THE RESEARCH AND DEVELOPMENT OF A MEDIATED
APPROACH TO UPPER ELEMENTARY LEVEL ART
HISTORY/APPRCIATION INSTRUCTION

DISSERTATION

Presented to the Graduate Council of the
North Texas State University in Partial
Fulfillment of the Requirements

For the Degree of

DOCTOR OF EDUCATION

By

Julie A. Norman, M.L.A.
Denton, Texas
August, 1984
Art history serves as a record of civilization's cultural heritage. Yet there is a paucity of art history or appreciation materials for the elementary level child that are historically ordered. The problem with which this study is concerned is the development of a prototype of a slide-tape series on art history for instruction of upper elementary students.

The purpose of this investigation is to produce a slide-tape set that is designed to use advance organizers, direct attention, proceed with moderate speed, elicit responses, and give feedback. The series also guides the student in analyzing art with a historical approach. Moreover, the media stress key ideas on the culture and examine the relationship between the culture and the art produced.

By combining an educational research and development model and a model for media production, an outline of study was devised. Objectives, content outlines, and storyboards were developed for Cave Art, Egyptian Art, and Greek Art, and a slide-tape set was produced for Egyptian Art. A panel of experts then judged the work.
The media were field tested and revised on three levels: a preliminary test in two schools, a main test in five schools, and an operational test in ten schools. Questionnaire data analyzed technical, content, and design quality. In addition, each test site was surveyed in terms of the class and school district setting and income levels of the students' homes.

The findings revealed that most tests were conducted in targeted settings and with students that fit the target audience specifications. In reference to the product, teachers requested more information on Egyptian culture and an audible advance signal on the tape.

It was recommended that a tape with audible advance signals and a study guide for the Egyptian Art set be produced. Moreover, the storyboards for Cave Art and Greek Art should produce acceptable products if the plan of study is followed.
# TABLE OF CONTENTS

| LIST OF TABLES | .......... | .......... | v |
| LIST OF ILLUSTRATIONS | .......... | .......... | vi |

## Chapter

### I. INTRODUCTION

- Statement of the Problem
- Purpose of the Study
- Outline of Study
- Background of the Study -- Art Education
- Background of the Study -- Media
- Significance of the Study
- Definition of Terms
- Summary
- Chapter Bibliography

### II. REVIEW OF THE LITERATURE

- Introduction
  - Art Education
    - Pre-1960 literature
    - Literature of the 1960's
    - CEMREL 1965-1977
    - Literature in general -- 1960's and 1970's
    - Literature 1970-1974
    - Literature 1975-1983
    - Summary
  - Media
    - Media and art
    - Effects of media
    - Message design and development of materials
    - Formative evaluation of media
    - Summary
- Chapter Bibliography
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>III. PROCEDURES OF THE STUDY</td>
<td>80</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Research and Information Collecting</td>
<td></td>
</tr>
<tr>
<td>Planning</td>
<td></td>
</tr>
<tr>
<td>Development of the Preliminary Form of the Product</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>Chapter Bibliography</td>
<td></td>
</tr>
<tr>
<td>IV. PRESENTATION AND ANALYSIS OF FIELD TESTING DATA</td>
<td>96</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Preliminary Field Test and Revision</td>
<td></td>
</tr>
<tr>
<td>Main Field Test and Revision</td>
<td></td>
</tr>
<tr>
<td>Operational Field Test and Revision</td>
<td></td>
</tr>
<tr>
<td>Summary of Data Findings</td>
<td></td>
</tr>
<tr>
<td>Chapter Bibliography</td>
<td></td>
</tr>
<tr>
<td>V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR DISTRIBUTION OF MATERIAL AND FOR FUTURE STUDY</td>
<td>110</td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>Conclusions</td>
<td></td>
</tr>
<tr>
<td>Recommendations for Distribution of Materials and for Future Study</td>
<td></td>
</tr>
<tr>
<td>Chapter Bibliography</td>
<td></td>
</tr>
<tr>
<td>APPENDICES</td>
<td>116</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>185</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Judges' Responses to Content Outline Questionnaire</td>
<td>86</td>
</tr>
<tr>
<td>II. Judges' Responses to Storyboards</td>
<td>89</td>
</tr>
<tr>
<td>III. Judges' Responses to Slide-Tape Set</td>
<td>93</td>
</tr>
<tr>
<td>IV. Preliminary Field Test Responses</td>
<td>97</td>
</tr>
<tr>
<td>V. Main Field Test Responses</td>
<td>99</td>
</tr>
<tr>
<td>VI. Operational Field Test Responses</td>
<td>102</td>
</tr>
<tr>
<td>VII. Field Test Settings</td>
<td>105</td>
</tr>
</tbody>
</table>
**LIST OF ILLUSTRATIONS**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Storyboard Card</td>
<td>88</td>
</tr>
<tr>
<td>2.</td>
<td>Log Sheet</td>
<td>90</td>
</tr>
<tr>
<td>3.</td>
<td>Socioeconomic status of Field Tested Students by Income Level</td>
<td>107</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Since art serves as a reflection of cultural values and as a historical record, art history/appreciation should be an important component of the elementary school art program. The National Art Education Association (31, p. 35) believes that acquiring knowledge of civilization's visual art heritage during the elementary school years is important because "... most children in the elementary art program will grow up to be viewers rather than producers of art." Viktor Lowenfeld (27), a pioneer in the area of the creative development of children, notes that aesthetic development and creative development cannot be separated. "Both are bound up with the process of growing" (28, p. 315). He recommends aesthetic experiences for ten and eleven year old children.

The National Art Education Association Commission on Art Education (32) specifies sixth grade as the best place to begin art appreciation lessons.

The reasons for teaching art history and appreciation in the sixth grade may be stated as follows:

1. to help the children culminate their elementary art experience with a body of art knowledge which will give meaning to their own growth through elementary school art;
2. to prepare them for the adult world of
art by making sure they have some idea about aesthetic criteria for making value judgments;
3. to provide them with opportunities to have early positive encounters with art before they leave childhood after which they may or may not elect art career choices at later grades;
4. to assist them in becoming literate and conversant about art, with a vocabulary which they can use without embarrassment;
5. to provide opportunities for children to integrate the arts into the total learning system before they move into the departmentalization of the secondary schools, thereby opening up the possibility of electing creative arts approaches when doing secondary school projects in other subjects.

The problem in implementing an art history program for sixth grade level students is the paucity of historically ordered materials available for this age group. Virginia Brouch (7, p. 5) states that "... at this time, this investigator knows of no current bibliographic source of texts and references available for the effective teaching of art history at the elementary level." She later remarks (8) that she knows of no one who "... has attempted to put art history together reasonably for the sixth grade." Authors generally assume that a capable teacher of art will find reproductions or will, as in Al Hurwitz's (20) pilot program, make their own slides.

The rationale for developing a multi-media package as a basis for art history/appreciation lessons is provided by Leslie Briggs (6, p. 11), who observes that media can be helpful since it can "... provide stimuli, direct attention, set goals, prompt, guide thinking, and evoke a response." In addition, media can reach many learning modes and many
different kinds of learning that various objectives represent. Bullough (11) argues that a prime reason for utilizing media lies in the fact that it aids concept internalization.

The advantages of developing and using a slide-tape package as opposed to other media forms are summed up by Ryan:

> Slide-tape packages provide a very convenient and flexible instructional program. Slides are easily stored in trays, carousels, cartridges, or files and can be organized, arranged or rearranged to suit the needs of the user. Audio-tapes and cassettes also lend themselves to modification and updating by means of erasure and rerecord features on the audio machines. The combined visual-sound production can be packaged, easily indexed, and stored in locally or commercially manufactured lockers for easy accessibility.

> Because of the operational simplicity and portability of the equipment involved, slide-tape programs lend themselves to a variety of instructional settings. This type of media can be utilized effectively in a number of ways, including individualized study or repeated presentations with large and small groups of students.

(36, p. 36)

In addition, Gerlach and Ely (16) note that slides can be more easily made than filmstrips or films and that the image can be held on the screen indefinitely, thus allowing for greater individualization.

There are programs available for this age level, such as CEMREL, "Teaching Through Art," and the "Wilton Art Program." They are reviewed below in the "Background of the Study" section of this chapter. Although technically well done, the programs available are not based on a historical progression of topics.
Statement of the Problem

The problem of this study is to develop the prototype of a slide-tape series on the history of art for appreciation instruction of upper elementary level students. This level is defined as being targeted for grade six but could include grades five and seven.

Purpose of the Study

The purpose of the study is to create a media product consisting of slides and an audio tape for use in art history/appreciation instruction for the sixth grade. The slide-tape presentation:

1. uses Allen's (1) prescriptions for media aimed at low and middle mental ability viewers, specifically to include learner preparation through the use of advance organizers (introductory outlines); verbal and visual outline of content; visual and verbal direction of attention to the content; elicitation of responses; feedback on correctness of responses; and moderate speed in narration and picture flow;

2. utilizes a series that is historical in nature;

3. guides the student in analyzing a piece of art work;

4. stresses one or two key ideas on the culture of the time;

5. examines the relationship between culture and the art produced.
Outline of Study

The study makes use of the Research and Development model of the Far West Lab for Educational Research and Development, as outlined in Borg and Gall (5), and of Kemp's (23) model of media production. The research and development model includes:

1. Research and information collecting, including product selection, criteria for selection, and review of literature.
2. Planning, including defining skills, stating objectives, determining course sequence, and determining money, manpower, and time to complete the project.
3. Develop the preliminary form of the product, including evaluation devices.
4. Preliminary field test in two schools with thirty subjects. Questionnaire or interview data collected and analyzed.
5. Main product revision based on preliminary field test.
6. Main field test with five schools, 30-100 subjects. Data collected and evaluated with respect to course objectives.
7. Operational product revision based on information collected in step six.
8. Operational field testing with ten schools and 40-200 subjects. Interviews and questionnaire data collected and analyzed.
9. Final product revision based on data from step eight.
10. Dissemination and distribution of materials.

Kemp's model comprises the following steps:

1. Idea
2. Write objectives
3. Audience analysis
4. Content outline
5. Checkpoint
6. Choose which medium and delineate why, considering teaching-learning patterns, learning experience required, and attributes of media
7. Write the treatment (Steps one through six above plus a description of the action sequence)
8. Produce a storyboard  
9. Write the script  
10. List specifications, such as length, sound, completion date, materials used  
11. Schedule and take the pictures and process the film  
12. Edit the pictures and produce titles and captions  
13. Sound  
14. Edit the package  
15. Formative evaluation  
16. Product evaluation  
17. Revision  
18. Copyrighting

(23, pp. 73-74)

The two models are consolidated in the following manner, which serves as an operational plan for this study:

1. Research and information collecting
   a. Review of literature
   b. Idea (identify broad goals and define topic)
   c. Audience analysis
   d. Product selection and criteria for selection including: choosing which medium and delineating why; considering teaching-learning patterns; examining learning experiences required and the attributes of media.

2. Planning
   a. Define skills based on audience analysis
   b. Determine course sequence based on product selection
   c. Determine money, manpower, and time to complete project including a list of specifications such as length, sound, completion date, and materials to be used
d. Write objectives for the first three products in the series (Cave Art, Egyptian Art, and Greek Art)
e. Write content outlines for the first three products
f. Checkpoint — submit to a panel of experts to include one art historian, Dr. Viktor Youritzen, Professor of Art History at the University of Oklahoma; one art educator, Mrs. Dee Ann Schulz, former Dallas art teacher; and one media specialist, Dr. Earle Williams, Professor of Educational Media at East Texas State University.

3. Develop the preliminary form of the product, including evaluation devices
   a. Write the treatment for the first three products
   b. Produce a storyboard for the first three products
c. Write the script for the first three products
d. Schedule and take the pictures and process the film for the Egyptian Art product
e. Edit the pictures and produce titles and captions
f. Sound
g. Edit the package
h. Formative evaluation including a questionnaire based on Kemp's questions to be submitted to the panel of experts as listed above.

4. Preliminary field test (product evaluation) in two settings with fifteen to thirty students utilizing questionnaires for data collection.
5. Revision based on information collected in the preliminary test.
6. Main field test in five schools with 75-100 students utilizing questionnaires for data collection.
7. Operational product revision based on information collected in step six.
8. Operational field testing with ten settings and 150-200 students. Questionnaire data collected.
9. Final product revision based on data from step eight.
10. Dissemination and distribution of materials.

