

AN EXPERIMENTAL STUDY OF A DIRECTED PARTICIPATION
APPROACH USING CLASSROOM EXHIBITS TO STIMULATE
STUDENTS' INTEREST IN ART

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Chapter 1

INTRODUCTION

As a subject art has been classified as being ancient, as old as mankind. Throughout the world, every culture developed some form of artistic expression--from the very primitive to the very sophisticated. The purpose of art has ranged from the need to satisfy religious demands to the desire to satisfy the artist's own need to express his personal emotions. No matter what the purpose has been that underlined the creation of works of art, there has been art as long as there has been a need for it. And as long as there has been junior high schools, there has been investigations and experimentations in search for a method which can be effectively employed toward developing the interest in art for the junior high student.

THEORETICAL FORMULATION

Although art has been around since ancient times, the serious approach to art education has been relatively new and recent. Before the turn of the twentieth century, art education was nonexistent or at best limited to a few who had the social qualification needed to be admitted to the study of the fundamentals in art appreciation. Due to our present educational philosophy with the emphasis on the education of the masses and the developing of art as an integral part of education, new teaching methods in art education has been taking place.

With this change in American educational philosophy from the education of the selected few to the education of the masses, the role of art education and the responsibility of the art teacher have also changed. We now recognize that "It is the art teacher's task to open the eyes and minds of pupils, to encourage them to explore and to be inventive, and . . . to be themselves."¹

This goal of art education and the responsibility of the art teacher can be accomplished through the use of a method of teaching art that has incorporated the following two basic ideas. To understand the meaning of an art experience, one has to be personally engaged in such an experience. To understand the meaning of a work of art, one has to be confronted by actual works of art.

When we look at the various school situations across the country, it becomes apparent that relatively few at the present time have available in quantity a collection of examples of works of art.²

It has been unfortunate in a culture such as ours that we have lived and worked in surroundings deficient in artistic quality. "Today's art students must know original art works of quality in order to develop their design sensitivity."³ Therefore, it has been considered that classroom art displays or exhibits are an essential part of a sound program for secondary art education. The exhibits have provided an effective and a vital means of instruction in the development of the

¹Charlotte Johnson, "Introducing New Art to Children," Instructor, No. 1, Vol. LXXIX (August/September, 1969), p. 89.

²Reid Hastie, "A Primer for Aesthetic Education," Art Education, No. 1, Vol. XXIV (January, 1971), p. 19.

³Wayne Dean, "Museum Without Walls," Art Education, No. 1, Vol. XXII (January, 1969), p. 28.

students' interest in art. "Since art is visual, displays provide a very valid technique for communicating understanding. . . ."4

THE PROBLEM

Teaching experience indicated to the investigator a possible means of enhancing interest in art through the firsthand exposure to actual works of art in the art classroom. Without this interest, it has been impossible for the students to react to the feelings involved in works of art. Ziegfeld stated:

The visual art requires visual materials for effective instruction. Such materials are needed . . . to stimulate the student . . . to show the relation between his work and similar products outside the classroom . . . to extend the scope and intensify the depth of his contacts, his knowledge, and his appreciation.⁵

Thus, the researcher concluded that the present method of teaching art needed the firsthand experiences gained from the use of actual works of art in the classroom. To become visually aware there has to be involvement. It has been left up to the art teacher to provide the opportunities.

Statement of the Problem

Is there a significant need in a secondary art program for a method that effectively uses classroom art exhibits in the development of the students' interest in art?

⁴Youlton C. Howell, "Art Displays—A Vital Form of Visual Communication," School Arts, No. 5, Vol. LXVIII (January, 1969), p. 18.

⁵Edwin Ziegfeld, Art For the Academically Talented Student (Washington, D.C.: National Education Association, 1961), p. 49.

Statement of the Null Hypothesis

There is no significant relationship between the firsthand use of classroom art exhibits using the directed participation approach and the stimulation of the ninth grade students' interest in art.

Purpose of the Study

In the endless search to find the best or the most effective method of teaching art to students on the secondary level, many methods have been proposed and used in the actual classroom situations. They have ranged from methods that emphasized only the projects oriented experiences to the methods with greater emphasis on aesthetic appreciation. The purpose of this investigation was to determine the effectiveness that the directed participation approach had on using classroom art exhibits.

Significance of the Study

Many art instructors have recently responded to the demands that have been placed before them by the communities, the individual school systems, and by the students who participate in the art classroom. Based on their knowledge of art and their understanding of the basic goals for the public school art program, these art instructors have accepted the demands for providing an authentic and justifiable art experience for the young people of the community. Some progress has been made in the search for a more meaningful and effective way of teaching in the field of art. To say that the need for experimentation and research has been completed is incorrect. There remains a great deal to be accomplished.

The creation of art has required time, training, and practice on the part of the artist. The realization or awareness of art has also required time, training, and practice on the part of the viewer. Art exhibits have helped to close the gap between the student's isolated experience with art projects and his isolated knowledge of aesthetic appreciation. Thus, the student was motivated to strive more for the attainment of a higher level of quality in his own creative work and be aroused to a greater sense of curiosity about art, art forms, and materials.

DEFINITIONS OF TERMS

In order to avoid confusion and for the sake of clarity in considering the terms that were used in this study, they have been defined for the reader.

