHY

1. American Heritage Dictionary. New York, NY: Dell Publishing Co., Inc., 1970.
2. Asch, Rosalie L. "Teaching Beliefs and Evaluation." Art Educator, (October, 1976), p. 21.
3. Boros, Oscar Krisen. The Seventh Mental Measurements Yearbook. Highland Park, NJ: The Gryphos Press, 1972.
4. Cook, M. J. "Measurement of Affective Art Objectives." School Arts, (October, 1977), pp. 14-17.
5. Conlin, D., Our Language Today. New York, NY: American Book Co., 1978.
6. Dewey, J. Art As Experience. New York, NY: Capricorn, 1958.
7. Ecker, D. W. "The Structure of Affect in the Art Curriculum." Art Education, (January, 1971), pp. 26-29.
8. Education Commission of the States. National Assessment of Educational Progress. Denver, CO: National Institute of Education, 1982.
9. Eisner, Elliott. "The Development of Information and Attitude Toward Art at the Secondary and College Levels." Studies in Art Education, Vol. 8, No. 1 (1966), p. 43.
10. Feldman, Edmund B. "Learning Through Visual Arts." School Arts, (December, 1978), pp. 17-21.
11. Giant Photos, Rockford, IL: Giant Photos, Inc., 1982.
12. Graduate College. Thesis Writing Manuar. Stillwater, OK: Oklahoma State University, Revised, 1979.
13. Maeroff, Gene I. "Student's Musical, Artistic Knowledge Hasn't Improved." Stillwater News Press, January 20, 1982, p. 19.
14. Mager, Robert F. Developing Attitude Learning. New York, NY: Fearson Publishing, 1968.
15. McFee, June. Preparation for Art. 2nd. Edition. Belmont, CA: Wadsworth Publishing, 1970.

16. Morris, Jerry W. and Stuckhardt, Michael H. "Art Attitude: Conceptualized and Implication." Studies in Art Education Vol. I, (1977) pp. 21-28.
17. Palmer, Richard D. "Coming to Know Through an In-Depth Approach to Art." Art Teacher, (Spring, 1978), p. 18.
18. Plummer, Gordon L. "Children's Art Judgment." Journal of Creative Behavior, Vol. 11, No. 3, (1977), p. 177.
19. Runyon, Richard P. and Haber, Audrey. Fundamentals of Behavioral Statistics. Reading, MA: Addison-Wesley Publishing Company, 1971.
20. Siegel, Laurence. "Test Review." Journal of Counselling Psychology. Vol. II, (September, 1964) p. 98.
21. Webster, Daniel. Webster's New Practical School Dictionary. New York, NY: American Book Co., 1964.

APPENDIX A

PRINTS

- I. Cezanne, Paul, "Still Life with Soup Tureen"
- II. Fragonar, Jean-Honore, "A Young Girl Reading"
- III. Millet, Jean Francois, "The Cleaners"
- IV. Rousseau, Henri, "The Waterfall"
- V. Van Gogh, Vincent, "Bedroom at Arles"
- VI. Van Gogh, Vincent, "Sunflowers"
- VII. Van Rijn, Rembrandt Harmenszohn, "A Girl with a Broom"
- VIII. Vinci, Leonardo Da, "The Last Supper"
- IX. Vinci, Leonardo Da, "The Mona Lisa"

APPENDIX B

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

ART

Key - Numbers in parentheses indicate the value of the answer for statistical analysis. An (X) in parentheses is used when there is only one desirable answer.

Instructions: Mark an X in the answer of your choice. There will be only one answer for each question.

1. Look at the works of art. The MAIN IDEA of these two works of art is similar because they both show
 - _____ people
 - _____ slavery
 - (X) _____ war
 - _____ weapons
 - _____ I don't know

2. Which statement best describes the MAIN IDEA shown or expressed by everything in the painting?
 - (X) _____ There is a violent, uneasy feeling about the picture
 - _____ The house is in a bad rain storm
 - _____ The tree that bends will make it through the storm
 - _____ Birds are being blown in a storm
 - _____ I don't know

3. Do you think it's important for you to look at drawing like this?
 - (5) _____ Definitely yes
 - (4) _____ Yes
 - (3) _____ Undecided
 - (2) _____ No
 - (1) _____ Definitely no