Background of the Study -- Art Education

The literature on general art education is fairly extensive. Until the 1960's one finds studies on art appreciation such as Waymack's and Hendrickson's (40) experiment on children's reactions to pictures with and without appreciation instruction. Without instruction, children tended to choose a picture because it was "pretty" or had appealing colors. With instruction, however, there were emotional reactions in addition to more intellectual reasons given for the child's preference.

Lark-Horovitz (24) and Katz (22) both studied children's preferences for paintings. Children tended to choose more traditional paintings as they neared the sixth grade level, their choice being related to subject matter.

Art education in the mid-1950's was profoundly influenced by Viktor Lowenfeld's (27) theory of the creative
development of children. Although basically concerned with studio art experiences for children, Lowenfeld later expanded his theories to include aesthetic experiences. Lowenfeld and Brittain (28) felt that aesthetic development should not be separated from creative development and that aesthetic experiences should begin when the child reached ten or eleven years of age.

Several programs developed in the 1960's focus on art appreciation. For example, Linderman and Herberholz (26) advocate developing awareness through experiences that touch all the senses. They agree that an art appreciation program is necessary in order to give a historical perspective to children. Classifications for study are based, however, on art forms (sculpture, painting, architecture) rather than a historical survey of art. They believe that the creative process starts with an awareness of the senses, proceeds to a focus and a working process (with media), and ends with a finished art product.

The largest curriculum undertaking was the CEMREL (Central Midwestern Regional Educational Laboratory) Aesthetic Awareness project. Manuel Barkan (3) began the project, and Stanley Madeja continued after Barkan's death. Aesthetic education is defined in this program as "... learning how to perceive, judge, and value aesthetically what we come to know through our senses" (29, p. 3). Packages for the generalist teacher were formulated on six levels. The upper
levels include Aesthetics and the Artist (Level IV); Aesthetics and the Culture (Level V); and Aesthetics and the Environment (Level VI). Units within each level were produced, such as Level IV -- roles of appreciator/audience or recreator/performer in each of the art forms (drama, music, dance, literature, visual arts, and film).

Two educators were especially outspoken during the 1960's and 1970's on the need for art education. Harry Broudy (9) cites the need to train aesthetic sensitivity in order to supply images for the intellect. Reasoning, he claims, is done with and through concepts. These concepts are rooted in the imagination which enables one to deal with the abstractions of actual things rather than with the things themselves. Broudy (10, p. 636) believes that aesthetic experience is basic because "... it is a primary form of experience on which all cognition, judgment, and action depend. It is the fundamental and distinctive power or image-making by the imagination."

Reid Hastie (18) agrees with Broudy. He feels that the individual is being bombarded by "... massive doses of unusual images, sounds, and actions" (17, p. 15). Hastie's content outline for an aesthetics program fuses two areas of knowledge -- production of art and the appreciation of art. Five topic areas are to be covered each year at different levels of complexity. Briefly, these topics include: the artist perceives; the artist transforms; the
elements of art; the observer shares the experience; and evaluation of unity, complexity, and intensity. Hastie concludes by noting that good art reproductions used for appreciation lessons are difficult to obtain in many schools nationwide.

The post-1970 literature reveals some research and a great deal of curriculum information. In the study by Gardner and Gardner (15), upper middle class first and sixth graders were tested. Four reproductions were shown to each student, two reproductions being by one artist and the other two reproductions by another artist. In addition, the subject of each artist's work consisted of one landscape and one still life. Thus, a student could sort by artistic style or by subject matter. First, students were asked to group the paintings they found to be "most similar." In the second test, students were told that two paintings were done by one artist and two by another artist. Subjects were asked to sort according to artist only. The results showed both age levels grouped by subject matter rather than by painting style when given a choice. When explicitly instructed to group by style, most sixth graders could perform the task. First graders, though, tended to ignore the new set of instructions and again grouped by subject matter. The authors concluded that

... sixth graders are on the verge of becoming sensitive to painting style, either because they have attained greater familiarity with the arts,
are undergoing certain neurological changes associated with puberty, or have become able to perform those logical operations which permit the consideration of hypothetical alternatives.  

(15, p. 15)

Gaitskell and Hurwitz (14) favor an art history-art studio approach for the elementary level because "... the imaginative and intuitive capabilities of most children on this level combine to provide a positive learning climate for their appreciation activities" (14, p. 417). Moreover, "... after working with a medium, we know what to look for in the works of others" (14, p. 419). They define art appreciation as "... knowing and having information about art works and using such knowledge as a basis for discriminating, interpreting, and judging. Knowledge about art refers to information surrounding the work of art (names, dates) as well as to facts concerning physical details (media, colors)" (14, p. 415). However, the educators warn not to rely too heavily on recognition and identification of facts in planning a program. The following procedure for criticism activities is suggested: (a) description (What do you see?); (b) formal analysis (How are things put together?); (c) interpretation (What is the artist trying to say?); (d) judgment based on the first three steps (What do you think of it?).

There is a multitude of literature on recent programs in actual existence. For example, Hurwitz (20) describes a pilot program for sixth graders in Newton, Massachusetts.
Criticism and visual acuity are stressed. With his or her own packet of pictures to examine and Newton-produced slides, the student can become familiar with artistic style. The aim of the program is perception, since the designer feels perception precedes appreciation.

Designed more for the classroom teacher, Stanford's Kettering Project, as described by Eisner (12), seeks to develop not only production competence in art but also critical proficiency and a historical perspective. Noting that art usually focuses on just the productive aspect of art, the Kettering project seeks broader aims.

Briefly stated, the critical domain aims at the development of the child's ability to perceive the world with respect to aesthetic qualities. It develops a critical and appreciative eye. The historical domain attempts to help children understand the fact that art is part and parcel of human culture and that it affects and is affected by culture.

(12, p. 6)

Each domain is divided into concepts and principles. These concepts and principles, in a sequential set, have objectives, rationales, motivating and learning activities, evaluation procedures, and a materials list. The "Kettering Box" also houses support materials for the lessons.

Themal (38) reviews Robert Saunders' "Teaching Through Art" program, produced by the American Book Company. The program consists of poster-sized prints and a teacher's manual in twenty study units. It is designed for grades kindergarten through six. Students describe details, make judgments, relate art to the environment, and make art products
dealing with the elements of art. Themal concludes that while the reproductions are good, the program itself is flawed. His objections center on a selection by grade level that seems random and the unsuitable art activities that follow. Moreover, the lessons are so restrictive in nature as to stifle the creative child. In addition, the teacher's manual contains references that are contradictory in terms of grade level designations.

Many of the art appreciation programs described in the literature are employed for enrichment. The Vernon Schools (39) in Rockville, Connecticut, use art appreciation in conjunction with studies on the elements of studio art. For example, a unit on warm and cool colors includes exposure to Renoir's paintings.

Several authors report on the use of volunteers to bring in great works of art on a monthly basis. One example is the Picture Person Program in Manhattan, Kansas, as explained by Bates (4). Volunteers are trained through an art gallery, and they gather their own interesting background information on the artist or the media. Each month they bring two prints to the classroom and discuss with the children what to look for in the paintings. Pictures are then left for two weeks, during which time students are encouraged to do research or some creative project in the room.

Recent literature also describes integrating the arts with other subjects. Esterow (13) discusses Mineola, Long
Island's, arts-in-education program which integrated the basics with the arts. Varied activities include museum visits and "chalk talks" by a children's author and illustrator. Howard (19) reviews the Seattle Project, which utilizes the interdisciplinary approach to arts education. One unique feature is the Community/Schools Arts Partnership. Community arts organizations, artists, teachers, parents, and principals plan and implement a program for an individual school. Such a program might be in-school exhibitions or workshops for students and teachers.

Focusing on the importance of art appreciation in the curriculum is a topic of continuing concern. David Baker (2) explains:

The value of art appreciation not only resides in its contributions to creative visual expressions, but in its function as one of the most effective ways of integrating the content of the arts into the "basic" subject matter areas. Critical skill behavior, the ability to translate visual impressions into verbal expressions, and the forthright historical record portrayed in art works are essential attributes in any area of study. The skill and knowledge gained from the critical study of aesthetic objects is far more applicable to children's whole world than their ability to center a ball of clay on a potter's wheel.

(2, p. 3)

Background of the Study -- Media

Educational technology, or media, according to Moldstad (30, p. 387), ". . . can make education more productive, individual, and powerful, make learning more immediate, and make access to education more equal." He goes on to comment:
Twenty years of decision-oriented media research have produced significant evidence to justify the following claims when instructional technology is carefully selected and used:

1. Significantly greater learning often results when media are integrated into the traditional instructional program.

2. Equal amounts of learning are often accomplished in significantly less time using instructional technology.

3. Multimedia instructional programs based upon a "systems approach" frequently facilitate student learning more effectively than traditional instruction.

4. Multimedia and/or audiotutorial instructional programs are usually preferred by students when compared with traditional instruction.

The advantages of using a slide series over another medium are many. Slide series require only filming, usually with a 35mm camera. A film laboratory processes and mounts the slides. Colorful and realistic reproductions can be obtained, and they can be made even more effective when combined with taped narration. In addition, slides are easily stored, handled, rearranged, revised, and updated. The disadvantages are fewer in number. Slides can get out of sequence, and special photography skills and equipment may be needed in some cases.

There are a number of slide series and filmstrips on art history. The NICEM (National Information Center for Educational Materials) Indexes (33, 34) on currently produced slides and filmstrips identify a multitude of single sets and series. However, the majority are targeted for junior high school level and above. This means that there are shots with a great deal of visual information that may
be too sophisticated for the elementary school child. Moreover, the picture selection can be inappropriate for lower grades.

Surveying the NICEM volume on slides (33), one finds many single concept sets that are not rated as to age level, such as the sets produced by the American Library Color Slide Company. Some examples include Ancient Art of Egypt (thirty-two color slides) or Romanticism and Realism (thirty-two color slides). To obtain a collection of slides covering the history of art, one would need to obtain a large number of sets. Lasher (25) and Orderinde (35) note that cost is to be considered. The American Library Color Slide Company's slide sets are more costly than most other sets.

There are also several series that have been produced. Janson's History of Art has 400 color slides and a script but is designed for high school students. The vocabulary is beyond the elementary level, and the picture selection is sophisticated. For example, when examining Leonardo da Vinci, nude studies for paintings are examined. A more appropriate selection for elementary school would be Mona Lisa.

The American Library Color Slide Company's Survey of Western Art is a fine series of fifteen sets. However, it covers only the periods of art from the Stone Age up to the Baroque, and each set contains approximately twenty slides. Again, cost would be a major factor when considering this series.
Most 35mm filmstrip sets surveyed in the NICEM volumes (34) are geared toward the junior high level and above. The captions provide a reading level beyond that of many elementary students. Examples include Creative Learning's History of Western Art and Educational Production's Art Through the Ages 1958 series. The Western Art Series, produced by Jam Handy School Services, is listed for use in the intermediate grades through high school, but each filmstrip covers many art periods, thus making study of individual periods difficult.

The Book of Art series is produced for intermediate grades through college level. The 600 color frames come with a script, but this is geared to the more sophisticated viewer. Moreover, the individual sets investigate art geographically rather than historically.

One filmstrip series with cassettes is produced specifically for elementary art appreciation. The Wilton Art Appreciation Program, published by Reading and O'Reilly, has two series, one set for third through eighth grades and the second set for fifth through twelfth grades. The series is unsuitable to a historical study of art in that great art is discussed by subject matter. Portraits, Still Lifes, and Landscapes are examples of the themes around which great art is viewed.

Most slide series or filmstrip sets that are on the market are unsuitable for a sixth grade level study of art.
history. Many of the media are not historically ordered or are geared to the junior high level and above.

Significance of the Study

A need to include art history/appreciation in the elementary school art education curriculum has been noted by several authorities. The National Art Education Association (31, 32) and Viktor Lowenfeld (27) have cited the need to train viewers of art. These authorities have also noted the rich opportunity to engage in aesthetic experiences at the sixth grade level.

The value of a media package to show great works of art is obvious, and the advantage of a slide-tape series over another media package has been discussed. Following the model of Research and Development from the Far West Lab for Educational Research and Development, as outlined in Borg and Gall (5), and incorporating Kemp's (23) model of media production, three products are scripted and storyboarded: Cave Art, Egyptian Art, and Greek Art. Of the three, one slide-tape product, Egyptian Art, has been developed and tested.

Definition of Terms

For the purposes of this study, the following terms are used:

1. Art history/appreciation -- the dual purpose of examining art historically and of learning to appreciate art.

2. Low mental ability viewers -- as defined by Allen (2, p. 141), "... a class of individuals ... deficient
in abstract reasoning and in attentional, perceptual coding, perceptual processing, and analytical skills."