Appreciation

This term was used in the interpretation of the idea of having thought highly of something, having recognized the worth or quality of it, to have an opinion of value for it, and to have enjoyed it.⁶

Art

This study used the term to demonstrate the power of performing certain actions as acquired by experience, study, or observation which

⁶Clarence L. Barnhart, ed., The World Book Encyclopedia Dictionary, I (Chicago, Illinois: Field Enterprises Educational Corporation, 1966), p. 99.

includes the conscious use of skill, taste, and creative imagination in the production of beauty.⁷

Awareness

Awareness was considered to be observed as having obtained knowledge of something through alertness or interpreting what the child sees, hears, or feels. Conscious awareness implied awareness of a sensation, feeling, fact, or condition.⁸

Bulletin Board

This term was considered to be an area for display that provided opportunities for seeing, thinking, and learning and to have provoked thought, interest, and challenge.⁹

Creative

This study used this term to mean the act that brought into existence something which was new and imaginative that was expressive of the maker.¹⁰

⁷Phillip Babcock Gove, ed., Webster's Third New International Dictionary (Springfield, Massachusetts: G. & C. Merriam Company, 1961), p. 122.

⁸Webster's New World Dictionary, College Edition (Cleveland and New York: The World Publishing Company, 1966), p. 289.

⁹Katherine LaMancusa, Source Book For Art Teachers (Scranton, Pennsylvania: International Textbook Co., 1968), p. 23.

¹⁰Gove, loc. cit.

Directed Participation Approach

The students have been introduced to the artist's biography and have been directed by the researcher to participate in organizing the exhibit.

Display

Display was considered to be a visual arrangement such as bulletin boards, exhibits, or display cases.¹¹

Environment

This term was interpreted as the surrounding conditions and influences that affected the development of a living thing.¹²

Exhibit

This study considered this term to represent a large or small showing of art or art objects.¹³

Experience

This term implied all that has happened to the student, his individual reaction to events by personally undergoing or observing something or things in general as they occurred.¹⁴

¹¹LaMancusa, loc. cit.

¹²Barnhart, op. cit., p. 658.

¹³Ibid., p. 690.

¹⁴Webster's New World Dictionary, College Edition, op. cit., p. 512.

Original

The study used this term to mean an artist's independent creation.¹⁵

Typical Approach

An approach using classroom art exhibits wherein students are left on their own to discover the exhibits.

LIMITATIONS OF THE STUDY

Certain limitations have been listed which may have affected the study. In the selection of the students and in the gathering and analysis of data from the students, no effort was made to consider sex, race, academic background, environment, or any other qualifications of the participants. The only requirement in the selection of the sample used for this study was that they were junior high students at Independence, Kansas and enrolled in the researcher's sixth and seventh hour ninth grade art classes.

Data were gathered from the students through the use of a questionnaire which was given at the beginning and at the conclusion of the study. There was no way to determine when false or biased answers or reasons were given on the questionnaire. The study was also limited because of the number of people involved and the length of time that the study was conducted.

¹⁵Ralph Mayer, A Dictionary of Art Terms and Techniques (New York: Thomas Y. Crowell Co., 1969), p. 272.

Chapter 2

REVIEW OF RELATED LITERATURE

An extensive search was necessary to locate materials related to the use of classroom art exhibits in the development of students' interest in art. Art history books, periodicals, textbooks on the philosophy of art education, and other related references were used. Through the review of these references, it was discovered that there was a limited amount of research similar to this study.

The related articles in the periodicals and other related references either centered on the emphasis of the actual creative activities in a classroom or placed the emphasis on the study of art appreciation. However, when articles that dealt with the subject were located, the discussions were limited but valuable to this study.

RELATED IDEAS

One of the roles for the art instructor has been to make the student aware of the fact that one has to seek in order to learn. The growth of artistic interest in the individual depends on the ability of the student to enjoy looking at his environment.¹ The researcher concluded from related ideas that this could be accomplished through the use of instructional aids like classroom art exhibits or displays.

¹K-12 Art Guide (Topeka: Kansas State Department of Education, 1973), p. 4.

Bulletin boards should indeed be springboards . . . of introduction, inquiry, investigation and involvement. They can serve more than the eye, by tempting children and rousing their curiosity. They can also offer challenges for independent study. Few children can resist . . . an attractive bulletin board display.²

Based on the evidence stated, art has been presented and taught as a part of the student's total educational process. Therefore, it has been decided that the approach toward teaching art must follow the general educational objectives for the student. One must be encouraged to be creative by providing opportunities for the person to create and to express himself. In Art Search and Self-Discovery, Schinneller stated that ". . . through the creative process . . . art challenges the individual and activates what exists within the senses."³ This objective to develop greater powers of observation and visual judgment in art education has been emphasized by Ziegfeld of the National Education Association when he stated:

As in any other area, firsthand experiences are apt to be the most compelling in art. Classes should make extensive use of actual things: original paintings . . . etc.⁴

Ziegfeld further elaborated by having stated that, "Firsthand experiences are . . . most readily had with the near-at-hand. The resourceful teacher studies the community for . . . experiences in the visual arts" ⁵

²Edith Fine, "Bulletin Boards: Springboards to Catch a Student's Eye," Grade Teacher, No. 6, Vol. LXXXVI (February, 1969), p. 133.

³James Schinneller, Art Search and Self-Discovery (Scranton, Pennsylvania: International Textbook Company, 1962), p. 3.

