

A DESCRIPTIVE SURVEY OF ART EDUCATION IN TUCSON'S
CATHOLIC SCHOOLS

by

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ABSTRACT

The primary objective of this study was to describe the existing art programs regarding scheduling, facilities, and personnel, in Tucson's Catholic schools. This information was obtained by a written questionnaire developed from the National Art Education Association's (NAEA) goals for a quality school art program. Ten schools were used in the study and 55 subjects were surveyed with all 55 responding. The data gathered was analyzed by: (1) comparing it to the available data on the existing art programs in the nation's public schools, (2) determining if the NAEA goals were being met, and (3) calculating a multiple regression to determine what effected the amount of art instruction time in the classroom.

This report reveals: (1) what little data there are on art instruction in the nation's public schools are old and/or incomplete, (2) the data on art instruction in Tucson's Catholic schools compare favorable to the nation's public school data, (3) Tucson's Catholic schools did not meet many of the NAEA goals for a quality school art program, (4) the data gathered from the multiple regression determined that art teacher training increases the amount of art instruction time in the classroom, and (5) income level had no effect on instruction time. Large art student class size decreased art instruction time. The number of certified art teachers also decrease art instruction time. Schools with higher non-Anglo populations increased instruction time.

CHAPTER 1

INTRODUCTION

Every year, administrators of Tucson's Catholic schools make decisions concerning art education with very little existing data. These administrators generally know how art is taught in their own schools, but they seldom know how they compare with other Catholic or public schools.

Purpose and Need of the Study

In an interview with the superintendent of Catholic schools of the Diocese of Tucson, it was revealed that there is no comprehensive survey of art education in Tucson's Catholic schools.

This is not an exclusive problem of Catholic schools. Elliot Eisner, of Stanford University, says that there has not been enough research on the status of art education in the nation's schools. With accurate information, he feels that policy makers could ". . . systematically generate insight into, if not answers to the problems that the field (of art education) faces" (Eisner, 1977, p. 17).

Most educators would agree that the teaching of art improves a student's art skills. This conclusion was arrived at in Design and Drawing Skills (1977) by the National Assessment of Educational Progress (NAEP). The report states, "The implications for art education seems obvious. Schooling in art does appear to be related to the achievement levels that students attain" (p. 85).

There is a need to teach proper art opinions as shown in Art Attitudes (1978) again by the NAEP. The report states,

. . . even our 17-year-olds harbor unsophisticated attitudes and incomplete knowledge about either the nature and the function of art in this culture or the most effective ways of evaluating the worth of particular works. Furthermore, we have seen great disparity in attitudes among various socioeconomic groups of people and among those involved in art experiences and those yet uninitiated (p. 41).

In Coming to Our Senses (1977) by the Arts, Education and Americans Panel (AEAP), it was recommended that artists should assume the role of the art teacher in the schools. This suggestion generated great controversy in the field of art education. The nation's art educators were outraged at this simplistic approach to education. Some art educators felt that the AEAP did not consider art teachers as being "bona fide" members of the art world (Johnson and Ciganko, 1978). Laura Chapman, also disturbed by the AEAP's portrayal of art teachers writes "There emerges--by direct claim, inuendo, and omission--the singular impression that arts educators are hopelessly lost souls whose only salvation is to be found by submitting themselves to The-Mythical-Force-of-the-Artist" (Chapman, 1978, p. 9).

The National Art Education Association (NAEA) is concerned with who teaches art and what is taught in the schools. This is evident in their position paper entitled "The Essentials of a Quality School Art Program" (1973). But how is the NAEA going to know if its goals are being met, if the best information on art instruction in the nation's schools is nearly 20 years old?

The nation's Catholic school administrators are faced with the same lack of data about art instruction. A national survey was beyond the scope of this investigation, so a decision was made to survey a single geographical region. The Catholic schools in the Diocese of Tucson were chosen and surveyed. The data generated were compared to existing information on public school art instruction, as well as to the NAEA goals for a quality school art program. This was done to answer the question "Will art programs in Tucson's Catholic schools compare favorably with U.S. public schools and the NAEA guidelines?"

Other questions needed to be answered regarding the performance of Tucson's Catholic schools:

1. Do schools with a larger number of non-Anglo students teach as much art as schools with high Anglo populations?
2. Do teachers with more art courses during their formal education teach more art to their students?
3. Do students in large classes get less art time per month?
4. Does the presence of a certified art teacher increase the amount of art instruction time in the classroom?
5. Do schools with higher average family income level allot more time for art instruction?

Definition of Terms

The administration and structure of Catholic schools is different from public school systems on the state and local levels. Certain terms are used in comparison of Catholic schools and clarification needs to be made.

1. A Diocese is an administrative district under the jurisdiction of a bishop. The Diocese of Tucson is one of two in the state of Arizona. Six state counties are under the authority of the Diocese of Tucson, so the diocese is the equivalent of a state's jurisdiction in the public schools.
2. A Parish is a congregation of families establishing a church community. It may operate a school as long as it follows diocesan policy.
3. There are three kinds of Funding Classifications used in this study: (a) Catholic Private Schools are institutions principally funded by private means, tuition, and fees; (b) Catholic Parochial Schools are institutions principally funded by a parish, tuition, and fees; and (c) Catholic Diocesan Schools are institutions funded by the diocese, tuition, and fees.
4. Catholic Elementary Schools vary in grade levels, but are generally the equivalent of a combination public elementary (1-6) and junior high (7 & 8) school.
5. Catholic High Schools are the equivalent of the Arizona public high schools which are composed of grades 9-12.
6. Public Secondary Schools is sometimes used in the literature as meaning both junior and senior high schools. The schools referred to in this way will be compared to Catholic high schools in this study.

Limitations and Assumptions

The scope of this study limits itself to the Catholic schools of the Tucson area. Only a written questionnaire was used to gather teacher responses. This study bases its information on this data. No interviews were conducted with the teachers with the exception of two high school teachers.

This study was also greatly limited by using dated, 1963 NEA information as a basis for some of the comparisons. Since the Catholic school questionnaire did not replicate the one conducted by the NEA, comparisons were again limited.

It is assumed in the investigation that the number of art instruction minutes per student per month is critical in art students' training. There are, of course, many factors that effect the quality of art teaching in the classroom. This study made no attempt to ascertain content quality. Art time means little, if no learning takes place. The reverse is also true; if active learning is to occur, art instruction time must be provided.

It was also assumed in this study that data within a school would be treated in a non-qualitative manner. The intent of this study was to describe not to evaluate. When comparisons occur, they are made only on the basis of the information gathered. Although qualitative judgments are implied, they are limited to comparative analysis.

CHAPTER 2

REVIEW OF LITERATURE

U. S. Public School Art Education

The state of the nation's art education programs is of interest to both Catholic and public school administrators. Accurate research in this area can provide useful information for policy and decision making.

In the past, there was little information on art education programs on the national level. Much data on enrollments, art teachers, course offerings, and related information are outdated. Some data are unreliable, because of incomplete or small samplings. There is, however, some information that gives insights into the general condition of the nation's art education.

The most comprehensive descriptive survey of art in the public schools was published by the National Education Association (NEA) in 1963. The report was entitled Music and Art in the Public Schools. Questionnaires were mailed to 790 randomly selected elementary schools and 948 secondary schools with an 83 percent and 82 percent response rate respectively.

In art instruction time for grades 1-6, 60 percent of large school districts, and 48 percent of small districts had definite time apportioned. Schools in systems with 6,000 or more students were

considered large, and systems with fewer than 6,000 students were considered to be small. Most schools allotted between 40 and 100 art minutes per student per week. There was a mean of 60 minutes in grades 1-3; 70 minutes in grades 4 and 5; and 72.5 minutes in grade 6. This average was calculated from combined data of both large and small school districts.

In grades 1-6, 61 percent of regular classroom teachers were expected to teach art without the help of a specialist. Thirty-eight percent of large districts and 27 percent of small districts required these classroom teachers to have the ability to teach art as a condition of employment.

Regarding facilities and equipment for grades 1-6, 74 percent of the schools had basic art supplies as paper and paint. Seventeen percent of large school systems and 7 percent of small systems had a special art room.

In summary of art practices in grades 1-6, 90 percent of all public elementary schools provided for formal art instruction.

Fifty-three percent of all public secondary schools grades 7-12 allotted time for art. Grades 7-9 had 45.3 percent of the students enrolled in art, and grades 10-12 had 15 percent enrolled.

Less than 5 percent of the secondary schools' staff were full or part time art teachers. Of these teachers, 79 percent felt that they were adequately prepared to teach art.

One major finding of this 1963 NEA report was that regarding art availability, enrollments, facilities, and art teachers, there was

a consistently higher statistical measure in large school systems than in smaller ones.