3. **Media Approach** -- use of one or more forms of media (in this case, slides and an audio tape) as a strategy for imparting information.

4. **Research and development** -- a process used to develop and validate educational products.

5. **Upper elementary** -- targeted for grade six, but could include grades five through seven.

**Summary**

Five chapters present the foundation, literature review, research procedures, product presentation, and conclusions for this study. Chapter I includes the introduction, statement of the problem, purpose, background of art education and of media, and significance of the study. Chapter II presents a synthesis of the literature related to the problem, both art education and media. Chapter III describes the procedures used in creating the product. Chapter IV presents the product and analyses of field testing data. Chapter V consists of the study's summary, conclusions, and recommendations for the dissemination of the material. In addition to the five chapters, appendices and a complete bibliography are included.
CHAPTER BIBLIOGRAPHY


19. Howard, Margaret B., "Arts Education -- Have We Come to Our Senses?" Principal, 60 (September, 1980), 15-19.


33. National Information Center for Educational Media, NICEM Index to Educational Slides, Los Angeles, University of California, 1980.

34. __________, NICEM Index to 35mm Educational Filmstrips, Los Angeles, University of California, 1977.


CHAPTER II

REVIEW OF THE LITERATURE

Introduction

In order to develop a new product, the Research and Development model of the Far West Lab for Educational Research and Development, as outlined in Borg and Gall (9), recommends a thorough review of the literature. In Chapter II, the literature related to aesthetic or art education is examined historically in the first section. The second section is devoted to a topical review of media literature.

Art Education

Pre-1960 Literature

Examination of the literature on art appreciation prior to 1960 reveals not only varied research but also information on "picture study" lessons. In the mid-1920's, Karwoski and Christensen (70) developed a multiple-choice test for art appreciation. They concluded that multiple-choice tests eliminated guessing thus making the test more valid. Much of the research in the 1930's dealt with the paintings that children studied during art appreciation, or "picture study," lessons. Of the research during this decade, Lark-Horovitz (81) concluded that most children preferred action
scenes to still life paintings or to interior scenes. She noted that subject matter was the most important aspect of picture preference.

Literature of the 1930's also provided insight into the kinds of lessons that children experienced in elementary schools. Stafford and Rucker (130, 131, 132) published a seven-part series of textbooks on art appreciation, one for each elementary grade. The upper grade texts showed a wide range of art from Egyptian to the Romantic era. Lessons generally consisted of reading a small passage and copying the art work of the masters. Practical applications were also stressed. For example, grade four had lessons on designing a bulletin board; grade five had lessons on alphabets.

Similarly, Florence Lowe (85, 86, 87) provided a series of bulletins during the 1930's for the University of Texas. Her booklets for teacher use offered pictures with descriptions and biographies of the artists. In addition, she provided tips for teachers on art appreciation lessons, such as keeping the lessons a reasonable length.

Much of the literature on art appreciation from the 1940's continued in the same vein. For example, Katz (71) researched New York children's preferences for paintings. His findings, similar to those of Lark-Horovitz (81), showed that children selected more traditional paintings as they neared the sixth grade level and that their choice was related to subject matter. Katz concluded that children with
higher IQ's and with higher socioeconomic levels tended to prefer the more traditional paintings. Dietrich's and Hunnicut's (29) study also agreed with the findings of Lark-Horovitz and of Katz. In experiments with first and second graders, the researchers found that younger children preferred landscapes over interior scenes, still lifes, or portraits. Boys tended to choose seascapes. Bottorf (10) concluded that the art history-art studio approach to teaching college level art appreciation was preferable to straight art history lecture classes.

Art education in the 1950's was profoundly influenced by Viktor Lowenfeld's (88) theory of the creative development of children. These theories were later expanded by Lowenfeld and Brittain (89) to include aesthetic development.

Aesthetic development cannot be separated from creative development. Both are bound up with the whole process of growing. Developing aesthetic awareness means educating a person's sensitivity toward perceptual, intellectual, and emotional experiences so that these are deepened and integrated into a harmoniously organized whole. (89, pp. 315-316)

Art appreciation can be an avenue to aesthetic growth. However, the authors warned that children are not ready for these experiences until ten or eleven years of age. They explained that "... the best means of developing aesthetic awareness is through sharpening youngsters' sensibilities and strengthening their power of self-expression. The understanding of art and aesthetic awareness should be combined in a program aimed at the developing child" (89, pp. 337-338).
Literature of the 1960's

Lowenfeld's theories greatly influenced many art classrooms in the elementary school. In the decade following the emergence of these theories, a large number of art educators pressed for more appreciation and aesthetics lessons in the schools. For example, Smith (129) expressed the belief that children must be taught to be critics of art work. As he noted:

The young child gets ready for enlightened aesthetic criticism by constructing or "creating" aesthetic aspects which later he will perceive without being tied to concrete manipulations. The adolescent practices the skills and procedures of aesthetic criticism, thereby continuing the process which promotes the disposition to regard works of art aesthetically.

(128, p. 10)

Smith continued by describing what aesthetic education should contain:

The crucial thing is to promote the disposition to see, notice, and feel the qualities and powers of works of art. And it may be hypothesized that the better the student knows how to judge, describe, explain, interpret, and evaluate the characteristics of works of art, the more likely he will be able to develop the disposition to see for himself.

(128, p. 11)

Research during the 1960's was not as extensive as in previous decades. Salome (120) studied fourth and fifth graders to determine if perceptual training, the ability to "... observe and respond selectively to visual stimuli" (120, p. 19), had any effect on their two-dimensional drawings. Half of the students were trained to look for
information along the contours of objects or patterns while the other half received no perceptual instruction. Their subsequent drawings were measured for closure clarity and proportion. Salome concluded that perceptual training did have an effect on children's drawings.

Day (27) studied eighth graders in San Jose, California, and discovered that the traditional slide-lecture format of art appreciation lessons was not effective for adolescents. Students' art work and written tests were significantly better in the experimental group that studied art history through studio art activities.

Lark-Horovitz, Lewis, and Luca (82) developed an aesthetics program in the mid-1960's. They claimed that even though "... these older children are still mainly responding to the content of pictures, they are more able at this stage to deal with aesthetic values" (82, p. 227). Their program for upper elementary students included information about the artist's life and about cultural and historical setting. They warned teachers setting up a program, however, not to substitute acquisition of knowledge for direct aesthetic response. Several sources for visuals, such as museums and college slide libraries, were offered.

Local school curriculum writers also developed programs during this period. One example was Mohamed's (100) course of study for the Gary, Indiana, schools. Art for upper elementary students was studio oriented, but art appreciation was studied as part of the cultural heritage of civilization.
Manuel Barkan (6) was instrumental in developing the CEMREL (Central Midwestern Regional Educational Laboratory) Aesthetic Awareness program. He noted that even though

. . . current art teaching still encourages the child to work with many art media and within the limits of his own restricted experiences, some teachers are beginning to pay attention to the rich and varied historical traditions of art in order to challenge, feed, and enrich whatever inventive abilities a child may possess.

(5, p. 5)

Barkan completed the first phase of the program in 1970. After Barkan's death, Phase II was headed by Stanley Madeja.

As Madeja and Onuska defined it for CEMREL, "... aesthetic education in its simplest form is learning how to perceive, judge, and value aesthetically what we come to know through our senses" (95, p. 3). The authors emphasized that aesthetics sharpened and intensified skills already being promoted in a general curriculum.

The cognitive skills acquired through exposure to an aesthetic education curriculum build the students' capabilities to organize ideas, understand processes, analyze similarities and differences, and they also improve students' capacities for making informed judgments and decisions.

(95, p. 5)

Basically, the program regarded the various arts disciplines "... as phenomena existing separately but sometimes best explained in terms of their interrelationships" (92, p. 18).

The curriculum was designed in two phases. Phase I provided the guidelines. As Kern explained:
The Guidelines consist of two major sections. The first section, the Handbook, provides a rationale, context, method, and examples necessary for curriculum planning in aesthetic education. The second section, Appendices A, B, C, and D, provides supplementary materials in the form of a thesaurus, curriculum sentences, concepts, and a workbook for curriculum writers.  

(74, p. 188)

Phase II consisted of packaged units of instruction, approximately ten packages per grade level with each package containing about ten hours of instruction. In addition, slides, filmstrips, and puzzles were included. Designed for the generalist teacher, these packages were flexible in that a teacher could choose parts of a package rather than having to use the entire sequence. The levels included: Level I (Grades K-1) Aesthetics in the Physical World; Level II (Grades 1-2) Aesthetics and the Arts Elements; Level III (Grades 2-3) Aesthetics and the Creative Process; Level IV (Grades 3-4) Aesthetics and the Artist; Level V (Grades 4-5) Aesthetics and the Culture; Level VI (Grades 5-6) Aesthetics and the Environment. An example of the units included in Level IV were roles of creator/developer, recreator/performer, implementor, appreciator/audience, and critic/commentator in each of the art forms (drama, music, dance, film, visual arts, and literature). As Madeja noted:

What is proposed, then, is that aesthetic education be defined as an area of study, broadly based at the beginning and introducing the primary student to a wide range of aesthetic phenomena. As a student moves through the program, the disciplines would emerge at appropriate times, depending on their nature and on the needs, experience, and motivation of the students at that
particular level. The program would logically parallel those patterns of instruction now existing in the social sciences, the physical sciences, and in the study of language.

This is not a revolutionary idea but a new way of looking at the dilemma of how to deal with the range of content categorized as aesthetic in a school setting. It provides an opportunity to fit education in the arts into the already crowded school day.

(92, p. 19)

CEMREL has also published many books and reports by various authors on its program. Ingham (61) described aesthetic centers in the classroom. In addition, she stressed a rationale for including aesthetics education in the total school curriculum: arts education can give information for choosing and can heighten vital sensitivities. Based on this, an individual would then make judgments that would affect the quality of his or her life.

Kunkel (77) reported on the results of the CEMREL pilot program involving eighty-eight teachers in eighteen states, Puerto Rico, and Canada. He warned, though, that the results were based only on returned data and that no test results, control group, or classroom observations took place. Kunkel found vast approval of the packages but listed concerns about the lack of self-initiated activities for the students.

Mikel's (99) report on the second year of the CEMREL program concentrated on learning centers for the instruction of teachers on utilization of the CEMREL packages. After the initial training at the eight nationwide centers, the teachers were asked to evaluate the packages on the basis
of ease of use, relationship to other areas in the curricu-
lum, effective teaching by the packets, and interest levels.
The results were favorable to the program.

**Literature in General -- 1960's and 1970's**

Many authors in the field of art education wrote a great
deal during the 1960's and 1970's. Four major theorists of
this period included Harry Broudy, Elliot Eisner, Sidney Lan-
ier, and Al Hurwitz.

Harry Broudy (16) has been outspoken concerning the need
for aesthetics education. Claiming that an aesthetic domain
lies between the cognitive/intellectual domain and the emo-
tional/dispositional domain, he notes that education by aes-
thetics "... enlarges the range of experience through per-
ception of the arts and other aesthetic objects ... also
[providing] a means of expression for those who cannot them-
selves create aesthetic objects for this purpose" (19, p. 17).
The goal is "... enlightened cherishing, which can be
thought of as a love of objects and actions that by certain
norms and standards are worthy of our love. It is a love
that knowledge justifies" (17, p. 6). If cherishing is to
be enlightened, imagination must first be disciplined by
thought. "All reasoning is done with and through concepts,
ideas, notions, and all of these are rooted in an act of imag-
ination which enables us to deal with images and other tokens
of actual things rather than with the things themselves" (17,
p. 11).
Training people to perceive and, consequently, to cherish is the goal of aesthetic education. The need, Broudy claims, is vital. "The existence of a powerful mass media able to shape the values of multitudes possessing political and economic power but untutored taste is as explosive a threat to a national democracy as an unlettered public was thought to be fifty years ago" (15, p. 17). Art education, then, can not only help a child become more sensitive and selective in dealing with the bombardment of images from the "Graphic Revolution" of the mass media, but it can also supply the images that help develop comprehension of basic concepts. Aesthetic education is a "basic" because

... there is an important relation between the three r's and the aesthetic skills, but it is not their correlation with test scores. Nonreaders lack access to the meanings encased in written language -- the imagic store is impoverished and therewith their resources for interpretation and comprehension. [Aesthetic experience] is a primary form of experience on which all cognition, judgment, and action depend. It is the fundamental and distinctive power or image-making by the imagination.

Roughly, art is to feeling what science is to thought. Science restructures ordinary experience by imposing theoretical form on it. Art orders feeling by giving it an expressive form perceptible by the senses -- an image.