⁴Edwin Ziegfeld, Art For the Academically Talented Student (Washington, D.C.: National Education Association, 1961), p. 49.

⁵Ibid.

As a subject to be taught, art has been one of uniqueness. Thomas stated ". . . no other subject depends so much on the skill, personality and interest of the teacher."⁶ This has been especially true on the junior high level, for the junior high student has been found to be at a critical stage in his art development. He has become more aware of adult standards and has become more critical of his own artistic endeavors. Ernst Kris stated ". . . art is not produced in an empty space, . . . no artist is independent of predecessors and models. . . ." ⁷ Based on this fact,

Children . . . are deeply influenced by works of art they have seen in museums, galleries, books, and magazines. These influences are frequently and often clearly manifested in their work.⁸

"Only a small part of the average school curriculum is devoted to the enjoyment of art."⁹ Classroom art exhibits by individual artists of the community have alleviated this situation. Well-timed exhibits enabled students to return to their work with a fresh objectivity and at the same time have provided ideas for new ventures. John Locke stated that ". . . the ideas a child acquires come from objects in the child's environment, in particular those objects relevant to the needs and interests of the child."¹⁰ The fear that these ideas will

⁶Aneurim M. Thomas, "Art in General Education: Changes in the Arts," Trends in Education, No. 28 (October, 1972), p. 33.

⁷Howard Conant, Art Education (Washington, D.C.: The Center for Applied Research in Education, Inc., 1964), p. 3.

⁸Ibid., p. 23.

⁹B. F. Skinner, "Creating the Creative Artist," On the Future of Art (New York: Viking Press, 1970), p. 71.

¹⁰John W. Yolton, John Locke and Education (New York: Random House, 1971), p. 43.

not be original but imitation of previous formulated ideas has been labeled as false by Locke.

It is not true that if we fill the student's head with facts he will be unable to think for himself. He is not damaged by facts but only by the ways in which facts have been taught. There is no reason why methods of discovery must be taught by the discovery method. Learning the techniques of others does not interfere with the discovery of techniques of one's own. On the contrary, the artist who has acquired a variety of techniques from his predecessor is in the best possible position to make truly original discoveries. And he is most likely to be original if he has been taught how to be so.¹¹

RELATED STUDY

In 1966, the school children of San Bernardino, Inyo, and Mono counties of California participated in a research to determine the relationship of the use of mobile display vehicles to the aesthetic growth of students. The mobile display vehicles contained original art works. The art supervisors in Southern California, known as the Inland Art Group, believed the problem in art education was the need to use original art works of quality in the effective teaching of art.

An area of 33,000 square miles with 52,000 students was selected for the testing. The program used vehicles to bring original works of art to the schools. Of the 52,000 students, 2,000 in 48 schools were selected to take part in the evaluation of the program. A confidence level of 87.5 percent or better in 64 percent of the students who participated increased their knowledge and bettered their attitudes toward

¹¹Skinner, op. cit., p. 68.

art. Of the control group only 22 percent scored above the level of confidence.¹²

At the time the article was published in January, 1969, the evaluation of the data was still being conducted. But with the initial data, it has been accepted that the students did benefit by increasing their interest in art.

Summary

An analysis of the related literature and research suggested that the aesthetic development of the student can be improved through the added use of the classroom art exhibits. Having combined the actual art activities with the presence of the classroom art exhibits, the depth and the intensity of effort were broadened in the art work of the student. Classroom art exhibits have aroused curiosity about art forms and materials and have aided or provided solutions to problems in design. The student's understanding, appreciation, and awareness of art have been extended and deepened with the continuous contact with art through these exhibits.

¹²Wayne Dean, "Museum Without Walls," Art Education, No. 1, Vol. XXII (January, 1969), p. 28.

Chapter 3

PROCEDURE

"Art lives upon discussion, upon experiment, upon curiosity, upon variety of attempt, upon exchange of views and the comparison of standpoints."¹ Because of this reality, one of the objectives in the secondary art program has been to awaken and to develop the visual interest in art for the individual student.

In order to achieve this visual interest, the experiment that the researcher was involved in utilized five one man art exhibits. These individual artists included three art teachers and two non-teaching individuals. The list and the schedule of the five exhibits have been listed in Appendix A on page 38.

These five exhibits were shown in the researcher's classroom at Independence Junior High School where he is employed as the junior high art instructor. Each exhibit was scheduled for a two week showing during the second semester of the 1975-76 school year. Except for the last exhibit of sculpture, all of the art works involved were paintings, either in water color or in acrylic.

This investigation involved two groups of junior high students who were enrolled in a freshman art class taught by the researcher. Twenty-five students made up the experimental group, while the control

¹Alexander Eliot, Three Hundred Years of American Painting (New York: Time Incorporated, 1957), p. 115.

group was composed of a similar number of students. The sixth hour art class served as the control group, and the seventh hour art class comprised the experimental group. The control group and the experimental group were treated differently in the use of the five invited classroom art exhibits.