4. It's a waste of time to look at this sculpture.
- (1) _____ Strongly agree
 - (2) _____ Agree
 - (3) _____ Undecided
 - (4) _____ Disagree
 - (5) _____ Strongly disagree
5. Do you think it's important for you to look at masks like this?
- (5) _____ Definitely yes
 - (4) _____ Yes
 - (3) _____ Undecided
 - (2) _____ No
 - (1) _____ Definitely no
6. Do you enjoy looking at this print?
- (5) _____ Definitely yes
 - (4) _____ Yes
 - (3) _____ Undecided
 - (2) _____ No
 - (1) _____ Definitely no
7. The works of artists are shown in art museums and art galleries.
How often have you visited art museums or art galleries?
- (1) _____ Never
 - (2) _____ One time
 - (3) _____ About five times
 - (4) _____ About ten times
 - (5) _____ Fifteen or more times

8. Outside of school what kinds of art work do you do? Tell whether you do each of the following things.
- A. Outside of school, do you draw?
- (5) _____ Yes
- (4) _____ No
- (3) _____ I don't know
- B. Outside of school, do you paint?
- (5) _____ Yes
- (4) _____ No
- (3) _____ I don't know
- C. Outside of school, do you make collages by cutting and pasting paper, cloth and scrap materials?
- (5) _____ Yes
- (4) _____ No
- (3) _____ I don't know.
- D. Outside of school, do you carve or make models with wood, stone, clay, metal, or plastic?
- (5) _____ Yes
- (4) _____ No
- (3) _____ I don't know
9. When a painting has horses in it the painting is usually quite good.
- (1) _____ Strongly agree
- (2) _____ Agree
- (3) _____ Undecided
- (4) _____ Disagree
- (5) _____ Strongly disagree

10. A drawing done in three minutes could be considered a great work of art.
- (5) _____ Strongly agree
 - (4) _____ Agree
 - (3) _____ Undecided
 - (2) _____ Disagree
 - (1) _____ Strongly disagree
11. If a painting costs a lot of money then it must be good.
- (1) _____ Strongly agree
 - (2) _____ Agree
 - (3) _____ Undecided
 - (4) _____ Disagree
 - (5) _____ Strongly disagree
12. A work of art should tell a story.
- (1) _____ Strongly agree
 - (2) _____ Agree
 - (3) _____ Undecided
 - (4) _____ Disagree
 - (5) _____ Strongly disagree
13. The world would be better off without art like this.
- (1) _____ Strongly agree
 - (2) _____ Agree
 - (3) _____ Undecided
 - (4) _____ Disagree
 - (5) _____ Strongly disagree

14. It's all right for sculptures to look like this.

- (5) _____ Strongly agree
- (4) _____ Agree
- (3) _____ Undecided
- (2) _____ Disagree
- (1) _____ Strongly disagree

15. It's all right for paintings to look like this.

- (5) _____ Strongly agree
- (4) _____ Agree
- (3) _____ Undecided
- (2) _____ Disagree
- (1) _____ Strongly disagree

16. Paintings should NOT look like this.

- (1) _____ Strongly agree
- (2) _____ Agree
- (3) _____ Undecided
- (4) _____ Disagree
- (5) _____ Strongly disagree

17. Sculptures should NOT look like this.

- (1) _____ Strongly agree
- (2) _____ Agree
- (3) _____ Undecided
- (4) _____ Disagree
- (5) _____ Strongly disagree

18. It's all right for furniture to look like this.
- (5) _____ Strongly agree
 - (4) _____ Agree
 - (3) _____ Undecided
 - (2) _____ Disagree
 - (1) _____ Strongly disagree
19. All drawings should be real-looking like this.
- (1) _____ Strongly agree
 - (2) _____ Agree
 - (3) _____ Undecided
 - (4) _____ Disagree
 - (5) _____ Strongly disagree
20. Photographers waste their time when they take pictures of things like this.
- (1) _____ Strongly agree
 - (2) _____ Agree
 - (3) _____ Undecided
 - (4) _____ Disagree
 - (5) _____ Strongly disagree
21. This church has some very unusual shapes. Do you think architects should experiment this way?
- (5) _____ Definitely yes
 - (4) _____ Yes
 - (3) _____ Undecided
 - (2) _____ No
 - (1) _____ Definiitely no

22. This photograph was made by putting together parts of several different photographs. Do you think the photographer should experiment this way?