(18, pp. 635-636)

Elliot Eisner is another advocate of arts education. In the 1960's, Eisner (35) was professing the belief that the roles for art teachers in the future would be as theorists and as technologists. By 1980, however, Eisner (34) was concentrating on the "national scandal" of neglecting the arts.
Importance of the arts lies in the fact that it "... is through the sensory system that the child learns to abstract sensory concepts from the world. This process of abstraction is at the root of art and forms the basis of human knowing -- concepts are created and meanings are made" (34, p. 12).

Eisner contends that the arts

... can be regarded as a language [and that] the process of education may be regarded as a process that cultivates the child's literacy, that develops his capacity to use a variety of modes of thought -- visual, auditory, kinesthetic. To capitulate to the view that arts education is not the school's responsibility is to remove from the school what schools at present need most: activities and problems that stimulate the imagination, tasks that celebrate ambiguity, that prize sensitivity, and that encourage children to take intellectual risks. (34, pp. 13-14)

Vincent Lanier (80) offers a different view of arts education. As project director under the auspices of the National Art Education Association in the mid-1960's, Lanier edited a collection of articles on media. In his introduction, he suggested that educators did not know how media enhanced learning in the affective domain but that in the future, media would have a major impact on arts education. His final recommendations included expanding the quality and quantity of media for art education. In the early 1970's, Lanier was one of the few authors to criticize the CEMREL program: "I must wonder how appropriate these [CEMREL objectives] are to the pupils of 1972, particularly in depressed urban or rural areas" (78, p. 10). Instead, his candidate
"... for the directing idea in art education programs has been to use art as a means to clarify ways in which the social, economic, and political world works and how it can be improved" (79, p. 128). The author proposed that art education promote visual literacy, creative self-expression, and environmental awareness.

Al Hurwitz (60) focused attention on outstanding programs in art education. He developed his own unique program for the Newton, Massachusetts, schools. The educator asserts that in spite of the fact that art education lacks the support of research and of centers for aiding curriculum writers, "... the number of art educators who have been agitating for the inclusion of art appreciation in the art curriculum has been markedly increasing in the past five years" (59, p. 35). His pilot program for sixth graders involved 120 students divided randomly into four groups, two experimental and two control. Upper and lower socio-economic level students were included. Lessons were given for two hours per week for four weeks, and students were pre- and post-tested. The goals of the program were aimed at "sharpening the students' visual acuity and at strengthening his ability to apply critical processes" (59, p. 35). Training students' perceptions and experiences in criticism were accomplished through use of such resources as Artist Jr. magazine and Newton-produced slide-tape presentations. Each student had his or her own packet of pictures in order to become familiar with the characteristics of styles. As
Hurwitz (59, p. 36) noted: "It is our feeling that perception precedes appreciation and that appreciation can open our eyes to what lies beyond the museum, into natural as well as man-made objects."

Literature 1970 - 1974

Literature of the early 1970's continues to reflect the drive by theorists towards increasing art education in the schools. "The goal of having students learn about art and music, not just express themselves through these media, is on the ascendency in education," according to Inlow (62, p. 219). Frankston (44, p. 19) concurs, pointing out that "... art history and art criticism need to be taught in the schools at all levels in order to provide individuals with the foundation upon which visual literacy and aesthetic sensitivity are based." The National Art Education Association's position is that acquiring knowledge of civilization's visual art heritage is important in the elementary school because "... most children in the elementary art program will grow up to be viewers rather than producers of art" (103, p. 35). They advocate an art history-art studio approach to broaden vision and understanding. For this age level, strategies that the NAEA recommends are active looking and short discussions; the Visual Treasure Hunt game when discussing a painting; a Style Matching game; acting out an interpretation of a painting; or classifying reproductions on the basis of stylistic categories.
A research study during the first half of the 1970's concerns children's sensitivity to painting styles. In Gardner's (49) experiment, first, third, sixth, and ninth graders from middle class neighborhoods were shown two pictures by the same artist. They were then asked to match the style to one of four other pictures. Only ninth graders did better than the other three groups. Gardner suggests that increased problem solving skills at that age level might be responsible. Skills necessary include: "(a) the ability to form an overall impression of a painting; (b) the ability to note details characteristic of an artist; (c) knowledge of artistic tradition; (d) ability to focus on technique" (49, p. 820).

Four guides for curriculum planning published during the early 1970's are surveyed. Kohl's (76) guide for the Oregon schools claims we must expose children to art in order to train a "discriminant eye." The author advises that "... our ways of seeing are greatly affected by artists. Very often, without suspecting it, we are seeing, at second or third hand, ideas or images that truly original artists have been the first to express" (76, p. 1). Kohl provides the teacher with historical and biographical information and an extensive bibliography as a source for pictures.

Fensin (40) prepared a curriculum for grades seven through nine for Miami, Florida, schools. The course, aimed at deepening and extending the human experience, lists historical information and sources of color slides. She
advocates letting small groups of three or four students use audiovisual equipment to make presentations on one artist or art period. Extra readings, field trips, lectures, and multi-media instruction are encouraged.

The approach taken by the Massachusetts Department of Education (97) in its curriculum guide suggests integrating art with other subjects. Studio art is the basic format with little art history at the elementary level. The guide does, however, list films that might be appropriate for this age level.

Similarly, the Riverside (Illinois) Public School's (117) curriculum guide favors studio art. Here, though, art history is considered inappropriate for elementary grades. Instead, masterpieces are shown to the students as motivators for studio activities. Art lessons are often correlated with history and music history.

There are many unique arts education programs in actual use that are described in the literature. One example is Erickson's (37) "You Are There" approach, which has students duplicate techniques or styles of early artists. She feels this strategy awakens students' sensibilities and leads to greater awareness of self and humankind.

Guy Hubbard and Mary Rouse (58) also have developed a program for classroom teachers, but their sequential course follows developmental lines of learning. The authors build a curriculum along six categories: (1) learning to perceive;
(2) learning the language of art; (3) learning about artists and the ways they work; (4) criticizing and judging art; (5) learning to use art tools and materials; (6) building productive artistic abilities. Sixty highly detailed lessons are provided for each year with approximately four lessons (forty minutes each in length) making up a sequence. The lessons are written for children with teacher information overprinted. Because each student needs his or her own set of visuals and printed instructions, a textbook was developed. The program was field tested nationwide in urban and suburban schools in the early 1970's.

Literature 1975 - 1983

The rationale for including art in the total curriculum is a continuing theme in the literature of the late 1970's and early 1980's. As Engel asserts:

The perception of the arts as richly meaningful symbol systems is one of the keys to understanding why the arts are so critical in the school curriculum and why they must be taught like any other basic skill. A symbol system is, put simply, a set of elements such as words, plus a set of relations which hold between them such as a grammar, which map on to or correspond to a field of reference. The arts are languages that contain crucial meanings about the world not available in standard discursive prose, the languages of mathematics or the physical sciences, or any other non-artistic forms of communication.

(36, p. 10)

Howard backs the philosophy that there must be

. . . direct creative and recreative experience. Learning in the arts -- is of unique educational value. Learning about the arts is learning about
the rich world of sensation, emotion, and personal expression. Learning through the arts has the potential to enhance one's general motivation to learn, and to develop one's respect for a disciplined approach to learning.

(57, p. 17)

Other authors concur. Brouch (13) lists an extensive bibliography on art appreciation but states that "... at this time, this investigator knows of no current bibliographic source of texts and references available for the effective teaching of art history at the elementary level" (13, p. 5). She later (14) asserts that she knows of no one who "... has attempted to put art history together reasonably for sixth grade."

The National Art Education Association Commission on Art Education (104) reports that appreciation skills, such as describing and analyzing, must be taught. The Texas Education Agency (135), moreover, advises that art appreciation is a necessary part of the elementary art curriculum.

Jones' (68) rationale for including art history in the curriculum is that children can receive more resources for their own creativity by studying the history of great art. Olson expands that idea by asserting:

The elimination of art history in the elementary grades is unfortunate and extremely shortsighted. If children do not learn how to respond to great works of art, if they are not shown how to apply their reactions to their own work, and if aesthetics is never viewed as an integral part of value formation, then how can we reasonably assume that our students will become concerned adults who, in turn, will continue to nurture appreciation of and support for the arts?

(107, p. 31)
Two experimental studies in art education during the latter half of the 1970's attempted to validate a concept-acquisition model. Stahl (133) tested seventh and eighth graders in Mississippi. Two control groups received normal art instruction while the two experimental groups received supplemental discussions using art concepts. The post-test required critiques of paintings. The experimental groups were found to use concept terms more often and more accurately than students in the control groups.

In a similar study, Stahl and Webster (134) concluded that defining concepts specifically leads to greater understanding. Transfer of that understanding from one medium to another is not automatic, though. "Of particular importance to the art educator is the integration of conceptual thinking into art criticism, art history, and aesthetic appreciation" (134, p. 19).

Several sources provide content information for an art appreciation course. Morman (102) lists activities for students such as having children compare rhythms in music to the sweep of lines in Lascaux's cave art. Johnson's (64, 65, 66) series on studying art history correlated with a studio art activity furnished content, discussion questions, and possible art activities for Chinese Art, Impressionism, and Post-Impressionism. The Corpus Christi (Texas) Independent School District (25) has a guide for high school art teachers that lists each art period and briefly describes the major art styles.
Arts as enrichment is the basis for many school district's elementary art program. Plano (Texas) Independent School District (114) is one such example. Art history specifically is not included in the curriculum. Instead, children are intermittently exposed to fine art in a peripheral manner. There is one lesson for fifth grade devoted to El Greco's *View of Toledo*. St. Vrain Valley Public Schools (119) in Longmont, Colorado, basically uses the same approach. Grades seven through nine are expected to identify artists' styles, describe works of art, and examine the "spirit of the age." Fourth through sixth graders are given some exposure to great art by applying aesthetic value to their own creative efforts and to some works of the masters.

As a summer enrichment program in Palo Alto, California, Alexander (1) explains that upper elementary students are offered a four week course combining art, music, and movement. Sketchbooks and glossary books are kept, and students routinely simulate the style, subject, and media of the masters. In addition, they learn to critique the masters' works and their own activities.

The use of volunteers to bring art appreciation into the classroom has also been attempted in many areas. Van Deventer (138) describes the Picture Lady Program in Stillwater, Oklahoma. The program involves the community in bringing prints and information on the artist into the classroom. Pictures are left for a month for the children to
study. Sills (125) notes that Monmouth County, New York, uses volunteers to share prints in the classroom. Here, though, slides are borrowed from college art libraries. Volunteers prepare information folders that are left with the picture for one month. Sponsored by the PTA,

... the stated purpose of the Art Appreciation Program is to supplement the teaching of art in the elementary grades by introducing youngsters to fine art and encouraging their enjoyment and appreciation of it. By extending their world-view through selected paintings it is hoped that the children will become more open and receptive to their own environment. (125, p. 47)

Two instructors have developed art appreciation programs for primary grades. Brauer (11) devised a course for first through fourth graders in her private New York school. Four week units have been developed on either a style, subject, or media. Slides are shown the first three weeks in thirty minute, once a week lessons. Students review in the fourth week. Units on reliefs, sculpture, and Impressionism have been completed. Grisham (51) developed an "Art Appreciation Box" for her third graders. Pictures from magazines were mounted with discussions on the back. Simple creative art projects to accompany the art picture were also listed, and a supply box with necessary materials was placed nearby. Then, the box could be used either as a teacher-directed activity or independently by the students.

Programs have also been developed in art appreciation encompassing all grades, kindergarten through twelfth. As
Esterow (38) explains, Mineola, Long Island's arts-in-education program integrated the basics with the arts. Elementary students receive up to four hours per week in the arts. Varied activities include museum visits, developing a multi-media show on nutrition, or having a children's author and illustrator give a "chalk talk." In evaluating the program, it was found that reading scores had not increased, but that "... there is a significant change in students' performance, in their motivation and attitude towards learning generally and in the process skills -- perceiving, knowing, creating, doing, valuing, and evaluating" (38, p. 74).

Howard (57) and Hatfield (54) cite Project ARTS (Arts Resource Teams in the Schools) in Montgomery County, Maryland, as being exemplary. Howard notes that the program . . . promotes an understanding and appreciation of individual arts as forms of human expression, how these various art forms relate to each other, and how they can be infused into the total curriculum. Designed to provide assistance, training and support for classroom teachers, the project staff is made up of twelve artist/teachers divided into three teams, each with a music, drama, visual arts, and drama/movement specialist. (57, p. 18)

These teams work with teachers at inservice meetings and with students in the classrooms.