Because the sixth hour art class served as the control group, the researcher selected the typical approach of using the classroom art exhibits. The twenty-five students were left on their own to discover and to enjoy the art works. Their own individual artistic interest and curiosity served as their guide in this process of discovery. The researcher would have answered any question that was presented to him by the individual student and would have explained the meaning, purpose, or technique used by the exhibiting artist if the student or students so inquired. The personal biography, the professional artistic training, and the education of each of the invited artist were not presented to the control group by the researcher. If the student gave the researcher a hint that he desired to know, the researcher would have given the information on an individual basis. Each of the five one man art exhibits was already hung and in place when the sixth hour art class came into the art room.

The students in the seventh hour art class served as the experimental group. The directed participation approach was selected by the researcher to be used for the five one man art exhibits. The researcher hoped that this group's artistic interest and curiosity would increase to a greater degree by having seen these exhibits plus having been given the added information on the exhibits. In order to help create or to further arouse the student's curiosity, the researcher used the

seventh hour class period and student assistance to organize and to set up the scheduled art exhibit. The students also assisted in taking down the exhibit. But at that time, another group of individual students in the same class provided the assistance.

The following day, after the show was organized and was hung in place, the biography of the invited artist was presented to the seventh hour students. The aim that the artist had in mind, the philosophy, and the educational background of the artist were also presented to the students.

The researcher then used the art exhibits for comparisons. The students' own paintings were compared to the exhibits in terms of technique and composition employed. Also the visiting exhibits were compared to the previously scheduled one man show for similarities and differences.

The researcher then left the seventh hour students on their own to enjoy, observe, and compare the exhibits. Even though the class was provided with the information on the art show, the researcher continued to answer the individual questions throughout the two week period that the exhibit was up.

The researcher noticed that with the use of the added information and instructional time in class, the seventh hour students in the experimental group were more likely to have gone up to the art exhibits and to have looked the exhibit over more closely, talking among themselves about the art works.

A questionnaire was developed by the researcher. An example of the questionnaire has been listed in Appendix B on page 39. The two groups were given this questionnaire on Wednesday, January 7, 1976

as a pretest before they were introduced to the first one man art exhibit. The purpose for the pretest was to establish the level of interest that each student had towards art. The pretest and the posttest scores for the Control Group have been listed in Appendix C on page 40. The pretest and the posttest scores for the Experimental Group have been listed on page 41 in Appendix D. On Monday, March 22, 1976, after the conclusion of the last exhibit, this same questionnaire was given as a posttest. The purpose was to determine the changes in the interest level for each group after they have been exposed to the five exhibits. The changes in the interest level on the posttest compared to the pretest results determined how effectively the classroom exhibits were used and which method of presentation resulted in the greatest gain in development of the artistic interest of the student.

Chapter 4

ANALYSIS OF DATA

In this chapter, a description of the testing measurements used, an analysis of the tabulated data, and the testing of the null hypothesis for this research have been included. With the calculated data and the obtained numerical data, the null hypothesis was then tested by the researcher.

Description of the Instrument

Since the researcher wanted to determine a degree of relationship, he used the Karl Pearson product-moment method.¹ This instrument has been used most frequently in order to figure relationship. The formula for the Pearson product-moment coefficient of correlation computed from original data has been stated to be:

$$r_{xy} = \frac{N \sum XY - (\sum X) (\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}}$$

where r_{xy} = correlation between X and Y

X = original scores for the experimental group

Y = original scores for the control group

N = number of individuals in a single group

\sum = sum of the products.

¹J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Book Company, 1965), p. 97.

After the value of r was obtained, the .05 level of significance on the Pearson Correlation Coefficient Table was used to reject the null hypothesis. That is, there is no significant relationship between the firsthand use of classroom art exhibits using the directed participation approach and the stimulation of the ninth grade students' interest in art.

The questionnaire listed in Appendix A on page 38 served as the basis for the obtained data from the scores. The answers on the questionnaire were given numerical values as follows: "yes" received a 3, "no opinion" or "occasionally" received a 2, and "no" was given the numerical value of 1. Because the researcher sought more positive responses by the students than negative answers, a "no opinion" or an "occasionally" was considered more positive than a very definitely "no" response. The positive response meant that the students had a favorable attitude towards art. The total of the scores was then figured for each student in both groups. The scores for the pretest and the posttest for the control group have been listed on page 40, Appendix C. The experimental group pretest and posttest scores have been listed in Appendix D on page 41.

After having gathered the desired data from the pretests for both groups, the following necessary steps were taken to apply the above mentioned formula:

$\sum X$ = sum of the raw scores for the experimental group

$\sum X^2$ = sum of the squares of raw scores for the experimental group

$\sum Y$ = sum of the raw scores for the control group

$\sum Y^2$ = sum of the squares of raw scores for the control group.

The correlation formula was then computed as

$$r_{xy} = \frac{25(7934) - (456)(428)}{\sqrt{[25(8998) - (456)^2] [25(7848) - (428)^2]}}$$

$$r_{xy} = \frac{198350 - 195168}{\sqrt{[224950 - 207936] [196200 - 183184]}}$$

$$r_{xy} = \frac{3182}{\sqrt{(17014)(13016)}}$$

$$r_{xy} = \frac{3182}{14881.337} \text{ or } .213$$

The researcher found the correlation between the experimental and the control group was .213. In order to use the Pearson Correlation Coefficient Table listed in Appendix E on page 42, the degree of freedom was established before applying the r value. The formula was $df = n - 2$ where df equals the degree of freedom and n equals the number of individuals in a single group. The degree of freedom was found to be $25 - 2$ or 23. Since the observed value of r was .213, it was less than the .05 level of significance (.396). The researcher concluded that there was no significant difference between the students in the experimental group and in the control group at the start of the study. The two groups were near equal status at the beginning of the experiment.