- (5) _____ Definitely yes
(4) _____ Yes
(3) _____ Undecided
(2) _____ No
(1) _____ Definitely no

23. Some works of art are very well-known because pictures of them are printed in books and prints of them are sold to hang on walls. Which of the four paintings shown is MOST well-known?

- _____ Number 1
_____ Number 2
(X) _____ Number 3
_____ Number 4

24. You will now see four sculptures. One of these sculptures is very well-known, because pictures of it are shown throughout the world. Which of the four sculptures is MOST well-known?

- _____ Number 1
_____ Number 2
(X) _____ Number 3
_____ Number 4

25. Four works of art are shown. Which one was done by Leonardo daVinci?
- Number 1
 - (X) Number 2
 - Number 3
 - Number 4
26. This sculpture was made in which part of the world?
- America
 - (X) Greece
 - Egypt
 - China
 - I don't know
27. What is the BEST reason for judging this print to be a good work of art?
- It has a number of circular shapes
 - (X) It has a powerful design
 - It has a mother and child
 - It has light and dark lines
 - I don't know
28. The ONE best reason for saying that a painting is good because
- (X) It is organized in a pleasing way
 - It took a long time to make
 - Everyone likes it
 - A famous art museum bought it
 - I don't know

APPENDIX C
STUDENT RESPONSES

TABLE X
COGNITIVE STUDENT RESPONSE COMPARISON

1.	PEOPLE	SLAVERY	WAR	WEAPONS	I DON'T KNOW
GROUP 1	6	2	16	0	0
GROUP 2	0	0	19	5	0
GROUP 3	3	0	5	12	4
2.	VIOLENT FEELING	RAIN STORM	BENDING TREE	BIRDS	I DON'T KNOW
GROUP 1	2	10	0	0	12
GROUP 2	13	20	0	0	0
GROUP 3	3	20	1	0	0
3.	DEFINITELY YES	YES	UNDECIDED	NO	DEFINITELY NO
GROUP 1	1	4	11	7	1
GROUP 2	5	4	7	4	4
GROUP 3	0	4	6	9	5
4.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
GROUP 1	8	6	4	5	1
GROUP 2	3	5	3	6	7
GROUP 3	6	6	1	5	6
5.	DEFINITELY YES	YES	UNDECIDED	NO	DEFINITELY NO
GROUP 1	8	13	1	2	0
GROUP 2	8	11	2	1	2
GROUP 3	1	5	3	13	2
6.	DEFINITELY YES	YES	UNDECIDED	NO	DEFINITELY NO
GROUP 1	9	9	1	4	1
GROUP 2	10	7	0	3	4
GROUP 3	2	4	6	4	7

TABLE X (Continued)

	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
11.					
GROUP 1	12	5	3	3	1
GROUP 2	10	4	2	5	3
GROUP 3	4	5	5	4	6
12.					
GROUP 1	3	8	7	5	1
GROUP 2	10	6	3	2	3
GROUP 3	7	10	3	4	0
13.					
GROUP 1	14	2	3	5	0
GROUP 2	10	3	2	3	5
GROUP 3	12	6	5	1	0
14.					
GROUP 1	4	13	4	3	0
GROUP 2	7	7	3	4	3
GROUP 3	3	7	7	5	2
15.					
GROUP 1	1	11	7	3	2
GROUP 2	5	6	1	3	9
GROUP 3	2	7	2	2	11
16.					
GROUP 1	8	9	2	5	0
GROUP 2	8	5	2	1	8
GROUP 3	8	3	5	3	5

TABLE X (Continued)