Descriptions of art programs designed specifically for elementary grades are prevalent in recent literature. Designed for grades five through eight, the Irvington (New Jersey) Public Schools' (63) "Art is Life" curriculum
combines art appreciation with studio art. Perceiving, criticizing, studio performance, and art appreciation are major goals of the program. Objectives include visual discrimination and cultural understandings in order to improve personal and community living.

South Carolina’s Project Interface, as explained by Hatfield (54), uses released planning time to capitalize on existing art teachers in the school and in the district. During this staff development, classroom teachers are given time with arts specialists to plan tasks that incorporate arts processes into the basic courses.

Fisher (42) developed an aesthetics education program for Lexington, Massachusetts, elementary schools. The curriculum is designed for use by classroom teachers and is divided into two parts — Humanities Seminars and Artistic Involvements. The Seminars are three hours long and are given four times per year. Focuses include "Beauty," "Art," and "Light," and they are generally large group lectures by outside resource people. Afterwards, small group discussions take place before the student, back in the classroom, works on the topic at a learning station. Some activities include "Art Bingo;" "Make a booklet on 'Art is...';" "Look at a slide of a realistic painting and turn it into an abstract design on paper." The activities are varied and developed enough so that students will continue reinforcing the current seminar concepts until the next seminar is presented.
The National Art Education Association Commission on Art Education (104) provides a rationale and strategies to aid in art appreciation lessons for sixth graders. The commission feels that this type of approach will give students a good background of aesthetic criteria and art vocabulary. The lessons given guide students through a role playing process. The students are artists considering what goes into a piece of art; critics; art historians discovering cultural influences; and aestheticititititizations developing their own theories of art. Suggestions for the teacher are given with extensive behavioral objectives. For example, as an art critic, the child would be asked to compare similarities and differences in media, subject matter, and style of one abstract and one realistic painting. As an aestheticitician, the student might bring in an illustrated story and explain how the pictures interpret the mood or tell the story.

Summary

The literature on arts education in general is extensive. Until 1960, research studies were done on art appreciation for children in the areas of subject preferences and children's reactions to paintings. Lowenfeld's theories on creative development in the 1950's changed the focus of many art curriculums from art appreciation to studio art. During the 1960's there was a small group citing the need to teach aesthetics, and several authors developed theoretical
or actual programs. The 1960's and 1970's witnessed the development of an aesthetic awareness curriculum by CEMREL to be used nationwide. In the first half of the 1970's one finds literature on research and a continued request for including arts programs in the general curriculum. Authors provided rationales and explained theoretical and actual art programs. From 1975 to the present, one finds a large body of information on actual programs in existence nationwide. These programs range from using arts as enrichment to curriculums designed for various levels of the kindergarten through twelfth grade range.

Media

The review of literature on media examines the following topics: Media and Art; Effects of Media (including visual literacy and individualization through the use of media); Message Design and Development of Materials; and Formative Evaluation of Media.

Media and Art

Garbett (48) and Chipley and Chipley (24) note that media and the arts need to work together. Garbett suggests that art and media are both forms of communication. For example, she compares media's sender to the arts' author/sculptor; the message is compared to the theme; and the receiver is compared to the reader/viewer. The Chipleys offer a proposal to build better "... media based programs of art education" (24, p. 50).
Many media products are already available for the art history educator. The NICEM (National Information Center for Educational Materials) Indexes (105, 106) on currently produced slides and filmstrips identify a multitude of single sets and series. Generally, the majority are targeted for junior high school level and above. This means that there are shots with a great deal of visual information that may be too sophisticated for the elementary school child. Moreover, the picture selection can be inappropriate for lower grades.

Surveying the NICEM volume on slides (105), one finds many single concept sets that are not rated as to age level, such as the sets produced by the American Library Color Slide Company. Some examples include Ancient Art of Egypt (thirty-two slides, color), Romanticism and Realism (thirty-two slides, color), or Neoclassicism in French Painting (eighteen slides, color). To obtain a collection of slides covering the history of art, one would need to acquire a large number of sets.

There are also several slide series that have been produced. Janson's History of Art has 400 color slides and a script but is made for high school students. The vocabulary is beyond the elementary level, and picture selection is sophisticated. For example, when examining Leonardo da Vinci, nude studies for paintings are explored. A more appropriate selection for elementary school would be Mona Lisa. College
Art Association's History of Art Series lists nine sets, each with 250 black and white slides. Prehistoric through Medieval Art are contained in the first three sets, and the Renaissance through Modern eras are contained in the last six sets. However, beginning with the Renaissance, each set takes the art of a geographic region and covers several centuries. For example, Set Seven discusses Italian Art in the sixteenth through eighteenth centuries, English Art in the eighteenth century, Spanish Art in the seventeenth century, and Dutch, Belgian and German Art in the seventeenth and eighteenth centuries.

Universal Color Slide Company has produced Art Through the Ages. Unit One, consisting of 400 color slides, covers Paleolithic Art through the seventeenth century. Unit Two consists of 400 color slides and investigates the eighteenth century through Modern Art. The level of sophistication is complex in terms of artists represented. For example, minor artists such as della Robbia are examined.

Most 35mm filmstrip sets surveyed in the NICEM volumes (106) are also geared toward the junior high level and above. The captions provide a reading level beyond that of many elementary students. Examples include Creative Learning's History of Western Art, Educational Production's Art Through the Ages 1958 series, or the Pageant of Art in History series. The Western Art Series, produced by Jam Handy School Services, is listed for use in the intermediate grades through high
school. The filmstrips come with record or cassette. Many art periods are grouped together in this series. For example, one filmstrip, *From the Renaissance to the Modern Age*, covers five post-Renaissance periods.

The *Book of Art* series is produced for intermediate grades through college level. The 600 color frames come with a script, but this is geared to the more sophisticated viewer. The individual sets investigate art geographically rather than historically, an example being the set that discusses French art from 1350-1850.

*Hands of a Genius*, by Universal Educational and Visual Arts, contains sound filmstrips with audio tape, produced for intermediate through high school students. The scope is limited in that the Renaissance through Post-Impressionism are the only areas covered.

**Effects of Media**

Most authors agree that media impact society. Tickton believes that media, or instructional technology, "... can make education more productive, individual, and powerful, make learning more immediate, give instruction a more scientific base, and make access to education more equal" (136, p. 10). Moldstad notes that twenty years of research have produced significant evidence to justify the following claims when instructional technology is carefully selected and used:

1. Significantly greater learning often results when media are integrated into the traditional instructional program.
2. Equal amounts of learning are often
accomplished in significantly less time using instructional technology.

3. Multimedia instructional programs based upon a "systems approach" frequently facilitate student learning more effectively than traditional instruction.

4. Multimedia and/or audiotutorial instructional programs are usually preferred by students when compared with traditional instruction.

(101, p. 390)

Briggs (12) stresses the need for media in instruction. Media can, according to the author, "... provide stimuli, direct attention, set goals, prompt, evaluate, guide thinking, evoke responses, or test for transfer" (12, p. 11).

McLuhan (90) espouses the belief that media are an extension of man. Not only can they lengthen his reach into society, but they also can lengthen society's reach into man. To counteract this, McLuhan feels that individuals must know about media. McLuhan and Fiore (91), introducing the phrase "the medium is the message," insist that the message is the impact of media on society.

Campeau (22) reviews comparative effectiveness studies of media. Her conclusions are that filmstrips and slides are as effective as films because of individual pacing and student participation. However, films have the advantage over slides and filmstrips in portraying interacting events.

Recently, many authors have expressed the belief that visual literacy is an important component of basic education. Pett (113) explains visual literacy as "... a term coined to describe a variety of theoretical constructs and practical considerations relating to communicating with visual
signs" (113, p. 8). Its importance lies in the fact that ". . . developing visual skills can assist in the development of important conceptual, languaging, creative and analytic skills relating to relevance, editing, sequence, and unity" (113, p. 14). Pett notes:

The theoretical constructs that influence visual communication primarily fall into two closely interrelated categories. (1) Those that relate to the individuals involved in the communication process... such things as: Visual perception; Split brain functions; Mental imagery; Cognitive styles; (2) Those that relate to the visual signs... such things as Sign systems; Visual languaging; Image analysis. These examples do not constitute all the theoretical influences of visual communications but they do represent those most frequently referred to by persons concerned with visual literacy. (113, p. 8)

Pett describes the varied studies which often show that pictures help us learn and remember in the section on mental imagery.

In discussing split brain functions, Pett explains that the left side of the brain deals with linear, logical, verbal operations, the kind associated with reading and math. The right side handles intuitive, holistic, non-verbal operations. He argues that "... developing skills which are processed by the right hemisphere of the brain could result in superior performance in areas such as reading, memory, and creative thinking" (113, p. 10).

Grady (50) believes that students need media for a balanced brain. He suggests utilizing more media and letting students work with media for creative projects. Dixon (31)
explores the research on split brain functions, and she notes that a number of cognitive styles are related to hemisphere laterality.

Pett (113) also contends that cognitive style is one component of visual literacy. He lists three: field dependence and independence; visual and haptic; and impulsivity and reflectivity.

As defined by Ehrhardt and Corvey (33, p. 3), cognitive style "... addresses an individual's preference in one area or lack of it in that area, and encourages comparison of the individual with himself or herself in one or more areas -- not with a norm or group." The authors see the instructor and student jointly choosing effective materials thus making each accountable for learning.

Dimsdale (30) suggests utilizing cognitive style mapping in order to provide alternative materials to students. Cognitive style mapping is a systematic approach for determining an optimal approach to learning for any given individual. Areas to consider include how an individual receives basic information (language by hearing or by sight); controls the environment (input via the five senses); and makes decisions (reasons by using rules, differences, or deduction).

Oxford and Moore (109) stress that teachers must be visually literate before they can help students become visually literate. Their inservice program includes such
topics as perceptual effects, visual acuity, nonverbal communication, and visual persuasion.

Seels lists four arguments for mandating visual literacy:

1. Visualization is the only way most people can comprehend the complex relationships that are characteristic of a technological society.
2. Our existence is filled with visual experiences that require sophisticated interpretation.
3. The qualities required for communicating with ourselves and others develop from visual experiences.
4. The connections between imagination and intellect are the result of visual processing.

Cognitive differences are important to media designers interested in individualization through the use of media. Gagné (46) approaches learners as having to master a hierarchical system of learning tasks. Ausubel (4) believes that the learner's cognitive structure provides an anchor onto which new information can be meaningfully subsumed. Heidt (55) mentions the learning theories of Piaget and Guilford's IQ category in describing cognitive differences.

Individualization through the use of media is thoroughly explored by Heidt (55). He notes that media are used for visualization of abstract concepts, enrichment, and as an extension of experience. However, "... the use of media in itself has not resulted in a more individualized instruction nor in any other effective change" (55, p. 370). Heidt asks:

What, then, can media contribute to instruction which is more appropriately and effectively
adjusted to the needs and requirements of the individual learner? There are two ways, in particular, under which media seem to be linked to individualized instruction. The first is the transfer of teaching functions from an individual to a medium. A direct consequence of that transfer is the possibility of reproducing and multiplying these teaching functions. The second aspect under which media can make an important contribution to individualized instruction also refers to a qualitative improvement. Media expand the traditional scope of presentation techniques of instructional information. By means of different design options they can be adjusted to different individual abilities, cognitive styles and other variables.

(55, p. 372)

Believing that it is impossible to develop a media taxonomy or to compare various media for the purpose of individualization, Heidt explores individual differences in learning theory and ATI (Aptitude-Treatment Interaction).

Some authors explain the ATI approach in order to link individual learner traits to media decisions. For example, Salomon (121) observed that different learners respond to the same information in different ways. If media can present a piece of information in such a way that the mental process is supplanted, or simulated, then the learner will internalize the process observed by imitation. Three models are presented for instruction: the remedial model (treatments aid development of deficient capabilities of the learner); the compensatory model (treatment skirts the learner's deficiencies with alternative approaches); and the preferential model (treatment works on the learner's strengths).
Cronbach and Snow (26) authored a definitive book on ATI. Of particular interest is aptitude-treatment correction whereby a treatment that is perhaps practical but vulnerable to individual differences in learner aptitude could be adapted by finding an alternative strategy.