With the conclusion of the study, the above mentioned questionnaire was given in order to obtain the posttest data. The formula for the Pearson Product-Moment Coefficient of Correlation was again employed. The same symbolic meaning for each element of the formula was retained except that the posttest values were substituted. The formula was then computed as the following:

$$r_{xy} = \frac{25(9127) - (506)(445)}{\sqrt{[25(10846) - (506)^2][25(8443) - (445)^2]}}$$

$$r_{xy} = \frac{228175 - 225170}{\sqrt{[271150 - 256036][211075 - 198025]}}$$

$$r_{xy} = \frac{3005}{\sqrt{(15114)(13050)}}$$

$$r_{xy} = \frac{3005}{\sqrt{19723770}}$$

$$r_{xy} = \frac{3005}{4441.14} \text{ or } .676$$

The correlation between the experimental and the control group was found to be .676. The degree of freedom was again found in order to apply the r value. Using the same formula and the values as were previously mentioned, the degree of freedom was established at 23. Because the observed value of r (.676) was greater than the .05 level of probability and even the .01 level, the researcher concluded that there was a significant relationship between the stimulation of the student's interest in art and the use of the directed participation approach for the classroom art exhibits. The null hypothesis was therefore rejected.

One failure of any research has been the lack of the researcher to apply his data to more than one test. This researcher felt a sense of curiosity and applied the same obtained data to another measurement in order to solidify his rejection of the null hypothesis. The formula for the significance of the differences of mean gained scores was

used.² In such cases the t-test has been applied. The correct formula has been established as:

$$\underline{t} = \frac{\text{Mean Gain Experimental} - \text{Mean Gain Control}}{\sqrt{\frac{N(D^2) - (D)^2}{N^2(N-1)}}$$

where t = test to determine level of significance

D = gain of experimental over control

D² = sum of the square of gain of experimental over control

N = number of students in a single group.

Appendix F, page 43, showed the tabulated data that was needed in order to apply the t-test. The t-test was then employed with the following results:

$$\underline{t} = \frac{2 - .84}{\sqrt{\frac{25(111) - (29)^2}{(25)^2(25-1)}}$$

$$\underline{t} = \frac{1.16}{\sqrt{\frac{2775 - 841}{625(24)}}$$

$$\underline{t} = \frac{1.16}{\sqrt{\frac{1934}{15000}}}$$

²Robert H. Koenker, Simplified Statistics (Bloomington, Illinois: McKnight & McKnight Publishing Company, 1961), p. 95.

$$\underline{t} = \frac{1.16}{\sqrt{.1289333}}$$

$$\underline{t} = \frac{1.16}{.35907} \quad \text{or } 3.230$$

After the value for \underline{t} was found, the degree of freedom was calculated. The degree of freedom formula was $df = n-1$ where df equal the degree of freedom and n equals the number of individuals in a single group. The degree of freedom was found to be $25 - 1$ or 24 . Using the Table for the Distribution of \underline{t} listed in Appendix G on page 44, the .05 level of significance for 24 degrees of freedom was 2.064, and the .01 level was 2.797. With the observed value of \underline{t} having been 3.230 and greater than both the .05 and the .01 levels of significance, the researcher rejected the null hypothesis.

Tables 1 through 4 on the following pages were used to illustrate the breakdown on how the students in both groups responded to the pre-test and the posttest questionnaire.

Table 1
The Pretest and the Posttest Responses
For the Experimental Group

Question number	PRETEST RESPONSES				POSTTEST RESPONSES			
	Yes	No	No opinion	Occasionally	Yes	No	No opinion	Occasionally
1	10	3	12		14	1	6	
2	7	8	10		11	1	13	
4	1	21		3	1	15		9
5	1	18		6	1	16		8
6	1	22		2	1	20		4
7	2	22		1	2	22		1
8	13	12			17	8		
9	4	21			6	19		
10	1	21		3	1	18		6
11	3	7		15	3	4		18
12	18	0	7		23	0	2	

Table 2
The Pretest and the Posttest Responses
For the Control Group

Question number	PRETEST RESPONSES				POSTTEST RESPONSES			
	Yes	No	No opinion	Occasionally	Yes	No	No opinion	Occasionally
1	11	8	6		13	3	9	
2	6	13	6		8	11	6	
4	0	20		5	0	19		6
5	0	20		5	0	19		6
6	0	21		4	0	21		4
7	1	24		0	1	24		0
8	15	10			16	9		
9	2	23			3	22		
10	0	23		2	0	21		4
11	2	15		8	2	15		8
12	15	1	9		17	1	7	

Table 3

How the Students Responded to Question 3
in the Pretest and Posttest

PRETEST RESPONSES			POSTTEST RESPONSES		
Painting	Drawing	Prints	Painting	Drawing	Prints
5	1	1	6	2	3

Experimental Group

PRETEST RESPONSES			POSTTEST RESPONSES		
Painting	Drawing	Prints	Painting	Drawing	Prints
3	2	1	5	2	1

Control Group

Table 4

How the Students Responded to Question 13
in the Pretest and Posttest

RESPONSES	EXPERIMENTAL		CONTROL	
	Pretest	Posttest	Pretest	Posttest
convenient to see art work	9	9	11	14
can look at it more often	5	6	6	7
can learn how to understand it	0	0	0	0
cannot see original art work any other time	7	8	5	3
can see related work in a medium and understand it in my own work	4	2	3	1

Chapter 5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

REVIEW OF THE STUDY

The purpose of this study was to investigate the influence that two different uses of classroom art exhibits had on changing the interest level that ninth grade junior high students have in art. The five exhibits included art works by three art teachers and two non-teaching individuals, all of whom were known by the researcher.