Much of the data in this NEA report is old and has been criticized by art educators. In Arts and Aesthetics: An Agenda for the Future, First Yearbook on Research in Arts and Aesthetic Education, Harla Hoffa says, "These data are grossly out of date . . ." (Madeja, 1977, p. 10). In the article "Thoughts on an Agenda for Research and Development in Arts Education" from the Journal of Aesthetic Education, Elliot Eisner says, ". . . this data are fifteen years old now and might not represent the current situation" (Eisner, 1977, p. 17). However, it appears that Eisner considers this data to be useful as he refers to it as "the best data available" in a 1978 report to the National Endowment for the Arts (Eisner, 1978, p. 15).

In the Digest of Educational Statistics 1979, enrollments differ from those of the NEA national survey for the same period (Grant and Lind, 1979). The digest reveals that in 1960-61, 20.3 percent of all public school students in grades 7-12 were enrolled in art courses. The NEA reported that 15 percent of the nation's public school students in grades 7-12 were enrolled in art courses. The Digest of Educational Statistics receives its information from the National Center for Educational Statistics (NCES). This agency records statistics from most of the public schools in the nation. The NEA report was from a random national sampling. The most recent data on public school student enrollment listed in the digest are for the school year 1972-72. The figures show that 5,115,981 or 27.5 percent of public school students grades 7-12 were enrolled in art courses.

Many changes have taken place in art education since the NEA report. In 1977 the Agency for Instructional Television (AIT) of Bloomington, Indiana wanted to know the state of the nation's art education. The agency was frustrated by the lack of existing data, and decided to conduct their own survey. It presented its findings in The Status of Arts Education in the Public Schools (Schneller, 1978). The AIT report quoted selected results from a 1976 survey which was conducted by the Arts Education and Americans Panel (AEAP). The AEAP eventually published some of the 1976 findings in their controversial book Coming to Our Senses, The Significance of the Arts for American Education (1977).

The AIT survey lacks good reliability because of its small national sampling. Only 12 selected state art directors were mailed questionnaires with all 12 responding. Three of the 12 states had specific mandated curriculum requirements for student attendance in any art course. One of only three states required art for graduation. Only seven of twelve states reported that art had to be taught at all. Three states have experienced art cutbacks within the last five years (1977-1973), and the rest were either holding their own or reported some growth.

About half of the states expected a drop in student enrollment within the next five years (1977-1981). In almost every responding state, 90-100 percent of all high schools offered art. These states had between 5-30 percent of the high school students enrolled. This art course availability is different from that of the NEA report. In

1963, 74 percent of high schools grades 10-12 offered art in comparison to the 90-100 percent availability in 1977. The significance of this fact is lessened because of the continually low enrollment percentage of 5-30 percent.

Only five states gave information on the certification of non-art specialists. These states reported that between three and six hours of art were required of teachers for employment.

The Agency for Instructional Television quotes selected results in the area of requirements and teachers from the 1976 AEAP national survey. The AEAP reports that 39 of 43 states required art to be taught at the secondary school level with only one state requiring art for graduation. The AEAP did not obtain data on student enrollments from 39 of 43 states.

The AEAP found that there were detailed requirements for art specialists but few specialists were found at the elementary level. This finding is in line with the NEA's 1963 findings of 39 percent of art specialists employed at elementary schools. The AEAP also found that the ratio of certified art specialists was about 300-400:1 for elementary and secondary schools.

The most recent national art education survey comes from an article in Art Education, the Journal of the National Art Education Association. This report is entitled "State of the Arts in the States" (Mills and Thomson, 1981). The authors write,

The idea of gathering basic information on the status of art(s) education in the 50 states has been voiced at numerous National Art Education Association conventions. Many art

educators would agree that such information with a nationwide perspective, would be both interesting and useful. . . (p. 40).

The National Association of State Art Directors of Art Education (NASDAE) conducted this survey. They sent a questionnaire to each state art director with all 50 states responding.

Between 20 and 30 percent of the states did not have information on art teachers. A majority of the states responding placed the number of certified or endorsed art teachers between 200 and 1,000 persons per state. This figure is misleading because some 26 states said that information on the number of certified art teachers was not available. The report states,

. . . from observing the responses of the states which provided both sets of numbers (number of art teachers now and the growth from 1973-74 to 1978-79), it is safe to say that any increase in the number of art teachers over the period has not been phenomenal! In fact, in ten of these states the number of art teachers remained virtually the same . . . and in six of these states the number dropped (Mills and Thomson, 1981, p. 41).

For elementary school art, NASDAE reports that two-thirds of the states said that art was taught by the classroom teacher. Again this is in line with the NEA 1963 survey reporting that 61 percent of the schools' teachers taught art. NASDAE reports that 12 states had art specialists teaching in their elementary schools.

NASDAE found that 56 percent of the elementary schools and 38 percent of the junior high schools required art under the authority of statute or regulation. No information was available for calculating percentages for high schools. This is in contrast with some of the findings of the National Center for Educational Statistics. NCES

reports that in 1972-73, 79 percent of the nation's public high schools, grades 9-12, offered art courses with only 4 percent of the students required to take art for graduation. These data come from Course Offerings, Enrollment and Curriculum Practices in the Public Secondary Schools, 1972-73 (Osterndorf and Horn, 1976, p. 39, p. 309).

In the NASDAE report, 84 percent of the states felt that the current responsibility of the state department of education was in developing in-service programs and in providing technical assistance to public school districts.

In summary, 74 percent of the states currently have or are developing position papers on art, 82 percent of the states have advisory committees, and 78 percent of the states have regional or state-wide workshops. The report says that these statistics

. . . may possibly offer the breath of life and hopefully fresh air to the otherwise 'not growing' or 'sporadically growing' field of art education. . . . In subsequent years, it will be worth examining whether arts positions and responsibilities . . . reflect increasing attention to this possible trend (Mills and Thomson, 1981, pp. 42-32).

The NASDAE survey is the most recent, comprehensive report on the state of art education in the nation. It does, however, lack depth in area of art enrollments and other descriptive data like the percentage of certified art teachers at the elementary and secondary levels.

Arizona and Tucson Art Education

In the state of Arizona, it is difficult to assess the status of art education. The report of Courses Offerings, Enrollments, and Curriculum Practices in the Public Secondary Schools 1972-73 did not list enrollment percentages for the State of Arizona (Osterndorf and Horn, 1976). It did give the number of Arizona secondary schools offering certain types of art courses. The art courses being offered in the number of schools were: Art 7-8, (50); Art I, (99); Art II, (51); Art II/VI (30); Art Appreciation/History, (8); Art Studio, (7); Design, Commercial/Industrial, (15); Graphics, (20); Crafts, (37); Jewelry, (17); Pottery/Ceramics, (35); Painting/Drawing/Design, (40); Photography/Filmmaking, (10); and Sculpture, (13).

The number of secondary schools out of a total of 112 which offered art grades 9-12 were: 29 schools less than 2 years, 47 schools between 2 and 3.9 years, and 18 schools between 4 and 6.9 years.

According to this national report, in 1972-73, no Arizona public secondary schools require any art credits for graduation.

For Pima County and the city of Tucson, no published information on art statistics is available.

National Catholic School Art Education

On the national Catholic school level, there is no comprehensive art education data for students in all grade levels. There were approximately 3,289,000 Catholic school students grades K-12, in the United States in 1977-78 (Grant and Lind, 1979). There is one study on the state of art education in Catholic high schools. This report

was presented as a doctoral dissertation by Sister Edith Pfau of Ball State University in 1971. The report, Art in Catholic Secondary School Education, presented the results of a six state saturation survey. The Catholic high schools in these states had school populations proportionate to the nation's Catholic schools as a whole.

Out of 486 Catholic schools who were sent questionnaires, 382 responded. This response group represented 19 percent of all Catholic high schools in the nation (Grant and Lind, 1979). The results of this survey roughly corresponded to the NEA 1963 art survey after which it was modeled.

According to the Catholic high school report, 76 percent of the schools offered art. This far surpassed the 54 percent of all public secondary schools offering art as reported in the NEA survey. But the percentage of Catholic high school students enrolled in art being at 15 percent was nearly the same as in the NEA report.

Less than 3 percent of the Catholic high schools required students to take art past the ninth grade. This statistic is similar to the 4 percent of the nation's public secondary schools requiring art according to the National Center for Educational Statistics (Osterndorf and Horn, 1976, p. 309).

It was found that large Catholic high schools not offering art were all boys schools. It was also found that within the decade of the 1960's, 55 percent of all boys schools had introduced art or shared art courses and facilities with nearby girls schools.