Message Design and Development of Materials

General prescriptions for message design are important components of product development. Fleming and Levie (43) provide a comprehensive discussion of research on general message design. The authors cover a large number of topics, presenting design rules and discussion. Under the topic of perceptual elements, for example, Fleming and Levie note that color does not give a learning advantage over black and white. Travers (137) agrees, but he observes that learners prefer color versions. Dwyer, on the other hand, believes that ". . . there is an increasing amount of empirical evidence to support the use of color in visual illustrations as evidenced by improved achievement of specific educational objectives" (32, p. 150). Sinofsky and Knirk (126) concur, asserting that color can affect attention span. For example, red lights cause people to overestimate time whereas green or blue lights cause people to underestimate time.

Memory and message design are also considered by Fleming and Levie. Witt (139), utilizing many of their findings, suggests the following guidelines as aids in organizing
information that viewers could understand and remember:

Consider the limitations of the viewer and their viewing situation.
Help the viewer select a useful learning strategy.
Help the viewer understand the message by presenting it as an integrated, organized set of ideas.
Suggest useful encoding/retrieval cues for each topic.
Relate new facts and ideas to familiar ones.
Don't overload the viewer with unnecessary facts.
Ask questions that highlight critical facts and ideas, then answer those questions.
Close with a summary of the major ideas, presented as an organized, integrated overview.

(139, p. 37)

In addition, he offers specifications for making information more memorable. "Use visuals and concrete, vivid language whenever possible, then bind your narration tightly to the accompanying pictures" (139, p. 38). The structure and language should be simple. Moreover, the message can be made interesting through the use of examples and dramatizations involving the viewers. Major points need to be repeated visually and aurally more than once.

Fleming and Levie discuss findings on unit size, pacing, and spacing. In this area, Allan and Richardson (2) report on studies concerning group-pacing versus self-pacing at Dundee College of Education in Scotland. The authors found that group-pacing was as effective as self-pacing. Gallegos (47) studied high and low ability students in terms of self-pacing and fast and slow modes of group pacing. Low ability students performed better on slow modes as opposed to self-pacing. High ability students achieved more than low
ability students on fast-paced and self-paced materials, but no differences were found between the ability groups on slow-paced treatments.

Fleming and Levie argue that advance organizers facilitate meaningful learning. An advance organizer is introductory material such as a preview or an outline of topics to be covered. Mayer's studies point out that "... a good advance organizer provides an organized conceptual framework that is meaningful to the learner, and that allows the learner to relate concepts in the instructional material to elements of the framework" (98, p. 162). Advance organizers are most effective when the material is not well integrated or not familiar, and they "... mainly aid students who lack adequate existing knowledge" (98, p. 155). Grotelueschen and Sjogren (52) conclude from their experiment on organizers that introductory materials facilitate performance of both high and low ability learners.

Practice in varied contexts, according to Fleming and Levie, aids consolidation of learning. Rita Johnson's (67) work on the combined effects of prompts, relevant practice, and feedback finds that the learner needs to be told on what to focus. Moreover, the student should be given an opportunity to practice that behavior and then be given corrective feedback.

Allen (3) feels that questions related to the material increase learning in all mental ability groups. Dayton and
Schwier (28) studied the effect of postquestions in slide-tape presentations. They discovered that

... inserted postquestions can increase the learning of question-relevant information without impairing learning efficiency. The effects of grouped postquestions are unclear, but apparently such questions can impair learning efficiency. The learning of information not directly related to the postquestions was not enhanced by inserted or grouped postquestions and the efficiency of that learning was significantly reduced.

(28, p. 103)

Under the topic of concepts, Fleming and Levie discuss selecting examples and non-examples; prerequisites and instructions; presentation and sequencing of examples; and problem solving. In the final section of their book, the authors consider attitude; message content and structure; and the channel and receiver. Severin (124) studied single channel versus multimedia communication and concluded that multimedia presentations are not necessarily more effective than the single channel format. Testing 200 seventh graders, Severin found audio with related pictures to be better than audio with print. Audio with print was not, however, significantly better than print alone, although it was significantly better than audio alone.

Allen's (3) general message design prescriptions are related specifically to the intellectual abilities of the learner. "Low mental ability" viewers are those "... deficient in abstract reasoning and in attentional, perceptual coding, perceptual processing, and analytical skills" (3, p. 141). Students with "high mental abilities" possess
those skills. Based on that definition, Allen developed a series of generalizations about media design for low, middle, and high mental ability individuals. As an example, he noted that

... individuals of low mental ability appear to benefit from instructional procedures that:

1. Supplant or replace covert mental operations which the learner would normally need to activate on his own, possibly through the use of motion.
2. Arouse, motivate, or prepare the learner for the instructional material that is to follow.
3. Organize, outline, or structure the content to be learned.
4. Direct attention to, point out, or emphasize content of the stimulus that the learner needs to attend to.
5. Elicit an active response from the learner to the content of the communication.
6. Feed back to the learner knowledge of the correctness of responses he may have made.
7. Raise questions relative to the content of the communication.
8. Present the content to be learned at a pace slow enough for mental processing of the transmitted information.

(3, p. 158)

Generalizations about middle mental ability viewers include the same items as listed for low ability individuals, but Allen includes the provision of allowing necessary time for mental processing of the transmitted information.

Allen's prescriptions for design techniques, then, include the following for low mental ability students:

1. Preparatory or motivational procedures that establish a set to learn the material to follow (at the beginning and at points within the communication), such as advance organizers; verbal or pictorial overviews, outlines or summaries; verbal direction to "attend to..." points to look for, questions to answer; activities to engage in.
2. Organizational outlines or internal structuring of the content, such as printed or spoken headings; enumeration of points as presented; logical ordering of the content.

3. Attention-directing devices that point out, emphasize, or direct attention to relevant cues in the communication, such as verbal directions to "look at" contiguous with visuals; visual pointers (arrows); underlining or italicizing of printed material; color for emphasis; progressive disclosure; animated visuals that reduce detail; close-ups, large type; repetition of elements to be perceived.

4. Procedures that elicit active participation and response from the learner to the content of the communication, such as overt "speaking-out" to built-in requests for response; covert "thinking" responses to built-in requests for response; insertion of questions.

5. Provision for correcting or confirming feedback to responses elicited from learners, such as printed or spoken answers; pictorial depiction of answers; correctness of response confirmed.

6. A slow rate of development or pace of presentation of the content to be learned, such as narration at a moderate speed; scenes of sufficient length to permit adequate time for mental processing.

7. Formats that provide for supplantation or replacement of the mental processing operations, normally done by the learners, by means of imitation or modelling, such as techniques that "zoom" in and out on details; progressive graphic development of a process in the order of occurrence.

Hoban and Van Ormer (56) investigated the instructional value of films. Their findings suggest using such general design techniques as keeping the pacing slow enough for the learner to understand the material. Moreover, an introduction and summary should be provided, with important concepts repeated. The authors found that color, music, and special effects did not increase learning.
In an examination of the literature on actual development of materials, researchers can find many excellent recommendations. Bellard (7) questions why one would develop materials at the school level. He concludes that individual teachers have unique experiences that require local school production. Moreover, unique curriculums might require a unique school level approach. Kemp (72) lists ideas for producing such projects at the school level. Gabis-Levine (45) suggests making visuals that provide structure for complex content.

Hale (53) offers five techniques that are multi-sensory. Examples of graphics and materials that appeal visually and kinesthetically are shown. Metaphors are given as an illustration of how the structure of language can be used to circumvent resistance. The author notes, though, that "... unusual language structure can force the reader/listener to exert greater energy searching for meaning and relevance" (53, p. 38). Slides can be utilized as a method of increasing the learner's spatial perception while videotapes can increase visual perception of sequential changes.

There are three general sources that are invaluable to the media designer. Brown, Lewis, and Harcleroad (20) provide a thorough examination of all forms of audiovisual materials including graphics, photography, films, television, games, and print. In addition, they explore media as a systematic approach to teaching and individualized learning.
They offer guidelines in choosing and in using media. Finally, their reference section contains useful information for teachers on the following topics: (a) operating audiovisual equipment; (b) duplicating processes; (c) photographic equipment and techniques; (d) physical facilities; and (e) a classified directory of sources.

Kemp's (73) book is helpful for media designers and producers. He provides past research on learning theory, on instructional and media design, and on perception and communication. He offers a step-by-step approach to the design and production of materials, with sections devoted to photography, graphics, and recording sound. Production advice is also given for varied media, including slide series, filmstrips, films, and videotape recordings.

Bullough (21) provides another general view of creating materials. He examines the basis for the design and selection of media. He also presents chapters on such topics as illustration, lettering, audio, photography, and television. Bullough gives research findings on design principles that can be applied directly to the design of teaching materials. The techniques he discusses are attracting and maintaining attention; learning about relationships; learning to discriminate; simplicity and complexity; using cues; and embellishments.

Pett (112) gives a succinct account of the areas a media designer should consider in order to make an effective
presentation. Audience characteristics, objectives, and relevant content are examined. In reference to message design, Pett suggests that the designer "... (1) maintain visual simplicity and verbal clarity; (2) consider visual-verbal relationships; (3) organize elements for visual-verbal flow" (112, p. 12). The presentation itself is explored with regard to acoustics, projection, the meeting room, and evaluation.

**Instructional or product development encompasses media and materials design.** Popham (115) lists developmental principles to consider when preparing instructional products. Relevant practice for the learner with knowledge of results needs to be provided. Inclusion of irrelevancies are to be avoided, and the material must be interesting.

Popham and Baker (116) devised a product development plan. Formulation (what is to be accomplished), instructional specifications (entry behaviors, objectives), and prototype item tryout are the first phases of their plan. In actual product development, the authors suggest that the product be kept short and flexible, contain practice during the instructional sequence, and provide feedback. The material is then tested and revised, and the operations are finally analyzed.

Schutz's (122) elaboration of instructional development centers on instructional design (including instructional specifications) and testing of the prototype. Production
and quality verification through trial-revision cycles are then explained. Schutz also explores using the latest instructional technology.

Product development at the Southwest Regional Laboratory for Educational Research and Development is discussed by Locatis and Smith (84). They describe regulations in the areas of formulation, design, verification, and installation. For example, in terms of formulating a product, the authors suggest audience analysis and behaviorally stated objectives. Design rules should include minimizing cultural biases and developing alternative teaching procedures.

Penta (110) discusses a systems model for instructional materials development used at the University of Illinois Medical Center. In general, it is very similar to Kemp's (73) production process. The difference lies in developing not only introductory material but also preparatory and follow-up activities.

**Formative Evaluation of Media**

According to Bloom, Hastings, and Madaus (8), formative evaluation collects information in order to aid in the revision of the material before it is completed. Kandaswamy (69) provides a concise synthesis of models and methods of evaluation. The author defines both formative (improvement of materials) and summative (adoption of materials) evaluation in terms of focus of decisions. The process of data collection is either goal-free or goal-based. Measuring
instruments include input variables (entry tests, observation); process measures (pacing, scheduling, role of teacher); and outcome measures (intrinsic, transfer, and payoff outcomes). The suggested sequence of evaluation starts with self-evaluation by the developer and continues through professional jurying to individual, group, field, and extended testing.

Early studies in formative evaluation of media are varied. Carpenter and his associates (23) utilized the Film Analyzer to formatively evaluate films in production. The Analyzer recorded audience responses when a button was touched. This allowed continual data collection from many viewers. Carpenter and his colleagues believed that this device could be used to evaluate scripts, storyboards, and even film structure.

Zuckerman (140) experimented with validating the storyboard as a predictor of film effects. His storyboard was a 16mm black and white filmstrip with narration, as opposed to the completed film with color and sound. In this particular study, Zuckerman concluded that the prototype could help identify strengths and weaknesses of the completed film.

Rose and Van Horn advocated storyboard testing since "... the producer obtains 'feedback' from his audience at a time when corrections and clarifications are not prohibitively expensive" (118, p. 25). To measure this feedback, observation, questionnaires, and interviews were utilized.
Evans (39) and Knapper (75) provide general information on formative evaluation of media. In order to make evaluation easier, Evans describes the design elements that could occur in media. Advance organizers, repetition, cues, participation, and feedback are mentioned.

Knapper notes that the criterion for educational evaluation is evidence of learning or of skill performance. He explains the different types and levels according to Bloom's taxonomy, and he cautions that attitude and attitude changes need to be considered. In addition, the author suggests that cost effectiveness is an important evaluation component in terms of learning time, time taken to prepare the material, and the functional effectiveness of the instructional system.

Several authors have developed instructional material assessment tools. Although generally used as a summative evaluation form, media designers can utilize these checklists formatively. Orderinde's (108) topics to be judged include goals and objective-oriented materials, material objectivity, level of sophistication, validation, and design materials. Lasher (83) also has devised an evaluation form for non-print materials, parts of which could be used for formative evaluation. The author asks if the material in question is appropriate to the purpose in terms of objectives. Moreover, its appropriateness to the user in terms of the user's age, ethnicity, intelligence, and past
experiences are to be considered. Content should be examined for accuracy, bias, scope, and vocabulary. Techniques to be screened include editing, sound, field of view (types of shots, angle, composition), and illustrations.