Fifty students in the Independence Junior High School took part in this study. These students were enrolled in the researcher's freshman art classes. The twenty-five students in the sixth hour class served as the control group. They were exposed to the exhibits but not to the researcher's explanations that accompanied each of the five one man art exhibits. The twenty-five students in the seventh hour class were selected at the discretion of the researcher to serve as the experimental group. These students were not only exposed to the five exhibits but were also subjected to the researcher's explanations on the exhibits, comparisons, use of examples, and instructions from the five exhibits. A questionnaire that was given at the start and at the conclusion of the study served as the basis for the statistical data. The formula for the Pearson Product-Moment Correlation Coefficient computed from the original data and the formula for the significance of the difference on

the mean gained were employed to test the data and to establish the basis to reject the null hypothesis.

SUMMARY

The junior high years are an important part in the total development of the adolescent's personality. Not only are physical changes taking place but major ideas, attitudes, opinions, and interests are being formulated within the adolescent. These concepts will continue to influence him the rest of his life, as well as the society of which he becomes a member.¹

The development of the students' interest in art must be taken into consideration. "It follows that in order to become visually aware there must be involvement and it is up to the [art] teacher to provide the opportunities."² Exhibits in the art classroom provide an excellent opportunity for the teacher to help the student arouse his artistic awareness and interest in art. For the student, the exhibits can provide opportunities to learn new techniques that have been discovered and used by others, to encourage the habit of looking at and enjoying art works, and to learn how to accept and respect what others have created. This in return will help his own work to be accepted and appreciated.³

¹K-12 Art Guide (Topeka: Kansas State Department of Education, 1973), p. 8.

²Marie L. Larkin, "Art Education," Nation's Schools, No. 2, Vol. LXXXVIII (August, 1971), p. 45.

³Jane Bland, Art of the Young Child (Greenwich, Conn.: New York Graphic Society, 1968), p. 6.

Art offers an excellent opportunity for helping children to understand that in some areas of life there is not just one right answer which makes all other answers wrong. It can also help them to realize that it is not necessary to pronounce judgement upon every work or action. By having their own efforts accepted they can develop tolerance for what other people do.⁴

Reasons for the lack of classroom art exhibits are bountiful. The time and the effort involved are formidable to the art teacher who is exhausted after a full day. The lack of a place to exhibit can hamper the teacher who has the well meaning desire to have the classroom exhibits. But once these obstacles were overcome, the art instructor discovered that it was worth the added effort.

Whether the community is rural or urban, its resources should be explored, not only for the enrichment they have to offer, but also because through awareness of community resources or lack of them, the . . . student[s], destined to be the leader[s] of the future, senses [their] cultural environment.⁵

The reviewed literature in Chapter 2 and the analysis of the data in Chapter 4 have presented a case for the directed participation approach in using the classroom art exhibits. The one man exhibits composed of invited artists have demonstrated that the directed participation approach of using exhibits had effected the development of the student's interest in art.

The posttest responses revealed that the classroom exhibits made it more convenient for the students to see original art work firsthand. The opportunity to travel and to see examples of original art are

⁴Hilda Lewis, "What Research Says To The Teacher About Developing Creativity," Art Education, No. 5, Vol. XXIV (May, 1971), p. 34.

⁵Edwin Ziegfeld, Art For the Academically Talented Student (Washington, D.C.: National Education Association, 1961), p. 52.

not shared by all of the students. Therefore, these exhibits can provide some insight, where otherwise there would be none, into the American art world. Also the posttest responses revealed that the exhibits provided more time for the students to look at the art work. Growth or development in education must be considered in terms of a long span of time. "How much we enjoy a work of art is an indication of our ability to see. The more our visual experience expands, the greater becomes the amount of pleasure we receive from the visual form. . . ."⁶ With this additional time for seeing and looking at the exhibits, the student will have an added opportunity to develop his skills in looking, enjoying, and understanding art work, and will also have an opportunity to see quality art work. The greater the exposure, the better the chances are for arousing and sustaining the student's interest in art.

The full educational potential of teaching art has not yet been reached. Old and new methods of teaching have been and will continue to be examined in order to accomplish this desired goal. This study by the researcher has been an attempt in using the directed participation approach for classroom art exhibits as a means of employing the full potential of art education. Franklin Roosevelt once stated that he ". . . looked forward to a day when every schoolhouse would have contemporary American paintings on its walls."⁷

⁶Bates Lowry, The Visual Experience (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967), p. 17.

⁷John F. Kennedy, "The Arts In America," Look, No. 26, Vol. XXVI (December 18, 1962), p. 104.

CONCLUSIONS

Once the data from the pretest and the posttest questionnaire were collected, the researcher then analyzed the obtained information.