7.	NEVER	ONE TIME	ABOUT 5 TIMES	ABOUT 10 TIMES	15 OR MORE TIMES
GROUP 1	1	8	8	3	3
GROUP 2	1	8	7	3	5
GROUP 3	2	7	12	1	2
8A.	YES		NO		I DON'T KNOW
GROUP 1	18		6		0
GROUP 2	21		3		0
GROUP 3	21		2		1
8B.	YES		NO		I DON'T KNOW
GROUP 1	18		6		0
GROUP 2	20		4		0
GROUP 3	15		9		0
8C.	YES		NO		I DON'T KNOW
GROUP 1	7		17		0
GROUP 2	13		11		0
GROUP 3	7		17		0
8D.	YES		NO		I DON'T KNOW
GROUP 1	16		8		0
GROUP 2	17		7		0
GROUP 3	14		10		0
9.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
GROUP 1	8	9	5	2	0
GROUP 2	13	6	2	0	3
GROUP 3	12	3	7	2	0
10.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGRAEE	STRONGLY DISAGREE
GROUP 1	2	6	3	7	6
GROUP 2	4	6	3	5	6
GROUP 3	1	2	5	9	7

TABLE X (Continued)

17.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
GROUP 1	1	2	2	11	8
GROUP 2	3	0	0	0	21
GROUP 3	1	2	5	4	11
18.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
GROUP 1	10	1	1	2	3
GROUP 2	21	8	1	0	1
GROUP 3	16	8	0	0	0
19.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
GROUP 1	2	2	7	9	4
GROUP 2	7	3	4	4	6
GROUP 3	4	6	2	7	5
20.	STRONGLY AGREE	AGREE	UNDECIDED	DISAGREE	STRONGLY DISAGREE
GROUP 1	3	4	2	9	6
GROUP 2	7	1	4	2	10
GROUP 3	6	3	4	9	2
21.	DEFINITELY YES	YES	UNDECIDED	NO	DEFINITELY NO
GROUP 1	2	10	5	4	3
GROUP 2	9	7	0	3	5
GROUP 3	7	12	2	3	0
22.	DEFINITELY YES	YES	UNDECIDED	NO	DEFINITELY NO
GROUP 1	1	6	1	8	8
GROUP 2	9	11	2	1	1
GROUP 3	0	10	4	6	4

TABLE X (Continued)

23.	NUMBER 1	NUMBER 2	NUMBER 3	NUMBER 4	I DON'T KNOW
GROUP 1	3	10	6	5	0
GROUP 2	3	2	15	4	0
GROUP 3	15	3	3	3	0
24.	NUMBER 1	NUMBER 2	NUMBER 3	NUMBER 4	I DON'T KNOW
GROUP 1	0	19	3	1	1
GROUP 2	1	9	12	0	2
GROUP 3	0	17	2	0	5
25.	NUMBER 1	NUMBER 2	NUMBER 3	NUMBER 4	I DON'T KNOW
GROUP 1	4	3	15	1	1
GROUP 2	7	24	2	1	0
GROUP 3	4	3	5	0	12
26.	AMERICA	GREECE	EGYPT	CHINA	I DON'T KNOW
GROUP 1	0	17	4	0	3
GROUP 2	1	14	7	1	1
GROUP 3	0	17	5	0	2
27.	CIRCULAR SHAPES	POWERFUL DESIGNS	MOTHER/CHILD	LIGHT/DARK LINES	I DON'T KNOW
GROUP 1	4	5	0	1	14
GROUP 2	1	13	4	2	4
GROUP 3	2	3	8	1	10
28.	ORGANIZED IN PLEASING WAY	LENGTH OF TIME	EVERYBODY LIKES IT	ART MUSEUM BOUGHT IT	I DON'T KNOW
GROUP 1	14	2	1	3	4
GROUP 2	18	1	2	1	2
GROUP 3	6	3	2	3	10