Perelle (111), Sive (127), and Fetter (41) also delineate media evaluation instruments. They cover many of the same areas as the above-mentioned authors: accurate and complete content, technical quality, and appropriateness.

Summary

Literature on media focused on several topics. Media and art were examined in terms of how the two were related and in terms of media products in art appreciation already on the market. The effects of media were noted, especially the importance of visual literacy and individualization through the use of media. Individual differences were discussed with respect to learning theory, cognitive style, split-brain research, and aptitude-treatment interaction.

Message design, materials development, and formative evaluation of media were investigated. The Fleming and Levie (46) book provided a basis for discussion on message design, with comments from other authors on specific issues. Materials development was reviewed generally and specifically, and instructional or product development was explored. Formative evaluation was analyzed through general references, experiments in the area, and evaluation forms.
CHAPTER BIBLIOGRAPHY


18. __________, "How Basic is Aesthetic Education? Or is 'Rt the Fourth R?'," Language Arts, 54 (September, 1977), 631-637.


34. Eisner, Elliot W., "The Arts as a Way of Knowing," Principal, 60 (September, 1980), 11-14.

36. Engel, Martin, "Getting Serious About Arts Education," Principal, 60 (September, 1980), 7-10.


54. Hatfield, Thomas A., "Things You Need to Know About Developing an Arts Program," Principal, 60 (September, 1980), 24-27.

55. Heidt, Erhard U., "Differences Between Media and Differences Between Learners: Can We Relate Them?" Instructional Science, 9 (December, 1980), 365-391.


57. Howard, Margaret B., "Arts Education -- Have We Come to Our Senses?" Principal, 60 (September, 1980), 15-19.


70. Karwoski, Theodore, and Erwin Christensen, "Test for Art Appreciation," *Journal of Educational Psychology*, 17 (March, 1926), 187-194.


105. National Information Center for Educational Media, NICEM Index to Educational Slides, Los Angeles, University of California, 1980.

106. NICEM Index to 35mm Educational Filmstrips, Los Angeles, University of California, 1977.


CHAPTER III

PROCEDURES OF THE STUDY

Introduction

The research and development of a media product in art history for sixth graders are the focuses of this study. By consolidating the Research and Development model of the Far West Lab for Educational Research and Development, as outlined by Borg and Gall (2), and Kemp's (4) model for media production, an outline for the study was established. These models and the outline for study have been delineated in Chapter I. Research and information collecting; planning; and development of the preliminary form of the product are examined in Chapter III.

Research and Information Collecting

The topic of research and information collecting consists of four areas: review of the literature, idea (definition of purposes and topic), audience analysis, and product selection and criteria. The review of literature was examined in Chapter II, and the idea was developed in Chapter I.

When examining the audience, Pett (5) listed four characteristics that need recognition: educational, socioeconomic, psychological, and physical. Kemp (4) suggested
considering age, educational level, individual differences, and knowledge of the subject and attitude toward it.

The targeted audience for this study was sixth graders from an urban setting ranging in age from eleven to thirteen. They were drawn from either specialized art classes or from self-contained classes during a period set aside for art. Students generally had little knowledge about Egyptian art, but they were motivated to learn about the culture. The socio-economic status range was typically lower to low-middle income levels.

Fifth graders in the 1982-1983 school year were chosen to be examined educationally because they were the sixth graders field testing this product in the 1983-1984 school year. The average percentile score for fifth graders on the Iowa Test of Basic Skills was "... 40.05 percentile in reading, 58.72 percentile in language, and 52.86 percentile in math" (3, p. 41A). These figures were obtained by averaging scores from all the district's elementary schools in the three content areas. In addition, many specialized art classes contained mainstreamed special education students. This affected the level at which media were selected. The majority of students possessed learning characteristics that Allen described as typical of "low mental ability" viewers. According to Allen, the term "low mental ability" viewer "... is obviously a catch-all for a large group of traits. ... There do appear to be certain abilities of
an intellectual nature that are being measured by the most widely employed mental ability tests" (1, p. 141). He denoted that these tests were used in aptitude-treatment interaction studies. As representative of this general intellectual ability, Allen defines a low mental ability viewer as "... deficient in abstract reasoning and in attentional, perceptual coding, perceptual processing, and analytical skills" (1, p. 141).

Product selection examined which medium was utilized. The choices of media were extensive: photographic print series, overhead transparencies, motion pictures (either 16mm or Super 8mm), videotape recordings, filmstrips, and slide series. A print series was rejected because it was not adaptable to large group use. Overhead transparencies required teacher lecture. Motion was not required in this instance, thus Super 8mm, 16mm films, and videotape were rejected. Filmstrips were a viable alternative, but this medium was limited in that the sequence was permanent and could not be revised or rearranged. A slide series with audio tape was considered to be the best choice for the project because it could be employed for large or small group presentations; schools had the necessary equipment for utilization; and the taped narration reduced the need for students to read captions. As Kemp noted, slides "... result in colorful, realistic reproductions; are easily revised and updated; and are easily handled, sorted, and rearranged" (4, p. 44).
Planning

Planning involved six steps. The first step defined the skills needed based on the audience analysis. Students were required to have some reading ability and the ability to listen. Since they lacked the skills which Allen (1) labelled as characteristic of low mental ability viewers, the product needed to contain his prescriptions for message design:

1. Preparatory or motivational procedures that establish a set to learn the material to follow (at the beginning and at points within the communication), such as: advance organizers...; verbal or pictorial overviews, outlines, or summaries; verbal direction to "attend to...;" points to look for, questions to answer...; activities to engage in...

2. Organizational outlines or internal structuring of the content, such as: printed or spoken headings...; enumeration of points as presented; logical ordering... of the content.

3. Attention-directing devices that point out, emphasize, or direct attention to relevant cues in the communication, such as: verbal directions to "look at"... contiguous with visuals; visual pointers (arrows)...; underlining or italicizing of printed material; color for emphasis; progressive disclosure...; animated visuals that reduce detail...; close-ups, large type; repetition of elements to be perceived.

4. Procedures that elicit active participation and response from the learner to the content of the communication, such as: overt "speaking out" to built-in requests for response...; covert "thinking" responses to built-in requests for response...; insertion of questions...

5. Provision for correcting or confirming feedback to responses elicited from learners, such as: printed or spoken answers; pictorial depiction of answers; correctness of response confirmed...
6. A slow rate of development or pace of presentation of the content to be learned, such as: narration . . . at a moderate speed . . . ; scenes of sufficient length to permit adequate time for mental processing.

7. Formats that provide for supplantation or replacement of the mental processing operations, normally done by the learners, by means of imitation or modelling, such as: techniques that "zoom" in and out on details . . . ; progressive graphic development of a process in the order of occurrence . . . .

(1, pp. 161-163)

The second stage of planning determined a course sequence based on the product selection. The eventual completed series, of which this study focused on one, will contain thirteen slide-tape sets on the history of art. Included would be: Cave Art, Egyptian Art, Greek Art, Roman Art, Medieval Art, Gothic Art, Renaissance Art, Baroque Art, Rococo Art, Art of the Eighteenth Century, Impressionism, Post-Impressionism, and Modern Art.

Specifications of the project and of the product comprised the third phase of planning. Specifications that Kemp suggested noting were: "type of audiovisual material; material and size . . . ; length. . . ; sound. . . ; facilities and equipment. . . ; special techniques required. . . ; special assistance required. . . ; completion date. . . ; and budget estimate. . . " (4, pp. 54-55). The type of material consisted of 2x2 color slides with cassette tape recording. The material and size used were 35mm Kodak Ektachrome 50 film. The length of the presentation was approximately thirty slides and a recording of approximately seven to ten minutes,
the sound being provided by a tape-recorded narration. Facilities used were the Nikon F-3 single lens reflex camera; 3200° K. tungsten lights; copy stand; and recording areas at North Texas State University's Center for Instructional Services. Special techniques that were required were copy work from books and graphic work for written portions of some slides, such as a map or time line. Special assistance was required for shooting the three-dimensional shots and for recording the audio tape. Completion date was planned for September, 1983, and the budget estimate was set at $200.

The last section of the planning phase required three steps. Firstly, objectives needed to be written. Six or seven behaviorally stated objectives were prepared for each topic: Cave Art, Egyptian Art, and Greek Art. Appendix A presents these objectives. Secondly, content outlines were devised in order to provide a framework for the development of the storyboards. The content outlines for the art history topics are found in Appendix B. Thirdly, the content outlines were submitted to the panel of three experts for judging, as discussed in Chapter I. The panel consisted of one art historian, one art educator, and one media specialist. Jurying by the experts was based on a questionnaire (Appendix C), the results of which are shown in Table I.
Table I indicates that the entire panel of experts approved of the content outlines as they were presented. Since no one on the panel disagreed or was unsure of any aspect of the content outlines, this researcher continued with the plan of study.
Development of the Preliminary Form of the Product

The preliminary form of the product involved six steps, followed by a formative evaluation of the product by the panel of experts. A treatment was written for Cave Art, Egyptian Art, and Greek Art (see Appendix D). The treatment evolved from the content outlines and presented, in written narrative form, how the generalizations in the outline were visually developed. The proposal was then viewed in an organized sequential format. In addition, writing a treatment aided determination of the type of slides that would be needed.

Storyboards and scripts for Cave Art, Egyptian Art, and Greek Art were then developed. The storyboards consisted of simple sketches of the slide needed and a reference note as to where the picture could be found. Public, private, and college libraries were used to gather books and magazines that had excellent reproductions of art. When no reference was noted, a graphic needed to be produced. Graphics were made utilizing varied materials. For example, the elf was an artist's mannequin with a doll's face attached, and his clothing was constructed of felt. The snail was created by sewing jute twine into strips of quilting fabric, similar to the method of forming upholstery piping. Then the strips were wound into a coiled shape, and the head was attached. Paper graphics, such as the map and time line, were made with dry transfer lettering on colorful, untextured paper.
The original storyboard consisted of 3x5 cards with an area blocked off for the sketch. Figure 1 is an example of a storyboard card.

---

Slide Number II

Notes:
Long shot in the book
See Barbini p. 24
Kodalith-- "pyramid"
"sun-dried brick"

Narration: These pyramids were built by pharaohs such as Tut to hold their bodies after they died. The pyramids were made of sun-dried bricks or cut stone so they could last forever.

---

Fig. 1--Storyboard card

Special directions and production notes were noted on the card. The advantage to using cards was to allow for rearrangement of ideas until a logical flow resulted. Once the order was decided upon, slides were numbered as to sequence, and the accompanying narration was more fully developed. Then, a paper storyboard for each of the three topics was developed (see Appendices E, F, and G) and used for the judges' evaluations.

The script listed the directions for taking the pictures, including the type of shots. Since most of the shots were from books or flat graphics, only two types of shots were described. Close-up copy work was used for books and graphics. Three-dimensional scenes involving the elf were
generally medium shots with a subjective camera position. Needless background information was thus deleted for the viewer.

Storyboards were submitted to the panel of three experts for feedback before the slides were made. The questionnaire, (see Appendix II) results are shown in Table II.

TABLE II
JUDGES' RESPONSES TO STORYBOARDS

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vocabulary is suitable.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Advance organizers are used.</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Content is organized.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Viewer's attention is directed to important points.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Responses are elicited.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. Corrective feedback is given.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. Speed of picture flow is moderate.</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. Objectives are achieved.</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Table II indicates that the entire panel of experts felt that the storyboards, as presented, would lead to an acceptable product. The one undecided response on advance organizers resulted from confusion as to the definition. This led to a reworking of the questionnaire form to include a definition for that term before proceeding further.

Scheduling and taking the pictures for the Egyptian Art product involved a review of the storyboard and script. All graphic work and copy work were gathered and ordered according to size. Where two slides of the same subject were needed, a note was made. A log sheet, which included slide number, take number, and comments, was kept during the picture-taking session. An illustration is seen in Figure 2.