The following conclusions may be drawn:

- (1) There were substantial gains in the posttest scores over the pretest scores of the experimental group.
- (2) There was a larger gain in the posttest scores for the method that used the directed participation approach.
- (3) Even though the experimental group showed the greatest increase, the control group also benefited but to a lesser degree from the classroom art exhibits.
- (4) The analysis of data showed that the results of the experiment were outside the range of random occurrence or chance.
- (5) The results of the research and the reviewed literature indicated that art teachers should make greater use of classroom art exhibits.

FACTORS THAT SEEMED TO AFFECT THE STUDY

The final results of this experimental study may have varied due to several causes or have been influenced by several factors.

- (1) The amount of time allowed for the study by the researcher was limited.
- (2) The different mediums that were shown in the exhibits were limited only to painting and to sculpture.
- (3) Some of the questions in the questionnaire should have been rephrased to prevent obvious answers.

RECOMMENDATIONS

The range of this study was limited to only the five art exhibits that were scheduled by the researcher. Some thought should be considered for further study in the following areas:

- (1) The exhibits at the local museum and the local junior college could be employed.
- (2) Demonstrations or lectures by the exhibiting artists could contribute an added dimension to the full meaning, purpose, and use of the classroom exhibits.

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Thomas, Aneurim M. "Art in General Education: Changes in the Arts," Trends in Education (October, 1972), p. 33.

APPENDIX

APPENDIX A

LIST OF EXHIBITS

Mr. Bill Trouskie	January 12-23	water colors
Mr. Kris Dexter	January 26- February 6	acrylics and water colors
Mr. Leonard Wood	February 9-20	acrylics
Mrs. Marilyn Masoner	February 23- March 5	water colors
Mr. Ray Tarry	March 8-19	sculpture

APPENDIX B

QUESTIONNAIRE

1. Do you enjoy looking at art? Yes No No opinion
2. Do you prefer one area of art over another? Yes No No opinion
3. If so, which area of art do you prefer? Painting Sculpture
Prints Crafts Drawing
4. Do you look at the School Arts magazine in the school library? Yes, regularly I do.
No
Occasionally I do.
5. Do you look at the art books in the school or public library? Yes, regularly I do.
No
Occasionally I do.
6. Do you check out art books from the school or public library? Yes, regularly I do.
No
Occasionally I do.
7. Do you visit art museums when one is available? (while traveling) Yes, regularly I do.
No
Occasionally I do.
8. Have you visited the local museum? Yes No
9. Have you seen the junior college art department? Yes No
10. Have you read articles on art in the newspapers or in the magazines? Yes, regularly I do.
No
Occasionally I do.
11. Do you watch any art related programs on television? Yes, regularly I do.
No
Occasionally I do.
12. Should a school have a place to exhibit art work of invited artists? Yes No No opinion
13. Why would you like to have actual art works in the classroom?
_____ convenient to see art work
_____ can look at it more often
_____ can learn how to understand it
_____ cannot see original art work any other time
_____ can see related work in a medium and understand it in my own work

APPENDIX C

DATA FOR THE CONTROL GROUP

Pretest Scores		Posttest Scores	
Scores Y	Square of Scores Y ²	Scores Y'	Square of Scores (Y') ²
24	576	24	576
14	196	16	256
17	289	17	289
17	289	19	361
17	289	17	289
24	576	24	576
18	324	19	361
18	324	18	324
14	196	17	289
14	196	15	225
15	225	16	256
29	841	29	841
14	196	14	196
12	144	12	144
11	121	11	121
22	484	22	484
12	144	14	196
12	144	13	169
18	324	20	400
12	144	12	144
18	324	18	324
14	196	14	196
24	576	25	625
17	289	15	225
21	441	24	576
$\Sigma Y=428$	$\Sigma Y^2=7848$	$\Sigma Y'=445$	$(\Sigma Y')^2=8443$

APPENDIX D

DATA FOR THE EXPERIMENTAL GROUP

Pretest Scores

Posttest Scores

Scores X	Square of Scores X^2	Scores X'	Square of Scores $(X')^2$
33	1089	33	1089
12	144	13	169
12	144	14	196
18	324	18	324
12	144	16	256
16	256	18	324
25	625	26	676
22	484	24	576
19	361	25	625
15	225	17	289
19	361	22	484
20	400	23	529
20	400	20	400
24	576	26	676
19	361	19	361
28	784	29	841
24	576	25	625
14	196	18	324
16	256	19	361
15	225	19	361
15	225	19	361
15	225	15	225
15	225	18	324
14	196	15	225
14	196	15	225
$\Sigma X=456$	$\Sigma X^2=8998$	$\Sigma X'=506$	$(\Sigma X')^2=10846$