TABLE XI
COGNITIVE STUDENT RESPONSES - GROUP 1

QUESTIONS		1	2	23	24	25	26	27	27	TOTAL CORRECT
STUDENT	1	C	X	X	X	X	C	X	C	3
	2	C	X	X	X	X	C	X	X	2
	3	C	X	C	X	X	C	C	C	5
	4	C	X	X	D	D	X	X	X	5
	5	C	X	X	X	X	C	X	C	3
	6	C	X	X	X	X	X	X	C	2
	7	C	X	C	X	X	C	C	X	4
	8	C	X	C	X	X	C	X	C	4
	9	X	X	X	X	X	X	X	C	1
	10	X	X	X	C	X	X	X	X	1
	11	C	C	X	X	X	C	C	C	5
	12	C	X	X	X	X	C	X	C	3
	13	X	X	X	X	X	C	X	X	1
	14	C	X	X	X	X	C	X	X	2
	15	C	X	X	X	X	C	X	C	3
	16	C	X	X	X	X	C	X	C	3
	17	X	X	X	X	C	X	X	X	1
	18	C	X	C	X	X	C	X	C	4
	19	X	X	X	X	X	C	X	C	4
	20	X	X	X	X	X	C	X	C	2
	21	C	X	C	X	X	C	X	X	3
	22	C	X	X	X	C	X	X	X	2
	23	X	C	X	X	C	C	X	X	2
	24	X	C	C	X	X	X	X	X	2
TOTAL										66

X = incorrect response, C = correct response

TABLE XII
COGNITIVE STUDENT RESPONSES - GROUP 2

QUESTIONS	1	2	23	24	25	26	27	28	TOTAL CORRECT
STUDENT 1	C	C	C	C	C	X	C	C	6
2	C	C	C	X	X	X	X	C	4
3	C	C	C	X	X	X	X	X	3
4	C	X	C	C	C	X	C	C	5
5	C	X	C	C	C	C	C	C	7
6	C	C	C	C	C	C	C	C	8
7	C	X	C	C	X	X	C	X	4
8	C	X	C	X	C	C	X	C	5
9	C	C	C	X	C	C	X	C	6
10	X	C	X	X	C	C	C	C	5
11	X	C	C	C	C	C	X	C	6
12	C	C	C	C	C	C	X	C	7
13	C	X	X	X	X	C	C	C	4
14	X	X	X	X	C	C	X	C	3
15	C	C	C	X	C	C	C	C	7
16	C	C	X	C	X	X	X	C	4
17	C	C	C	X	C	C	X	C	6
18	X	X	C	X	X	X	C	C	3
19	X	X	X	C	X	X	X	X	1
20	C	X	X	X	X	C	C	C	4
21	C	X	X	C	X	X	X	X	2
22	C	X	X	X	X	X	C	C	3
23	C	C	C	C	C	C	C	C	8
24	C	C	X	C	C	C	C	C	7
TOTAL									118

X = incorrect response, C = correct response

TABLE XIII
COGNITIVE STUDENT RESPONSES - GROUP 3

QUESTIONS	1	2	23	24	25	26	27	28	TOTAL CORRECT
STUDENT 1	X	C	C	C	X	C	C	C	6
2	C	X	C	X	X	C	X	X	3
3	X	X	X	X	X	C	X	X	1
4	X	X	X	X	X	C	X	C	2
5	C	X	X	X	C	C	X	X	3
6	X	X	X	X	X	C	X	X	1
7	X	X	X	X	X	X	X	X	0
8	X	X	X	X	X	C	C	C	3
9	X	X	X	X	X	X	X	X	0
10	X	X	X	X	X	X	X	X	0
11	X	X	X	X	X	C	X	X	1
12	X	X	X	X	X	X	X	X	0
13	X	X	X	X	X	C	X	X	0
14	X	X	X	X	X	X	X	C	1
15	X	X	X	X	X	X	X	C	1
16	C	X	X	X	C	C	X	X	3
17	X	X	C	C	X	C	C	X	4
18	X	C	X	X	X	C	X	C	3
19	X	X	X	X	X	C	X	X	1
20	X	X	X	X	X	X	X	X	0
21	X	X	X	X	X	C	X	X	1
22	C	C	X	X	X	C	X	X	3
23	X	X	X	X	C	C	X	X	2
24	C	X	X	X	X	C	X	X	1
TOTAL									41