Art education literature pertaining to Catholic elementary schools was lacking in statistical detail. In the Catholic Periodical and Literature Index, 14 articles directly pertaining to art in the Catholic schools were found from 1970 to 1978 (Catholic Library Association, 1979). Many early articles dealt with creativity in children (Helter, 1980). Some articles showed an interest in aesthetic education (Galaudy, 1972; Madeja, 1978; Harris, 1978; Morman, 1979). Not one article indicating the actual status of art education in the nation's Catholic schools was found in the index between the years previously stated.

Diocese of Tucson Catholic School Art Education

When this study was begun there was little information on art education in the Diocese of Tucson. The curriculum policies of the diocese state that all schools are required to offer art. There were no statistics on number and kinds of courses offered, student enrollments, and personnel regarding art teaching.

CHAPTER 3

DESIGN OF THE STUDY

Subjects

Subjects in this study were 55 teachers of elementary and secondary art in Tucson, Arizona Catholic schools. The Tucson metropolitan area contains 12 of the 22 Catholic elementary and secondary schools within the Diocese of Tucson. Ten of these schools, nine elementary and one secondary, were selected for this survey because of their similarity in geographic location and grade levels. Demographic data on the 10 schools were collected in six areas: (1) number and level of grades, (2) number of students, (3) percentage of Anglo students, (4) number of teachers, (5) funding classification, and (6) regional family income level (See Table 1).

One school, a kindergarten with only 10 students, was excluded because it could not provide grade level information. A high school was also excluded because it offered no art. This high school did not offer art the year of this survey because of the yearly rotation of academic subjects. Throughout this report, both in the discussion and in the tables, the 10 schools will be referred by number. The schools' numbers and locations are listed in Appendix A.

Table 1. Demographic Data on 10 Tucson Catholic Schools

School by Number ^a	1	2	3	4	5	6	7	8	9	10
1) Grade levels ^b	P-1	K-8	1-8	P-8	K-8	P-8	K-8	K-6	1-8	9-12
2) Number of Students ^b	272	483	262	387	296	369	464	182	83	955
3) Percentage of Anglo Students ^c	92	80	19	88	13	73	61	13	0	55
4) Number of Teachers ^c	25	19	10	15	10	17	22	7	6	57
5) Funding Classification ^d	1	2	2	2	2	2	2	2	2	3
6) Regional Family Income Level ^e	1	2	4	3	6	7	5	8	6	4

^a Names and location are in Appendix A.

^b From Diocese of Tucson School Directory 1978-1980.

^c From Diocese of Tucson School Survey 1979-1980.

^d Funding Classification Key: 1 = Catholic Private
 2 = Catholic Parochial
 3 = Catholic Diocesan

^e Income Level Key: 1 = \$32,368
 2 = \$21,406
 3 = \$15,575
 4 = \$14,167
 5 = \$13,943
 6 = \$13,786
 7 = \$12,885
 8 = \$ 9,773

Instrument

The teachers of art in this survey answered a ten page questionnaire. A sample questionnaire is presented in Appendix B. These questions were developed from "The Essentials of a Quality School Art Program" (1973) a position statement by the National Art Education Association (NAEA), and from an unpublished manuscript entitled, Goals and Subgoals Contributing to Quality Education in the Arts (1978) by Jean C. Rush.

The NAEA position paper discussed three areas of concern at the elementary and secondary levels: (1) time and scheduling; (2) facilities, equipment, and materials; and (3) personnel.

The questionnaire sought the following kinds of information:

1. Time and Scheduling
 - a. Number of Art Instruction Minutes
 - b. Art Requirement
 - c. Student Class Size
 - d. Day and Time of Day Art is Taught
 - e. Media Offered
2. Facilities, Equipment, and Materials
 - a. Special Art Room
 - b. Classroom Size
 - c. Utilities
 - d. Work Surfaces
 - e. Storage Space of Materials

- f. Display Space
 - g. Resource Materials
3. Personnel
- a. Formal Training
 - b. Certified Art Teachers
 - c. Time Spent Teaching Art
 - d. Self-Categorization

The questionnaires were structured for maximum validity, reliability, and useability (Goodwin and Klausmeier, 1975). The form was simply designed so the task could be completed in approximately twenty minutes. The questionnaire was developed in consultation with the Superintendent of Catholic Schools, and was pretested to eliminate error.

Procedure

After the questionnaire was in a complete form, this study was submitted to the Human Subjects Committee of The University of Arizona which found it to be in accordance with ethical research standards. The letter of approval for this study is found in Appendix C.

The Superintendent of Schools contacted each school principal by mail asking if the researcher could serve the questionnaire to the art teachers at their schools. The researcher met with the principals of each school and explained the purpose of the survey. Each principal was given a copy of the NAEA position paper along with a copy of the questionnaire. All of the principals agreed to let their art teachers take part in this survey.

The questionnaires were collected within two weeks of distribution. All of the 55 subjects given the questionnaire responded. Although there were some incomplete questionnaires, they were not rendered useless because most of the questions were answered.

CHAPTER 4

RESULTS

Data collected in the Catholic school survey are presented in two ways. Some data appear in tabular form because they describe the status of current art programs within the Diocese of Tucson. Other data were examined using a multiple regression analysis in the attempt to identify the most significant factors influencing the amount of art now taught in the schools studied. The tabulated results of the survey are listed in Appendix D.

Comparison of Tucson Catholic Schools to U. S. Public Schools

Amount of Art

The Catholic schools surveyed compare favorably to the public schools of the nation. The Catholic elementary schools averaged 81 art instruction minutes per student per week, and the one Catholic high school surveyed averaged 245 art instruction minutes per student per week.

The NEA reported the average number of art instruction minutes per student per week in the public elementary schools as being 60 minutes for grades 1-3, 70 minutes for grades 4 and 5, and 72.5 minutes for grade 6. There were no data on art instruction minutes for secondary schools (See Table 2).

Table 2. Comparison of Tucson Catholic Schools
to U. S. Public Schools

	Tucson Catholic Schools	U.S. Public Schools
1) Amount of Art Taught ^a		
a) Grades 1-3	-	60 ^b
b) Grades 4-5	-	70 ^b
c) Grade 6	-	72.5 ^b
d) Grades P-8	81	-

2) Art Requirements		
a) Percentage of Elementary Schools Required to Teach Art	100	56 ^c
b) Percentage of Secondary Schools Required to Teach Art	100	38 ^c
c) Percentage of Secondary Schools Offering Art	50 ^d	78 ^e
d) Percentage of Secondary Schools Requiring <u>Students to Take Art for Graduation</u>	0	4 ^e

3) Percentage of Secondary School Students <u>Enrolled in Art Courses</u>	37	27 ^e

4) Percentage of Elementary Schools Having a Special Art Room	22	17 ^b

5) Number of Art Teachers		
a) Percentage of Elementary Art Teachers	39	61 ^b
b) Percentage of Secondary Art Teachers	7	4 ^b
c) Percentage of Elementary Certified Art Teachers	12	-
d) Elementary and Secondary Cert. Art Teacher to Student Ratio	429:1	353:1
		300-400:1 ^f

^a Measured in minutes of instruction time per student per month.

^b From NEA report, Music and Art in the Public Schools, 1963.

^c From Mills and Thomson, "State of the Arts in the States," 1981.

^d One high school did not offer art the year of the survey (1980) because of the yearly rotation of academic courses.

^e From Osterndorf and Horn, Course Offerings, Enrollments, and Curriculum Practices in the Public Secondary Schools, 1972-73, 1976.

^f From Schneller, The Status of Arts Education in the Public Schools, 1978.

Art Required

All of the Catholic elementary schools are required to teach art by diocesan policy and do so according to the results of the Catholic school survey. Many of the nation's public schools are required to teach art by state mandate. NASDAE reports that 56 percent (28 states) of the states' elementary schools, and 38 percent (19 states) of the states' secondary schools are required to teach art. These percentages are in close agreement with the AIT findings. It reports that seven of twelve states require all schools to teach art.

Student Enrollments

Under the same diocesan policy, the two Catholic high schools are required to offer art as an elective subject. The one Catholic high school surveyed enrolled 37 percent of the school's students in art courses.

The nation's public secondary schools show a growth in art course offerings and in student enrollments. NEA reports that 53 percent of all secondary schools offered art with 15 percent of the students enrolled in 1961-62. NCES reports that 78 percent of all secondary schools offered art courses with 27 percent of the students enrolled in 1972-73. AIT reports that 90-100 percent of all secondary schools offered art with between 5-30 percent of the students enrolled in 1976.

Neither of the two Catholic high schools surveyed required students to take any art for graduation, and according to Pfau (1971)

only 3 percent of the nation's Catholic high schools require art credits for graduation.

Compared to the nation's secondary schools, the Catholic high schools are just below the national average. NCES reports only 4 percent of the nation's public secondary schools required art for graduation.