APPENDIX E

VALUES OF THE PEARSON CORRELATION COEFFICIENT

Table 11 Critical Values of the Pearson Correlation Coefficient*

df	Level of significance for one-tailed test			
	.05	.025	.01	.005
	Level of significance for two-tailed test			
	.10	.05	.02	.01
1	.988	.997	.9995	.9999
2	.900	.950	.980	.990
3	.805	.878	.934	.959
4	.729	.811	.882	.917
5	.669	.754	.833	.874
6	.622	.707	.789	.834
7	.582	.666	.750	.798
8	.549	.632	.716	.765
9	.521	.602	.685	.735
10	.497	.576	.658	.708
11	.476	.553	.634	.684
12	.458	.532	.612	.661
13	.441	.514	.592	.641
14	.426	.497	.574	.623
15	.412	.482	.558	.606
16	.400	.468	.542	.590
17	.389	.456	.528	.575
18	.378	.444	.516	.561
19	.369	.433	.503	.549
20	.360	.423	.492	.537
21	.352	.413	.482	.528
22	.344	.404	.472	.515
23	.337	.396	.462	.505
24	.330	.388	.453	.496
25	.323	.381	.445	.487
26	.317	.374	.437	.479
27	.311	.367	.430	.471
28	.306	.361	.423	.463
29	.301	.355	.416	.456
30	.296	.349	.409	.449
35	.275	.325	.381	.418
40	.257	.304	.358	.393
45	.243	.288	.338	.372
50	.231	.273	.322	.354
60	.211	.250	.295	.325
70	.195	.232	.274	.303
80	.183	.217	.256	.283
90	.173	.205	.242	.267
100	.164	.195	.230	.254

* Abridged from R. A. Fisher and F. Yates, *Statistical Tables for Biological, Agricultural, and Medical Research*, Oliver & Boyd, Ltd., Edinburgh, by permission of the authors and publishers.

APPENDIX F

THE SIGNIFICANCE OF THE DIFFERENCE ON MEAN GAINS OF PAIRED GROUPS

Experimental Group			Control Group			Gain Experimental Over Control	
1st Test	2nd Test	Gain	1st Test	2nd Test	Gain	D	D ²
33	33	0	24	24	0	0	0
12	13	1	14	16	2	-1	1
12	14	2	17	17	0	2	4
18	18	0	17	19	2	-2	4
12	16	4	17	17	0	4	16
16	18	2	24	24	0	2	2
25	26	1	18	19	1	0	0
22	24	2	18	18	0	2	4
19	25	6	14	17	3	3	9
15	17	2	14	15	1	1	1
19	22	3	15	16	1	2	4
20	23	3	29	29	0	3	9
20	20	0	14	14	0	0	0
24	26	2	12	12	0	2	4
19	19	0	11	11	0	0	0
28	29	1	22	22	0	1	1
24	25	1	12	14	2	-1	1
14	18	4	12	13	1	3	9
16	19	3	18	20	2	1	1
15	19	4	12	12	0	4	16
15	19	4	18	18	0	4	16
15	15	0	14	14	0	0	0
15	18	3	24	25	1	2	4
14	15	1	17	15	2	-1	1
14	15	1	21	24	3	-2	4
Mean Gain=2			Mean Gain=.84			29	111

APPENDIX G

DISTRIBUTION OF t FOR GIVEN PROBABILITY LEVELS

Table 7 Distribution of t for Given Probability Levels

df	Level of significance for one-tailed test					
	.10	.05	.025	.01	.005	.0005
	Level of significance for two-tailed test					
	.20	.10	.05	.02	.01	.001
1	3.078	6.314	12.706	31.821	63.657	636.619
2	1.886	2.920	4.303	6.965	9.925	31.598
3	1.638	2.353	3.182	4.541	5.841	12.941
4	1.533	2.132	2.776	3.747	4.604	8.610
5	1.476	2.015	2.571	3.365	4.032	6.859
6	1.440	1.943	2.447	3.143	3.707	5.959
7	1.415	1.895	2.365	2.998	3.499	5.405
8	1.397	1.860	2.306	2.896	3.355	5.041
9	1.383	1.833	2.262	2.821	3.250	4.781
10	1.372	1.812	2.228	2.764	3.169	4.587
11	1.363	1.796	2.201	2.718	3.106	4.437
12	1.356	1.782	2.179	2.681	3.055	4.318
13	1.350	1.771	2.160	2.650	3.012	4.221
14	1.345	1.761	2.145	2.624	2.977	4.140
15	1.341	1.753	2.131	2.602	2.947	4.073
16	1.337	1.746	2.120	2.583	2.921	4.015
17	1.333	1.740	2.110	2.567	2.898	3.965
18	1.330	1.734	2.101	2.552	2.878	3.922
19	1.328	1.729	2.093	2.539	2.861	3.883
20	1.325	1.725	2.086	2.528	2.845	3.850
21	1.323	1.721	2.080	2.518	2.831	3.819
22	1.321	1.717	2.074	2.508	2.819	3.792
23	1.319	1.714	2.069	2.500	2.807	3.767
24	1.318	1.711	2.064	2.492	2.797	3.745
25	1.316	1.708	2.060	2.485	2.787	3.725
26	1.315	1.706	2.056	2.479	2.779	3.707
27	1.314	1.703	2.052	2.473	2.771	3.690
28	1.313	1.701	2.048	2.467	2.763	3.674
29	1.311	1.699	2.045	2.462	2.756	3.659
30	1.310	1.697	2.042	2.457	2.750	3.646
40	1.303	1.684	2.021	2.423	2.704	3.551
60	1.296	1.671	2.000	2.390	2.660	3.460
120	1.289	1.658	1.980	2.358	2.617	3.373
∞	1.282	1.645	1.960	2.326	2.576	3.291

* This table is abridged from Table III of R. A. Fisher and F. Yates: *Statistical Tables for Biological, Agricultural, and Medical Research*, published by Oliver and Boyd, Ltd., Edinburgh, by permission of the authors and publishers.