X = incorrect response, C = correct response

TABLE XIV

AFFECTIVE STUDENT RESPONSES - GROUP 1

QUESTIONS	3	4	5	6	9	10	11	12	13	14	15	16	17	18	19	20	21	22	TOTAL
STUDENT 1	4	2	5	4	1	2	1	2	4	5	4	4	5	1	4	5	4	5	63
2	2	4	2	2	1	1	4	3	1	5	3	1	4	3	3	1	3	1	44
3	4	1	5	1	1	4	2	3	4	4	5	2	5	1	1	5	1	4	53
3	5	2	4	4	3	4	4	4	1	4	4	1	1	5	5	4	5	1	61
5	3	1	5	5	1	4	1	3	1	3	4	1	5	5	3	4	3	1	53
6	3	3	4	3	2	2	1	1	4	2	4	2	4	4	4	4	4	4	55
7	2	1	4	5	3	3	1	3	1	5	4	2	4	4	4	4	4	2	54
8	2	3	4	5	2	1	2	3	1	4	4	2	4	4	3	4	4	1	53
9	3	2	4	4	1	5	3	2	1	2	3	2	4	4	2	2	4	4	52
10	3	3	4	4	2	4	1	2	3	4	3	3	3	2	3	4	4	1	53
11	4	4	4	4	2	1	4	1	4	4	4	4	5	4	5	5	4	4	67
12	4	2	5	4	2	2	1	4	4	5	4	4	5	5	4	5	4	4	68
13	3	5	4	4	1	3	1	2	1	4	3	4	4	5	3	4	3	1	55
14	3	4	4	2	2	2	2	4	3	4	4	2	4	4	3	3	4	2	56
15	1	2	4	5	2	1	1	2	1	4	3	2	4	5	5	4	4	2	52
16	3	1	5	5	3	2	3	2	3	4	3	3	4	5	5	5	5	3	64
17	2	1	5	5	3	4	1	1	1	3	2	1	5	1	4	1	1	1	42
18	2	4	3	2	2	2	2	4	1	4	2	2	4	2	4	2	2	2	48
19	3	1	5	4	4	1	5	5	1	4	2	1	2	5	4	4	4	2	59
20	2	4	4	5	2	1	1	2	1	4	1	1	2	5	3	2	2	2	44
21	3	1	4	4	1	2	1	4	2	2	4	1	5	5	4	1	3	1	48
22	3	2	3	2	1	3	2	3	1	4	3	2	3	4	2	3	3	2	46
23	2	1	4	5	3	4	1	2	1	3	1	1	2	4	4	2	2	2	44
24	3	3	2	5	4	5	3	3	2	3	4	4	5	5	1	5	1	4	62
TOTAL																			1,296

TABLE XV

AFFECTIVE STUDENTS RESPONSES - GROUP 2

QUESTIONS	3	4	5	6	9	10	11	12	13	14	15	16	17	18	19	20	21	22	TOTAL
STUDENTS 1	3	4	4	5	1	3	1	4	2	2	2	2	5	5	2	4	4	2	55
2	1	3	4	4	1	5	1	2	2	2	4	3	5	5	3	2	4	2	54
3	2	1	1	1	1	4	4	1	1	4	1	5	5	1	1	5	1	4	43
4	1	5	5	1	1	4	1	1	5	5	5	5	5	5	5	5	5	5	69
5	2	4	5	5	2	2	4	1	5	4	1	5	5	5	5	5	5	5	70
6	3	4	5	5	1	1	1	1	5	4	1	5	5	5	1	5	5	5	62
7	5	5	4	4	2	5	1	2	5	2	4	2	5	5	2	5	4	4	66
8	3	2	4	5	2	3	2	3	4	3	2	4	5	5	3	1	4	4	50
9	1	5	2	5	2	2	2	3	4	3	1	5	1	5	3	1	5	4	54
10	3	4	4	4	1	2	2	1	3	5	4	1	5	5	3	1	2	4	54
11	4	3	4	5	1	4	1	1	5	5	5	2	5	5	1	5	1	5	62
12	2	2	5	5	1	1	3	5	1	4	1	1	5	5	1	1	2	4	49
13	4	1	4	4	3	4	3	3	1	4	4	5	5	5	5	1	4	4	64
14	4	4	4	5	1	5	1	1	1	5	1	1	1	5	4	5	1	5	54
15	4	3	3	4	2	4	2	4	2	1	3	2	5	4	4	3	4	4	58
16	1	1	1	5	5	1	5	5	1	1	1	1	1	3	2	3	1	3	41
17	5	2	5	4	3	1	4	1	1	5	1	1	5	5	5	3	1	1	53
18	3	5	3	1	2	3	5	2	1	3	2	1	5	5	1	1	5	5	53
19	3	5	5	2	1	2	1	5	1	1	1	1	5	5	1	5	2	5	51
20	3	2	4	2	1	1	4	3	2	4	4	2	5	5	4	3	4	4	55
21	5	5	4	4	1	5	5	2	4	2	5	1	5	5	1	1	5	4	64
22	2	2	4	2	1	1	4	2	1	4	4	3	5	5	4	4	5	4	57
23	5	4	5	5	5	4	1	1	3	5	5	5	5	5	5	5	5	5	78
24	5	5	5	1	5	2	1	1	4	5	5	5	5	5	5	5	5	5	74
TOTAL																			1,399