Facilities

There are inconsistencies in the responses to questions about classroom size. It is not known whether teachers estimated room size or actually calculated it. There is also inconsistency in responses about display space and the availability of school equipment. From the responses, it cannot be determined whether teachers actually had no access to facilities or did not know that they existed.

The Catholic schools surveyed scored higher than the public schools in the aspect of facilities. The data on Catholic elementary schools showed that two of nine schools (22 percent) had a special art room. The NEA reports that only 17 percent of all large school systems and 7 percent of all small school systems had a special art room at the elementary level.

Personnel

Some teachers gave an estimate of the number of art courses taken instead of an accurate figure, so the actual number of courses taken could be different from those recorded in the table.

Responses such as "many" in answer to the number of in-service courses taken could not be recorded.

In the Catholic elementary schools surveyed, 39 percent of all teachers taught art. In many instances, certain individuals were delegated with art teaching responsibilities. Of the 39 percent, only 12 percent were certified art teachers. These certified art specialists, represented 4 percent of the elementary teacher population.

The nation's public schools show a different trend. NEA reports that 61 percent, and NASDAE reports that two-thirds of all elementary school teachers taught art. There are no definite percentages of art teachers on the national level, although NASDAE reports that 12 states had some specialists but gave no percentage.

At the one Catholic high school, there were four art teachers. One of these teachers was a student teacher in the process of being certified. These full and part time art teachers represented 7 percent of the school's faculty.

NEA reports that 4 percent of the public secondary schools' faculties were full or part time art teachers.

The ratio of certified art teachers to students was higher for the Catholic schools than for the public schools. The ratio for the Catholic elementary schools was 429:1 and was 353:1 for the Catholic high school.

The AEAP reports that the ratio of certified art teachers to students for all public schools was 300-400:1.

Comparison of Tucson's Catholic Schools
to the NAEA Goals

Amount of Art

The NAEA statement suggests that elementary school students should receive 400 minutes of art per month, and secondary school students 800 minutes of art per month (See Table 3).

The Catholic elementary schools met 81 percent of the NAEA goal for the number of art instruction minutes per student per month. The elementary schools taught 327 minutes compared to the 400 minutes suggested. The Catholic high school offering art exceeded the NAEA goal by 19 percent. It taught 938 minutes compared to the 800 minutes suggested.

Class Size

The NAEA recommends that the average class size should be 25 students.

The Catholic elementary schools were below the NAEA maximum class size. The elementary schools averaged 22.4 students per art class compared to the 25 student maximum. The Catholic high school exceeded the 25 student limit with an average of 26.4 students per art class.

Art Room

The recommendations of the NAEA state that there should be a special art room of adequate size for school populations of 350-400 students. The guidelines suggest that 1,250 square feet is adequate

Table 3. Comparison of Tucson Catholic Schools to NAEA Goals

	Tucson Catholic Schools	NAEA Goals ^a
1) Amount of Art ^b		
a) Elementary	327	400
b) Secondary	938	800
2) Average Class Size		
a) Elementary	22.4	25
b) Secondary	26.4	25
3) Art Room		
a) Special Art Room for Elementary School Populations of 350-400 Students	No	Yes
b) Special Art Room for Secondary School Populations of 500 Students	Yes	Yes
4) Number of Schools with Special Art Rooms		
a) Elementary	2	-
b) Secondary	1	-
5) Number of Schools with Majority of Rooms with Adequate Size		
a) Elementary	2	1,250 sq.ft.
b) Secondary	1	1,625 sq.ft.
6) Number of Elementary and Secondary Schools with Adequate Equipment		
a) Work Surfaces	10	Yes
b) Storage Space	9	Yes
c) Display Space	10	Yes
d) Utilities	6	Yes
e) Heavy Equipment	2	Yes
f) Light Equipment	10	Yes
7) Average Number of College Art Credits per Art Teacher		
a) Elementary	15.7 ^c	45
b) Secondary	53 ^c	45

^a From NAEA "The Essentials of a Quality School Art Program," 1973.

^b Art Instruction Time Measured in Minutes of Art per Student per Month.

^c Calculated under the assumption that each course was worth 3 credit hours.

for elementary schools, and 1,625 square feet of space is adequate for teaching art in secondary schools.

Of Catholic elementary schools with populations between 350 and 400 students, none had a special art room as suggested by the NAEA. Two of the nine elementary schools had a special art room, but their student populations were less than 350 students and four of the nine schools had an art area within the regular classroom. The high school, number 10, had several special art rooms.

Most of the Catholic elementary schools reported that they had rooms smaller than the 1,250 square feet suggested by the NAEA. Thirty-five percent of the teachers responded that they did teach in a room as large as 1,250 square feet. The Catholic high school said that most of their rooms approached the 1,650 square foot room suggestion.

Equipment

The NAEA recommends other facilities: storage space for three and two dimensional supplies and unfinished projects, work surfaces, display areas, basic utilities, and a variety of equipment and resource materials.

Almost all of the Catholic schools had desks or tables as their work surfaces. All of the schools appeared to have adequate storage space for two and three dimensional supplies and projects.

All of the Catholic schools had some basic utilities such as light and electricity, but four of the ten schools did not have access to water or a sink.

All of the Catholic schools had standard equipment and materials such as chalkboards, projectors, and paper cutters. Few of the elementary schools had any heavy equipment such as kilns, electric saws and drills. One of the elementary schools, number 1, had an outstanding list of equipment and materials compared to the other elementary schools. The high school, number 10, was well equipped with materials and heavy equipment.

Teacher Preparation

In the area of personnel, the NAEA statement suggests that all art teachers should have a minimum of 45 credit hours in art education, art history, and art studio.

All of the Catholic elementary schools fell short of the NAEA goal of 45 credit hours in art per teacher. The elementary teachers averaged 5.4 college art courses with an even distribution of art education, art history, and art studio courses. Assuming that each of these courses were worth three credit hours, they would only amount to 15.7 credit hours.

The one Catholic high school offering art surpassed the NAEA goal of 45 credit hours. These high school teachers averaged 17.75 college art courses again with an even course distribution. If each of these courses were worth three credit hours, that would amount to over 53 credit hours per teacher.

There were seven certified art teachers in Tucson's Catholic schools. Six of the 51 elementary teachers and one of the four high

school teachers were certified art specialists. As stated previously, one of the four high school teachers was a student teacher.

Twelve of these 51 elementary school teachers (22 percent) saw themselves as being full or part time art teachers, and two of these twelve considered themselves as being full time. All of the high school art teachers saw themselves as being full or part time art teachers, with three rating themselves as being full time.

The NAEA set no goals for the day and time of day art should be taught, but did recommend exploration of various media and subjects.

Friday afternoons had the greatest number of elementary teacher responses for the day and time of day art was taught. The order of the other days was as follows: (2) Tuesday, (3) Wednesday, (4) Thursday, and (5) Monday. There was no preference for the morning or the afternoon on these other days.

All of the Catholic elementary teachers rated highly the offering of two dimensional media such as drawing, painting, and paper crafts. Three dimensional media were low rated by the elementary teachers. The Catholic high school had a balanced offering of two and three dimensional media.

Only three elementary schools had teachers incorporating art history in over half of their art classes. The high school did offer a separate course in art history.

Multiple Regression Analysis

Some of the data were examined according to a multiple regression analysis using stepwise comparisons. A multiple regression is a general statistical technique that can analyze the relationships between a dependent variable and a set of independent variables. The independent variables are entered in order of their statistical significance, that is, their relative contribution to explaining the dependent variable, and are entered only if they meet standard statistical criteria. The computer program was part of the "Statistical Package for the Social Sciences" (SPSS), an integrated system designed for the analysis of social science data (Nie et al., 1970).

The regression analysis used as the dependent variable was the average number of art instruction minutes per student per month. The independent variables were: (1) percentage of Anglo students, (2) the average number of college art courses per art teacher, (3) the number of certified art teachers, (4) the regional family income level of the students, and (5) the average art student class size (See Table 4).

Four of the variables for this multiple regression were significant at $p < .001$. They are listed in the order of their inclusion in Table 5.

The average number of college art courses per teacher was the most significant variable effecting the number of art instruction minutes. The more art courses these teachers took, the more art instruction they provided for their students. Class size had an inverse

Table 4. Variables of the Multiple Regression and Order of Inclusion

School by Number ^a	1	2	3	4	5	6	7	8	9	10
<u>Dependent Variable</u>										
Average Number of Art Minutes/Student/Month	800 ^b	109	311	268	198	247	387	316	305	983
<u>Independent Variables</u>										
1) Average Number of College Art Courses/Art Teacher	16	3	7	5	2	1	10	4	2	17
2) Average Art Student Class Size	21	28	32	23	33	22	25	19	10	26
3) Number of Certified Art Teachers	2	-	1	-	-	-	2	-	1	1
4) Percentage of Anglo Students	92	80	19	88	13	73	61	13	-	55
5) Average Regional Family ^c Income Level of Students	1	2	4	3	6	7	5	8	6	4

^a Names and location are located in Appendix A.

^b Speculated from an open classroom .

^c Income Level Key: 1 - \$32,368
 2 - \$21,406
 (From Tucson Trends 1980)
 3 - \$15,575
 4 - \$14,167
 5 - \$13,943
 6 - \$13,786
 7 - \$12,885
 8 - \$ 9,773

Table 5. Mean Number of Classroom Minutes of Art per Week as a Function of Associate Variables

Step	Intercept ^a	Coefficient for ^a				Number of Observations	R ^{2b}	R ^{2c}
		Courses	Class Size	Teachers	Anglo			
1.	96.04 (54.17)	44.23 ^d (6.24)	-	-	-	10	.86	.84
2.	273.95 (127.64)	45.08 ^d (5.82)	-7.68 (5.07)	-	-	10	.90	.87
3.	330.56 (121.99)	54.37 ^d (7.99)	-10.07 (4.87)	-88.26 (56.81)	-	10	.93	.89
4.	369.21 (119.49)	58.37 ^d (8.19)	-0.96 (4.62)	-101.83 (54.89)	-1.18 (.92)	10	.94	.90

^a The standard error for each coefficient is in parentheses below the established coefficient.

^b R² gives the percentage of variance explained by the model.

^c Adjusted R² gives the percentage of variance explained by the model, but reflects the error related to the number of observations in relationship to the number of independent variables.

^d Significant at $p < .001$.

relationship to the number of minutes taught: the smaller the class, the more art minutes; the larger the class, the less minutes. The number of certified teachers also had an inverse relationship; the more certified art teachers, the less art taught. The more Anglo students at a school, the less art taught; the less Anglo students, the more art taught. Family income level was so insignificant that it did not appear as a variable during the stepwise regression.

Prediction of Art Instruction Minutes

A prediction equation was developed from the results of the multiple regression in order to establish the amount of possible art instruction for each school in relation to the others (See Table 6). The result of this equation gives an attainable goal for each school.

The schools have various levels of performance. There are four elementary schools and one high school exceeding the predicted goal with the highest attainment level at 146 percent. There are five elementary schools below the predicted goal with the lowest attainment level at 60 percent. No school exceeds or is below the goal by more than 50 percent.

Table 6. Analysis of Art Instruction Minutes for Tucson's Catholic Schools

School by Number ^a	1	2	3	4	5	6	7	8	9	10
1) Present Number of Art Minutes/Student/Month	800 ^b	109	311	268	198	247	387	316	305	983

2) Predicted Achievement										
a) Predicted Number of Art Minutes ^c	791	183	334	341	142	134	434	398	283	938
b) Difference of Minutes	+9	-74	-23	-73	+56	+113	-47	-82	+22	+45
c) Percentage of Predicted Art Minutes Attained	101	60	93	79	123	146	89	79	107	105

^a Names and location are listed in Appendix A.

^b Speculated from an open classroom.

^c Prediction Equation: $369 + 58(\text{Art Courses}) - 10(\text{Class Size}) - 102(\text{Cert. Teachers}) - 1(\text{Anglo}) = \text{Minutes}$.

CHAPTER 5

DISCUSSION

Findings

This study reveals that: (1) what little data there are on art instruction in the nation's public schools are old and/or incomplete, (2) the data on art instruction in Tucson's Catholic schools compare favorably with the public school data, (3) Tucson's Catholic schools did not meet many of the NAEA goals for a quality school art program, and (4) the data gathered from the multiple regression determined that art teacher training increases the amount of art instruction in the classroom.

Lack of National Data

The review of art education literature on the public schools show an impressive need for more information. The Catholic schools are just as remiss in not providing adequate art education information. Elliot Eisner elaborates on the need for more status studies, "Although it is one of the 'easiest' types of projects that might be conducted, studies of the status of the arts in American schools have been undertaken only rarely" (Eisner, 1977, p. 18).

Comparison of Catholic and Public Schools

This study cannot determine that art instruction in Catholic schools is superior or inferior to art in the public schools. It does, however, show that Catholic schools had a higher rate of performance in many areas that were compared.

In the comparison of Catholic schools surveyed to public schools, inconsistent data and absence of information makes definitive statements difficult.

For the most part, the Catholic schools surveyed compared well to the public school in the area of scheduling. The Catholic schools taught more art instruction minutes. In general, the Catholic elementary schools taught between 8.5 and 19 minutes of art more per student per week than the public elementary schools. Art was required to be taught more by the Catholic elementary schools than by the public elementary schools. Though art was more available than the public secondary schools, the one Catholic high school had a better enrollment percentage at 37 percent. The Catholic high school had no requirement to take art for graduation. This was below the national average which is at 4 percent.

The Catholic schools did somewhat better than the public schools in the areas of facilities. The Catholic elementary schools had 5 percent more special art rooms than all of the public elementary schools, but the amount of rooms was low by NAEA standards.

In the area of personnel, the Catholic schools surveyed were not better or worse than the public schools in percentages, just

different. The Catholic schools were lower, however, in the ratio of certified art teachers to students.

The comparison would be more significant, however, if the information on public school art instruction were collected as recently as that on Catholic schools used here.

NAEA Goals

For the most part, the Catholic schools fell short of the NAEA goals. The only areas bettering the NAEA scheduling goals were in elementary art class size and the number of high school art instruction minutes.

The elementary schools reported having adequate work surfaces and storage space. The high school, however, met or exceeded many of the NAEA goals in the area of facilities.

Even though the Catholic schools employed some certified art teachers, they did not meet the NAEA goal of having all teachers of art being certified art specialists. The elementary schools fell short of the art credit hours goal, but the high school well exceeded it.

Although Tucson's Catholic schools did not completely meet the NAEA goals, would the same be true of the public schools? This question can only be answered with new status studies on art instruction in the public schools.

Multiple Regression Findings and Recommendations

Our finding that art teacher training increases art instruction time has implications for the field of art education. Elliot Eisner discusses art instruction time, saying

Time is a necessary condition for an effective art program in the schools, clearly it is not a sufficient condition. If through some magic wand ten to fifteen percent of the school week (two and one half to four hours) were to be devoted to the teaching of art, the problem of facilitating learning in art would still exist in most schools. The reasons here are also not difficult to discern. Elementary school teachers are not particularly well prepared to teach art (Eisner, 1978, p. 15).

The Tucson Catholic school study shows that its elementary school art teachers averaged 5.4 or approximately 16.2 credit hours of art courses and that the increased teacher training in art increased art instruction time. Perhaps, when this instruction is provided by a knowledgeable art teacher, quality also improves. If all schools met the NAEA goal of 45 art credit hours for art teachers, there would be a higher statistical probability that quality art instruction would occur. If teachers were adequately trained in art, quality instruction time would increase and there would be no need to replace trained educators with artists in the classroom.

The multiple regression provided additional findings: (1) income level had no effect on instruction time, (2) large art student class size decreased art instruction time, (3) the number of certified art teachers also decreased art instruction time, and (4) schools with higher non-Anglo populations increased instruction time.

The fact that income level could not be entered into the multiple regression is significant. There appears to be no relationship between income level and art instruction time.

Perhaps a large class size decreased art time because of the logistics of working with so many people. According to the multiple regression, the smaller the class size, the more minutes of art will be taught.

It is difficult to determine why more certified art teachers would decrease art instruction time. Whatever the case, the inclusion of this variable was lower and therefore no definitive conclusions can be drawn.

The inclusion of the Anglo variable was also lower, but this does show that ethnic backgrounds in the Catholic schools was not a significant factor in art instruction time.

After all of the variables are examined, the number of college art courses teachers took is still the most significant factor. The final recommendation for Tucson's Catholic schools is to increase the average number of art courses of the teachers involved in art instruction. This could be achieved by hiring teachers with more art courses in the future or have existing teachers attend art in-service workshops.