TABLE XVI
AFFECTIVE STUDENT RESPONSES - GROUP 3

QUESTIONS	3	4	5	6	9	10	11	12	13	14	15	16	17	18	19	20	21	22	TOTAL
STUDENT 1	2	1	2	1	1	2	5	4	2	4	1	2	3	5	4	4	2	2	47
2	2	4	2	2	2	3	3	3	2	2	1	2	4	4	2	4	4	2	48
3	1	5	5	1	4	1	5	2	1	4	2	5	5	5	5	5	4	1	61
4	4	1	3	4	3	3	5	4	1	4	4	4	5	4	4	3	4	4	62
5	3	4	2	1	1	2	4	2	2	2	5	3	4	5	4	4	5	2	55
6	1	5	4	2	3	1	4	2	1	4	1	4	5	5	5	5	4	1	57
7	1	5	1	4	1	1	5	1	3	3	4	5	5	5	2	1	4	4	51
8	2	1	2	1	1	2	5	4	3	5	4	1	3	5	4	4	2	2	51
9	4	2	4	4	1	2	4	3	1	2	4	4	5	4	4	4	4	4	60
10	2	1	2	2	1	1	2	4	1	4	1	1	5	5	1	4	2	4	43
11	4	2	4	1	1	3	2	1	1	4	1	3	5	5	3	4	4	4	52
12	3	4	2	4	3	2	3	2	3	3	1	3	3	4	3	4	3	4	54
13	3	5	3	3	1	3	3	1	3	3	5	1	4	5	1	3	4	3	54
14	1	4	4	3	1	2	2	2	3	3	3	1	2	5	5	1	5	2	49
15	1	3	2	2	1	4	1	4	1	1	4	1	3	5	5	2	5	1	46
16	2	4	2	1	3	2	2	2	2	2	4	3	5	5	4	4	5	1	53
17	3	5	1	3	1	1	5	1	1	2	1	1	1	4	1	1	4	3	39
18	3	2	3	5	3	4	1	1	2	4	2	5	5	4	5	1	5	4	59
19	2	2	2	3	2	2	3	2	4	5	4	1	4	5	2	2	4	4	53
20	3	2	2	3	4	1	1	1	1	1	1	5	5	5	1	2	5	4	47
21	2	2	2	3	3	2	3	3	2	3	1	1	5	4	2	3	3	3	47
22	2	1	2	2	2	3	4	2	1	3	1	2	4	4	4	3	4	2	46
23	2	5	2	1	3	1	2	2	1	3	1	3	3	5	2	1	5	3	45
24	4	1	4	5	1	5	1	1	1	5	3	5	2	5	2	1	4	4	54
TOTAL																			1,233

VITA ²

Robie Treat London

Candidate for the Degree of

Master of Science

Thesis: A COMPARATIVE STUDY OF AFFECTIVE AND COGNITIVE DEVELOPMENT OF FIFTH GRADERS USING VARIOUS ART FORMS

Major Field: Curriculum and Instruction

Biographical:

Personal Data: Born in Tulsa, Oklahoma, November 6, 1956, the daughter of Mr. and Mrs. Robert B. Treat.

Education: Graduated from East Central High School, Tulsa, Oklahoma, in May, 1975; received Bachelor of Arts degree in Elementary Education from Oral Roberts University in May, 1979; enrolled in Master's program at Oklahoma State University in 1980; completed requirements for the Master of Science degree at Oklahoma State University in May, 1983.

Professional Experience: Elementary teacher, grade 5, 1979 to present in Sand Springs, Oklahoma; member of National Education Association, Oklahoma Education Association, and Sand Springs Education Association, 1979 to present.