APPENDIX A

NUMBER AND LOCATION OF THE CATHOLIC SCHOOLS IN THE STUDY

1. Kino Learning Center
6625 N. 1st Ave.
Tucson, Arizona 85705

2. Our Mother of Sorrows School
1800 S. Kolb Road
Tucson, Arizona 85710

3. Saint Ambrose School
300 S. Tucson Blvd.
Tucson, Arizona 85716

4. Saint Cyril School
4725 E. Pima St.
Tucson, Arizona 85712

5. Saint John The Evangelist School
600 W. Ajo Way
Tucson, Arizona 85713

6. Saint Joseph School
215 S. Craycroft Road
Tucson, Arizona 85711

7. Saints Peter and Paul School
1436 N. Campbell Ave.
Tucson, Arizona 85719

8. Santa Cruz School
29 W. 22nd St.
Tucson, Arizona 85713

9. San Xavier Mission School
San Xavier Road
Route 11
Tucson, Arizona 85706

10. Salpointe Catholic High School
1545 E. Copper St.
Tucson, Arizona 85719

APPENDIX B

CATHOLIC SCHOOL ART EDUCATION SURVEY (SPRING 1980)

Catholic School Art Education Survey (Spring 1980)

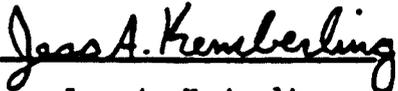
Cover Sheet

Teachers:

This questionnaire is part of a research study entitled, "A Descriptive Survey of Art Education In Tucson's Catholic Schools." At the present time, there is no report on the state of art education in the Catholic schools of Tucson. This study will be the first such effort. Questions will be asked in three general areas, scheduling, facilities, and personnel. Light needs to be shed on the simplest of questions such as "How many students take art and how often?". The results of this survey will be invaluable to those who make decisions and provide services. It will be of benefit to your school and the Diocese of Tucson.

Your participation in this descriptive survey is completely voluntary. About twenty minutes of your time will be required for completion of this questionnaire, and will indicate your consent as a willing participant in this study. All data received will be treated with anonymity and confidentiality, you are free to withdraw from this study at any time without incurring ill will. (This information has been presented to protect your rights and is in accordance with the Human Subjects Committee Regulations from the University of Arizona.)

I thank you for your help in this study. The success of this project depends upon your participation. I believe that you will find it interesting. A summary of the results of the survey will be provided to your school principal, and again thank you.



Jess A. Kemberling
Art Education Graduate Student
University of Arizona

Working with the Approval and the Cooperation of

Sister Mary Norbert Long S.C.
Superintendent of Catholic Schools

Catholic School Art Education Survey (Spring 1980)

School _____ Number _____

Do Not Write in This Space

Please Note: Questions about art classes and number of students are asked within the time frame of the school year. Please be accurate with the number of students you teach, since your responses will be grouped with the other teachers at your school. These responses will then be checked with your school's total enrollment. If a question does not provide an answer for a special circumstance of yours, give additional information in the margin of the page.

PLEASE!!!! FINISH THIS QUESTIONNAIRE WITHIN 24 HOURS !!!!!!!!!!!

Section (A): Scheduling

Directions: Read each question thoroughly and fill in the blank.

- (1) How many art classes do you teach each month ? _____
- (2) What is the average number of art classes that you teach each week ? _____
- (3) How many minutes of art do you teach each month ? _____
- (4) What is the average number of minutes of art that you teach each week ? _____
- (5) How many individual students take art from you ?
(Fill in the number of students to the corresponding grade.)

PS & K _____	4 th _____	9 th _____
1 st _____	5 th _____	10 th _____
2 nd _____	6 th _____	11 th _____
3 rd _____	7 th _____	12 th _____
	8 th _____	

Catholic School Art Education Survey (Spring 1980)

- (6) How many are there in each art class ? (Fill in the number of students to the corresponding grade.)

PS & K	_____	4 th	_____	9 th	_____
1 st	_____	5 th	_____	10 th	_____
2 nd	_____	6 th	_____	11 th	_____
3 rd	_____	7 th	_____	12 th	_____
		8 th	_____		

- (7) How many times each month do you meet these students ? (Fill in the number of meeting times to the corresponding grade.)

PS & K	_____	4 th	_____	9 th	_____
1 st	_____	5 th	_____	10 th	_____
2 nd	_____	6 th	_____	11 th	_____
3 rd	_____	7 th	_____	12 th	_____
		8 th	_____		

- (8) How many students, per academic year, take your art class(es) as a required course ? (Fill in the number of students to the corresponding grade.)

PS & K	_____	4 th	_____	9 th	_____
1 st	_____	5 th	_____	10 th	_____
2 nd	_____	6 th	_____	11 th	_____
3 rd	_____	7 th	_____	12 th	_____
		8 th	_____		

Catholic School Art Education Survey (Spring 1980)

- (9) Circle the day(s), within a given week, on which you most commonly schedule your art class(es). Circle the time of day these class(es) meet.

M	T	W	Th	F
AM PM				

- (10) Rank the following media, from 1 to 4, in order of time spent within the school year. (Number 1 rank as the most time spent.)
- A. _____ Drawing and Painting
(pencil sketching, crayons, tempera paint, oil paint, acrylic paint, and two dimensional design.)
- B. _____ Paper Crafts
(collage, paper mache, oragami, and paper sculpture projects using paper bags, milk cartens, and small boxes.)
- C. _____ Traditional Crafts
(jewelry, pottery, weaving, batik, macrame, tie-dyeing, leather working, and candle making.)
- D. _____ Sculpture
(construction or the carving of wood, plaster, plastics, soft materials or stone, oil clay, ceramic clay. Also mobiles and three dimensional design.)

- (11) Do you teach a course in art history? (Check one of the following.)

Yes _____ No _____

- (12) Do you incorporate art history lessons in over half of your art classes? (Check one of the following.)

Yes _____ No _____

Catholic School Art Education Survey (Spring 1980)

Section (B): Facilities

Directions: Most of the following questions will refer to the classroom in which you teach art. If you teach art in just one classroom, deal with only the blank spaces marked "Classroom # 1". If you teach art in more than one classroom, keep the classroom numbers consistently marked throughout this section. Check the appropriate blank spaces.

- (13) When you teach art, which teaching situation best typifies your classroom(s) ?

	Classroom #
A. A special art classroom	1__ 2__ 3__ 4__ 5__
B. A regular self-contained classroom with special art area	1__ 2__ 3__ 4__ 5__
C. A regular self-contained classroom	1__ 2__ 3__ 4__ 5__

- (14) When you teach art, does your classroom(s) have any of these special art areas ?

	Classroom #
A. Metal Crafts	1__ 2__ 3__ 4__ 5__
B. Ceramics	1__ 2__ 3__ 4__ 5__
C. Printmaking	1__ 2__ 3__ 4__ 5__
D. Photography	1__ 2__ 3__ 4__ 5__

Catholic School Art Education Survey (Spring 1980)

- (15) When you teach art, what is the general size of your classroom(s) ?

	Classroom #				
A. 35' by 45' (1,575 sq. ft.)	1__	2__	3__	4__	5__
B. 30' by 45' (1,350 sq. ft.)	1__	2__	3__	4__	5__
C. 30' by 40' (1,200 sq. ft.)	1__	2__	3__	4__	5__
D. 25' by 35' (875 sq. ft.)	1__	2__	3__	4__	5__
E. 20' by 30' (600 sq. ft.)	1__	2__	3__	4__	5__
F. 15' by 20' (300 sq. ft.)	1__	2__	3__	4__	5__

- (16) Does your classroom(s) have these work surfaces ?

	Classroom #				
A. Special art desks	1__	2__	3__	4__	5__
B. Regular school desks	1__	2__	3__	4__	5__
C. Work tables.	1__	2__	3__	4__	5__
D. Counter top surfaces	1__	2__	3__	4__	5__

- (17) Does your classroom(s) have these storage spaces ?

	Classroom #				
A. for 2-dimensional supplies	1__	2__	3__	4__	5__
B. for 2-dimensional tools	1__	2__	3__	4__	5__
C. for 3-dimensional supplies	1__	2__	3__	4__	5__
D. for 3-dimensional tools	1__	2__	3__	4__	5__
E. for unfinished projects	1__	2__	3__	4__	5__

Catholic School Art Education Survey (Spring 1980)

(18) Does your classroom(s) have these utilities ?

	Classroom #				
A. Water	1__	2__	3__	4__	5__
B. Sink (single or double)	1__	2__	3__	4__	5__
C. Water resistant counters	1__	2__	3__	4__	5__
D. 110 electrical outlet(s)	1__	2__	3__	4__	5__
E. 220 electrical outlet(s)	1__	2__	3__	4__	5__
F. Florecent lighting	1__	2__	3__	4__	5__
G. Incandescent lighting	1__	2__	3__	4__	5__

(19) When you teach art, do you have access to this equipment ?

	Classroom #				
A. Chalkboard	1__	2__	3__	4__	5__
B. Slide or filmstrip projector	1__	2__	3__	4__	5__
C. Overhead projector	1__	2__	3__	4__	5__
D. Projection screen	1__	2__	3__	4__	5__
E. Paper cutter	1__	2__	3__	4__	5__
F. Hot plate	1__	2__	3__	4__	5__
G. Ceramic kiln	1__	2__	3__	4__	5__
H. Pottery wheel(s)	1__	2__	3__	4__	5__
I. Any kind of electric saw	1__	2__	3__	4__	5__
J. Any kind of electric drill	1__	2__	3__	4__	5__
K. Gas torches for jewelry	1__	2__	3__	4__	5__
L. Printing press for printmaking	1__	2__	3__	4__	5__
M. Photographic enlarger	1__	2__	3__	4__	5__
N. Lapidary cutter or polisher	1__	2__	3__	4__	5__

Catholic School Art Education Survey (Spring 1980)

(20) When you teach art, do you have access to this resource material ?

	Classroom #
A. "How to" art books for the teacher	1__ 2__ 3__ 4__ 5__
B. Fine arts books for the teacher	1__ 2__ 3__ 4__ 5__
C. "How to" art books for the students	1__ 2__ 3__ 4__ 5__
D. Fine arts books for the students	1__ 2__ 3__ 4__ 5__
E. Art periodicals	1__ 2__ 3__ 4__ 5__
F. Color and/or black and white prints of art.	1__ 2__ 3__ 4__ 5__
G. Slides and/or filmstrips	1__ 2__ 3__ 4__ 5__
H. Permanent display of original art or reproductions of famous paintings or sculpture	1__ 2__ 3__ 4__ 5__
I. Other _____	1__ 2__ 3__ 4__ 5__

(21) Do you have the following display spaces for art projects, examples and materials, in your classroom(s) ?

	Classroom #
A. Wall space	1__ 2__ 3__ 4__ 5__
B. Bulletin board(s)	1__ 2__ 3__ 4__ 5__
C. Open display cabinet(s)	1__ 2__ 3__ 4__ 5__

(22) Do you have access to the following art display facilities ?

A. Glass enclosed cabinet(s) for 2-dimensional art	Yes: _____ No: _____
B. Glass enclosed cabinet(s) for 3-dimensional art	yes _____ No _____

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- (23) If Yes to A or B on question # 22, are they located in any of the following places ?
- A. Administrative offices or lobby Yes _____
- B. Library Yes _____
- C. Hall or auditorium Yes _____
- D. Hallway or breezeway Yes _____
- E. Classroom(s) Yes 1___ 2___ 3___ 4___ 5___

Section (C): Personnel

- (24) What college degree(s) do you hold ? _____
- (25) As part of your college preparation, did you ever take any art course(s) ?
- Yes _____ No _____
- (26) If Yes to question # 25, have you taken courses in any of these art areas ? (Fill in the number of courses.)
- A. Art History _____ (number of courses)
- B. Art Studio _____ (number of courses)
- C. Art Education _____ (number of courses)
- (27) Have you ever attended an in-service workshop in art appreciation or art methods ?
- Yes _____ No _____
- (28) If Yes to question # 27, how many _____
- (29) How many years have you been a teacher ? _____
- (30) How many years have you taught art ? _____

 Catholic School Art Education Survey (Spring 1980)

- (31) Have you been certified as an art teacher in any state ?
 Yes _____ State _____ No _____
- (32) As a teacher, what percentage of your time is spent teaching art ?
- A. _____ Over 25 %
- B. _____ 25 % to 21 %
- C. _____ 20 % to 16 %
- D. _____ 15 % to 11 %
- E. _____ 10 % to 6 %
- F. _____ 5 % to 0 %
- (33) If more than 25 %, what percentage of your time is spent teaching art? _____
- (34) As a teacher, into which category do you best fall ?
- A. _____ Full time art teacher with no other teaching area preparations.
- B. _____ Full time art teacher with occasional teaching area preparations.
- C. _____ Part time art teacher with no other teaching area preparations.
- D. _____ Part time art teacher with other teaching area preparations.
- E. _____ Regular self-contained classroom teacher who teaches art for at least 3 other teachers's classes.
- F. _____ Regular self-contained classroom teacher who teaches art for at least 1 other teacher's class.
- G. _____ Regular self-contained classroom teacher who teaches art to your own class.

THANK YOU

APPENDIX C

HUMAN SUBJECTS COMMITTEE APPROVAL LETTER



THE UNIVERSITY OF ARIZONA

TUCSON, ARIZONA 85724

HUMAN SUBJECTS COMMITTEE
ARIZONA HEALTH SCIENCES CENTER 2305

TELEPHONE: 626-6721 OR 626-7575

25 February 1980

Mr. Jess A. Kemberling
5833 South Wilshire Drive
Tucson, AZ 85711

Dear Mr. Kemberling:

We are in receipt of your project entitled, "Catholic School Art Education Survey (Spring 1980)", which was submitted to the Human Subjects Committee and concur with the opinion of the Departmental Review Committee's examination and recommendations of this minimal risk project. Therefore, approval is granted effective 25 February 1980.

Approval is granted with the understanding that no changes will be made in the procedures followed or the questionnaire used (copies of which we have on file) without the knowledge and approval of the Human Subjects Committee and the Departmental Review Committee. Any physical or psychological harm to any subject must also be reported to each committee.

Sincerely yours,

Milan Novak

Milan Novak, M.D., Ph.D.
Chairman
Human Subjects Committee

MN/jm

cc: Jean C. Rush, Ph.D.
Departmental Review Committee

APPENDIX D

SURVEY DATA

Table 7. Amounts and Kinds of Art Instruction in Catholic Schools Surveyed

School by Number ^a	1 ^b	2	3	4	5	6	7	8	9	10
1) Number of Students That Take Art	272	464	358	249	293	317	464	177	81	353
2) Number of Teachers That Teach Art	6	4	4	3	8	12	3	6	5	4
3) Total Number of Art Classes Each Month	-	105	46	19	34.5	77.5	81	36.5	21.5	200
4) Total Number of Art Classes Each Week	-	15	11	5	9	19	20	9	6	50
5) Total Number of Art Minutes Each Month	8560	2435	2100	1020	1800	3545	3684	2260	1560	9832
6) Total Number of Art Minutes Each Week	2140	565	550	790	400	785	860	565	405	2485
7) Average Number of Students per Class	20.8	28.3	32.1	22.5	32.5	21.8	25.0	18.4	10.1	26.4
8) Average Number of Art Minutes per Student per Month	800	108.9	301.9	268.4	198.2	147.0	386.5	315.7	304.7	983.2
9) Average Number of Meeting Times per Month	13.6	4.7	6.8	5.0	3.8	5.4	8.5	5.1	4.2	20.0
10) Number of Students Required to Take Art	-	464	258	249	293	317	464	177	56	0

Table 7. Amounts and Kinds of Art Instruction--Continued

School by Number ^a	1 ^b	2	3	4	5	6	7	8	9	10	
11) Number of Classes and Time of Day Taught^c:											
Monday	AM/PM	-	-/-	2/-	-/-	1/-	-/2	1/1	3/1	-/-	4/1
Tuesday	AM/PM	-	1/1	1/2	2/1	-/-	-/4	2/2	3/-	2/2	4/1
Wednesday	AM/PM	-	1/1	2/1	-/-	1/1	1/3	1/1	3/-	-/-	4/1
Thursday	AM/PM	-	1/-	2/-	1/1	-/1	1/1	-/1	3/-	-/1	4/1
Friday	AM/PM	-	1/3	3/2	-/-	-/4	1/3	1/3	4/2	-/3	4/1

12) Most Used Media^d											
Drawing & Painting		1.6	1.2	1.0	1.6	1.1	1.5	1.0	1.0	1.4	2.0
Paper Crafts		2.6	2.2	2.0	1.6	2.1	1.3	2.0	2.0	2.6	2.0
Traditional Crafts		3.0	3.5	4.0	3.0	3.5	3.7	3.5	3.3	3.0	2.0
Sculpture		3.6	3.5	4.0	3.6	3.7	3.5	3.5	3.8	3.8	3.6

13) Number of Art History Courses											
		-	-	-	-	-	-	-	-	-	1
14) Number of Teachers Incorporating Art History into Instruction											
		1	-	-	-	1	-	-	2	-	1

^a Names and location are listed in Appendix A.

^b Speculated from an open classroom.

^c The total number of responses do not indicate the actual number of classes taught, but rather the number of responses in relation to the number of art teachers in the school.

^d The ranking of media is on a scale of 1 to 4 with 1 being the highest.

Table 8. Art Facilities in Catholic Schools Surveyed^a

School by Number ^b	1	2	3	4	5	6	7	8	9	10
1) Number of Responding Teachers	6	4	4	3	8	12	3	6	5	4

2) Number of Responses to Classrooms in Which Art is Taught:										
a) Special Art Room	2	-	1	-	-	-	-	-	-	4
b) Regular Classroom with Special Art Area	-	-	-	2	-	1	1	4	-	-
c) Regular Classroom	-	5	3	2	8	1	1	4	-	-

3) Number of Responses to Classrooms with Special Art Areas:										
a) Metal Crafts	-	-	-	-	-	-	-	-	-	7
b) Ceramics	2	-	-	-	-	-	-	-	-	3
c) Printmaking	2	1	1	1	-	-	-	-	-	2
d) Photography	2	1	-	-	-	-	-	-	-	2

4) Number of Responses to Classroom Size										
a) 35' x 45' (1,575 sq.ft.)	-	-	1	-	-	-	1	-	2	3
b) 30' x 45' (1,350 sq.ft.)	-	-	-	-	-	1	-	-	-	-
c) 30' x 40' (1,200 sq.ft.)	1	-	3	1	1	4	1	-	-	2
d) 25' x 35' (875 sq.ft.)	-	9	-	1	3	4	-	6	1	-
e) 20' x 30' (600 sq.ft.)	-	1	-	-	-	2	-	-	-	-
f) 15' x 20' (300 sq.ft.)	1	-	-	1	-	-	-	-	2	-

Table 8. Art Facilities--Continued

School by Number ^b	1	2	3	4	5	6	7	8	9	10
5) Number of Responses to Kinds of Work Surfaces:										
a) Special Art Desks	-	-	-	-	-	-	-	-	-	4
b) Work Tables	2	6	4	3	3	7	2	6	2	4
c) Counter top Surfaces	2	-	1	1	-	4	1	1	-	4

6) Number of Responses to Kinds of Storage Spaces										
a) For 2-D Supplies	2	2	3	2	2	8	1	6	2	4
b) For 2-D Tools	2	1	2	1	2	7	-	6	1	4
c) For 3-D Supplies	2	1	2	1	1	5	-	5	1	4
d) For 3-D Tools	2	-	1	1	1	6	-	5	1	4
e) For Unfinished Work	2	6	3	2	2	5	1	3	2	4

7) Number of Responses to Kinds of Utilities										
a) Water	2	1	2	-	-	2	1	-	-	4
b) Sink	2	1	2	-	-	2	1	1	-	4
c) Water Resist - Counters	2	2	3	1	-	6	1	1	2	4
d) 110 Volt Outlet	1	10	2	3	4	8	2	5	4	4
e) 220 Volt Outlet	1	1	1	1	-	4	1	2	-	4
f) Fluorescent Light	2	10	4	-	8	12	3	-	4	4
g) Incandescent Lighting	1	-	-	-	-	-	-	7	-	4

Table 8. Art Facilities--Continued

School by Number ^b	1	2	3	4	5	6	7	8	9	10
8) Number of Responses to Kinds of Equipment:										
a) Chalkboard	2	10	4	3	7	12	3	6	5	4
b) Slide/Film Projector	2	2	4	3	4	10	3	6	4	4
c) Overhead Projector	2	5	4	3	2	9	3	6	4	4
d) Projection Screen	2	2	4	2	2	9	3	6	4	4
e) Paper Cutter	2	10	4	3	5	8	3	6	5	4
f) Hot Plate	2	-	1	3	-	-	-	6	4	4
g) Ceramic Kiln	2	-	-	-	-	-	-	1	-	3
h) Pottery Wheel	2	-	-	-	-	-	-	-	-	3
i) Electric Saw	2	-	-	-	-	-	-	-	-	3
j) Electric Drill	2	-	-	-	-	-	-	-	-	3
k) Gas Torches	-	-	-	-	-	-	-	-	-	3
l) Printing Press	-	-	-	-	-	-	-	-	-	2
m) Photographic Enlarger	1	-	-	-	-	-	-	-	-	2
n) Lapidary Equipment	1	-	-	-	-	-	-	-	-	2

Table 8. Art Facilities--Continued

School by Number ^b	1	2	3	4	5	6	7	8	9	10
9) Number of Responses to Resource Material:										
a) Teacher "How To" Books	3	6	3	3	6	12	3	6	4	4
b) Teacher Fine Art Books	3	1	1	1	1	8	3	6	2	4
c) Student "How To" Books	3	-	1	-	-	2	2	4	1	4
d) Student Fine Art Books	3	-	-	-	-	1	1	5	-	4
e) Art Periodicals	1	-	-	1	2	5	2	3	2	4
f) Art Prints	3	5	-	1	-	3	1	3	1	4
g) Slides/Filmstrips	2	5	-	1	-	9	1	3	1	4
h) Permanent Display of Art	1	-	-	1	-	-	-	2	1	4
i) Other	1	-	-	1	-	-	-	-	1	4
10) Number of Responses to Display Space:										
a) Wall Space	3	6	4	3	8	12	3	6	3	4
b) Bulletin Board	3	5	4	3	8	12	3	6	5	4
c) Cabinet Display	1	1	-	-	-	-	-	-	-	4
d) Glass Display for 2-D	-	-	2	-	-	7	-	1	-	4
e) Glass Display for 3-D	-	-	-	-	-	3	-	-	-	4

^a The number of responses in this table do not indicate the actual number of facilities, but rather the number of responses in relation to the number of art teachers in the school.

^b Names and location are listed in Appendix A.

Table 9. Number of Art Teachers in Catholic Schools Surveyed, Their Professional Credentials and Time Spent Teaching Art

School by Number ^a	1	2	3	4	5	6	7	8	9	10
1) Teachers of Art	6	4	4	3	8	12	3	6	5	4
2) Number Holding College Degree(s) and Distribution:	6	2	4	2	7	10	3	4	4	3
a) Multiple Masters	-	1	-	-	-	-	-	-	-	-
b) Masters	1	-	-	-	3	2	-	1	1	2
c) B.F.A.	2	-	-	-	-	-	-	-	-	-
d) B.A.	2	1	2	1	2	5	1	3	2	1
e) B.S.	1	-	2	1	1	2	2	-	1	-
f) A.A. or A.B.	-	-	-	-	1	1	-	-	-	-
3) Number Holding Art Specialist Certification:										
a) Arizona	2	-	-	-	-	-	-	-	-	1
b) Other	-	-	1	-	-	-	2	-	1	-
4) Average Number of College Art Courses Taken and Distribution:										
a) Art History	1.3	.5	1.5	1.0	.6	.5	3.0	1.5	.6	3.0
b) Art Studio	4.6	1.7	-	2.6	.3	.2	4.0	1.5	.2	10.5
c) Art Education	9.5	.5	5.0	1.3	.6	.5	3.3	.8	1.6	3.7

Table 9. Number of Art Teachers Surveyed--Continued

School by Number ^a	1	2	3	4	5	6	7	8	9	10
5) Art In-service Workshops:										
a) Number of Teachers Having Attended Art Workshops	5	2	3	3	4	5	3	2	4	2
b) Total Number of Art Workshops Attended	12	6	12	7	9	16	7	-	10	-
c) Average Number of Workshops for All Art Teachers	1.9	1.5	3.0	2.3	1.1	1.3	2.3	-	1.9	-
6) Teaching Experience:										
a) Average Number of Years Teaching	7.5	5.2	24.7	8.5	15.6	8.7	8.3	11.5	24.2	4.6
b) Average Number of Years Teaching Art	7.0	5.2	15.5	6.8	14.7	7.8	8.3	7.0	21.4	4.2
7) Percentage of Time Teaching Art:										
a) 100-91 Percent	-	1	-	-	-	-	-	-	1	3
b) 90-51 Percent	-	-	-	-	-	-	-	-	-	1
c) 50-41 Percent	2	-	-	-	-	-	1	-	-	-
d) 40-21 Percent	1	-	1	-	-	-	-	-	-	-
e) Over 20 Percent	1	-	-	-	1	1	1	-	-	-
f) Over 15 Percent	-	-	-	1	-	1	-	-	-	-
g) Over 10 Percent	1	-	-	-	1	-	1	2	1	-
h) Over 5 Percent	-	1	1	1	3	4	-	3	2	-
i) Under 5 Percent	1	1	2	-	3	6	-	1	1	-
j) No Answer	-	1	-	1	-	-	-	-	-	-

Table 9. Number of Art Teachers Surveyed--Continued

School by Number ^a	1	2	3	4	5	6	7	8	9	10
8) Kinds of Teaching Loads										
a) Art Full Time with <u>No</u> Other Preparations	2	-	-	-	-	-	-	-	-	3
b) Art Part Time with <u>No</u> Other Preparations	-	1	-	1	-	-	1	-	1	1
c) Art Part Time with Other Preparation	2	1	2	1	-	-	-	-	-	-
d) Regular Teacher with Art for 1 Other Teacher	-	-	-	-	-	2	1	-	-	-
e) Regular Teacher with Art for Own Class	-	2	2	-	7	10	1	6	4	-
f) No Category	2	-	-	1	1	-	-	-	-	-

^a Names and location are located in Appendix A.

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