<table>
<thead>
<tr>
<th>Date:</th>
<th>July 11, 1983</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film:</td>
<td>Kodak Ektachrome 50</td>
</tr>
<tr>
<td>Camera:</td>
<td>Nikon F-3 Single lens reflex</td>
</tr>
<tr>
<td>ASA setting:</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shot</th>
<th>Slide and reference</th>
<th>f/stop</th>
<th>Shutter speed</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>see Milton p. 71</td>
<td>f/8</td>
<td>1/125</td>
<td>cropped</td>
</tr>
<tr>
<td>2</td>
<td>see Milton p. 80</td>
<td>f/8</td>
<td>1/125</td>
<td>needs masking</td>
</tr>
<tr>
<td>3</td>
<td>see Boase p. 28</td>
<td>f/8</td>
<td>1/125</td>
<td>check lighting</td>
</tr>
</tbody>
</table>

Fig. 2--Log sheet

Figure 2 delineates how the shots were numbered and how references were given for picture location. Photographic information in the form of f/stop and shutter speed notations
were essential in the event that the slides needed to be remade. Remarks aided in recalling potential problems after the slides were developed. The pictures were shot and then processed by the lab. Finally, the slides were edited, and titles and captions of key points were produced. A Kodalith was utilized for captions. These were then superimposed onto the original slide.

A taped narration was prepared using Kemp's suggestions for editing purposes:

Write for the ear rather than the eye. Be conversational by writing the narration in simple straightforward English -- the way people talk.

Avoid such expressions as "here we see," or "in the next slide." There is no need to tell the viewer what is being seen when it is obvious.

Identify the picture subject being shown as quickly as possible with cue words or phrases. Identification that comes late in a written or spoken line may find the viewer lost in the attempt to understand what is being shown.

Be alert to where verbal transitions are needed by leading the user from one section of the presentation to the next.

Keep sentences short (10-15 words) and avoid multiple clauses. Place the subject and verb close together.

Write enough to carry the picture as necessary -- then stop writing.

Have some pauses in narration, otherwise the audience will stop listening.

Realize that one bit of narration can cover a number of pictures, and that narration can carry over from one scene to the next.
Read the narration aloud to test expressions, the pacing, and the emphasis. (4, p. 61)

The edited narration was typed on one piece of paper with the number of the slide beside it for cueing. Reading from one piece of paper during taping is preferable to the shuffling of several sheets of paper. Words needing emphasis were marked, and pauses were noted. In addition, unusual pronunciations of words, such as Egyptian names, were spelled phonetically. Middle Eastern music to set the mood was selected to be played during the title slide and ending slide. Narration and edited music were recorded on separate reel-to-reel tapes, and a mixer was used to fade the music out before the narration began. Once the final copy was produced, it was fed through the mixer onto a blank cassette tape for a final copy. Inaudible picture advance signals were then added to the master tape with a programming unit in order to synchronize the narration with the visuals. The tape was examined in conjunction with the slide set for a final review before the set of audio tape and slides were duplicated by a professional lab.

Finally, a formative evaluation of the slide-tape presentation was requested of the panel of three experts. The questionnaire, reproduced in Appendix I, was to be used. Results from the formative evaluation were to be utilized to alter any problems in the presentation prior to field testing. The results of the questionnaire are shown in Table III.
## TABLE III

JUDGES' RESPONSES TO SLIDE-TAPE SET

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Technical Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. A smooth flow of pictures is evident.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Narration aids continuity with moderate speed.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3. Narration supports the visuals.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>4. Visuals are clear.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Sound is clear.</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>II. Design Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Length is adequate.</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Vocabulary is suitable.</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Advance organizers are evident.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Content is organized.</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Attention is directed to important points.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. Responses are elicited.</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. Corrective feedback is given.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. Moderate speed of picture flow is evident.</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9. Objectives are achieved.</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>III. Content Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Deletions are required.</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2. Additions are required.</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3. Important points have been left out.</td>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Pictures need replacing.</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Additional pictures are needed.</td>
<td>0</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table III indicates that the panel of experts generally approved of the product. In reference to the technical quality of the narration, the panel member who disagreed with statements two and three felt that narration might be effective when the elf displays the four questions to be answered by the viewer. In reference to content quality and questions two and three, the panel members included more content information that might be considered. Specifically, information on bricks, Tut's burial, and papyrus were mentioned. In telephone conversations (6,7) with the panel members, it was concluded that revision of the product was not recommended.

Summary

Chapter III has taken the outline for study, as described in Chapter I, and examined the planning and production aspects. The section on research and information collecting analyzed the target audience and criteria for product selection. The section on planning explored skills that the audience would need; course sequence; and project specifications. In addition, writing objectives and content outlines for Cave Art, Egyptian Art, and Greek Art, and then submitting them to the panel of experts, was discussed. How the preliminary form of the product was developed was also studied. Writing the treatments; developing the storyboards and scripts; actual production of the slides and taped narration; and a formative evaluation of the product were explained in detail.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

PRESENTATION AND ANALYSIS OF FIELD TESTING DATA

Introduction

The outline of study calls for preliminary, main, and operational field testing of the slide-tape presentation (see Appendix K). Chapter IV describes test settings; reviews and analyzes data findings; reports on the product revisions for each level of testing; and summarizes data findings.

Preliminary Field Test and Revision

The preliminary field test took place in two sixth grade settings with thirty students. One site was an art class in an urban area's Montessori magnet school. The students were from lower to low-middle income level homes, as termed by the faculty and the school's "Improvement Report" for state accreditation. The report lists the number of Title I students, enrollment by ethnicity, number of students on free lunch, and the district-relative index on socioeconomic status. The other site was a suburban science class studying archaeology. The students were from homes with low-middle to middle income levels. Teachers' backgrounds included an education degree and a physical education degree.

The "Product Questionnaire" (see Appendix I) was used to obtain information on product quality. The results of the preliminary field test are shown in Table IV.
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Possible Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Technical Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. A smooth flow of pictures is evident.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2. Narration aids continuity with moderate speed.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3. Narration supports the visuals.</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4. Visuals are clear.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5. Sound is clear.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>II. Design Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Length is adequate.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>2. Vocabulary is suitable.</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>3. Advance organizers are evident.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4. Content is organized.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5. Attention is directed to important points.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>6. Responses are elicited.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>7. Corrective feedback is given.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>8. Moderate speed of picture flow is evident.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>9. Objectives are achieved.</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>III. Content Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Deletions are required.</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>2. Additions are required.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>3. Important points have been left out.</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Pictures need replacing.</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Additional pictures are needed.</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The test revealed that the product was acceptable. The teacher that requested additional information under "Content Quality" asked for clarification on one slide dealing with larger figures portrayed as being more important. Since this concept was repeated elsewhere, the teacher, Smythe, later agreed that it would be acceptable. Since revision was not needed, the main field test was conducted.

Main Field Test and Revision

The main field test took place in five schools with 100 sixth grade students. Two sites were urban self-contained classrooms. One class contained students from low income level homes, and one had pupils in the lower to middle income range. The product was used during a combined social studies and art lesson. The third setting was an art class composed of low-middle to middle income level students in an urban school. The fourth urban site was a librarian's presentation to a social studies class. Students were from low-middle income level homes. The fifth setting was a parochial school's art class consisting of middle income level pupils. The socioeconomic status labels were obtained from faculty members at each test school and from the school's improvement plan for state accreditation. Except for one teacher, those who conducted the test were not art or history majors.

The data collected for the main field test is presented in Table V. The same product questionnaire (see Appendix I) was used for this test as for the preliminary test.
<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Technical Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. A smooth flow of pictures is evident.</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Narration aids continuity with moderate speed.</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Narration supports the visuals.</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Visuals are clear.</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Sound is clear.</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>II. Design Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Length is adequate.</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Vocabulary is suitable.</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Advance organizers are evident.</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Content is organized.</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Attention is directed to important points.</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. Responses are elicited.</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. Corrective feedback is given.</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. Moderate speed of picture flow is evident.</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9. Objectives are achieved.</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>III. Content Quality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Deletions are required.</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>2. Additions are required.</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3. Important points have been left out.</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>4. Pictures need replacing.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>5. Additional pictures are needed.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>
The results indicate that the product was generally rated as acceptable. In analyzing the undecided responses, one teacher felt her class needed more time to absorb the information. She gave an undecided response on question two under "Technical Quality" and on question eight under "Design Quality." One undecided response concerned the quality of sound. This tape was found to be faulty and was replaced. One teacher was not sure as to the organization of the content, and she felt more responses needed to be elicited for her students.

Comments on "Content Quality" were then analyzed. One teacher asked for the addition of narration of the beginning questions. Another said her students wanted more information on paper making and the definitions to "rigid society," "burial chamber," and "cubic." The one teacher requesting replacement of slides felt that the lettering was too small on the review slide of key ideas. She also requested more pictures be made of such favorites as the temple and the pharaoh. Two general comments concerned the tape with its silent impulses. One teacher had difficulty locating a projector in the school that handled silent impulse signals. Another claimed her school did not have such equipment. Both suggested that audible signals be included on the tape.

Revision of the product was based on information collected in the main field test. One tape was faulty and was replaced. Since the other concerns were limited to only 20 per cent of those tested, the product was not altered. However, results from the next test were monitored.
Operational Field Test and Revision

The product was operationally tested in ten settings with 200 students. Product questionnaires (see Appendix I) were the same as those used previously. Again, the settings varied: eight urban school district sites; one suburban school setting; and one parochial school site. Only three of the ten teachers conducting the test were college art majors.

Four test sites were in special sixth grade art classes in an urban district. Two of the four had students from homes ranging in the lower to middle income levels. The remaining classrooms, one of which was in a magnet school for the arts, contained students ranging from lower to low-middle income levels. A librarian in an urban district conducted the fifth test. Her sixth grade students, working on a social studies assignment, were from lower income levels.

The last five sites were self-contained classrooms. One test was in a suburban school with middle income level sixth graders during a social studies lesson. Another took place in a parochial school's art period for sixth graders. Students came from lower to low-middle income level homes. The last three test sites were in urban schools during a combined social studies and art lesson. Classes consisted of lower income level sixth graders, lower to low-middle income level fifth graders, and low-middle to middle income level sixth graders. Socioeconomic terms were chosen by teachers based on data in their school's report for state accreditation. Results of the operational field test are shown in Table VI.
TABLE VI
OPERATIONAL FIELD TEST RESPONSES

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Technical Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. A smooth flow of pictures is evident.</td>
<td>2</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. Narration aids continuity with moderate speed.</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Narration supports the visuals.</td>
<td>3</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Visuals are clear.</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Sound is clear.</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>II. Design Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Length is adequate.</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2. Vocabulary is suitable.</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Advance organizers are evident.</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Content is organized.</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Attention is directed to important points.</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. Responses are elicited.</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. Corrective feedback is given.</td>
<td>2</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8. Moderate speed of picture flow is evident.</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9. Objectives are achieved.</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>III. Content Quality</td>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Deletions are required.</td>
<td>1</td>
<td></td>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>2. Additions are required.</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>3. Important points have been left out.</td>
<td>2</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>4. Pictures need replacing.</td>
<td>2</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>5. Additional pictures are needed.</td>
<td>4</td>
<td></td>
<td></td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
In analyzing the data, one finds that the product was generally rated as acceptable. In reference to the second question under "Technical Quality," "Narration aids in the continuity with a moderate speed," two of the undecided responses requested that the tape be slowed down, and one response indicated it to be too slow. Two respondents strongly disagreed with the fifth question, "Quality of the sound is clear and understandable." The tapes were examined before being released for further testing and were found to be clear. Two teachers questioned the adequacy of the length in the first question under the topic "Design Quality." Both felt the presentation should be expanded.

Analysis of comments in the section on "Content Quality" provided further insights. Concerning the first question, one teacher suggested deleting Alfie the Elf. She felt he was too "boring" a character for sixth graders. Answers to the second question on adding items to the presentation brought several recommendations. Two teachers requested an expanded presentation with more information while another felt background music would help. One of the educators reiterated her desire to slow down the presentation, and the fifth respondent recommended a tape with an audible advance signal. In reference to the third question concerning important points being omitted, one teacher felt more information should be included for the gifted student. Her suggestions as to possible topics included information on the
Nile, burial procedures, clothing, and papyrus. Another teacher asked for more information and examples of such key points as "stylized." The fourth question regarding replacement of some of the pictures prompted two teachers to suggest using different examples during the review portion of the presentation. Comments on the final question, "Additional pictures need to be made," generally referred back to information garnered in the second question. Three teachers again requested more examples and more information on such things as papyrus and the pyramids. One educator recommended explaining the time line and how it works, and another teacher requested more information on work sheets and studio art assignments for the students.

Final product revision occurs based on information collected in the operational field test. The majority of comments during this field test concerned adding to the content on Egyptian culture, with 20 per cent recommending expanding the length. However, each respondent suggested a different point to consider. Since there are several excellent products on the market that discuss Egyptian culture, and inasmuch as the original purpose of the project was to stress one or two ideas on the culture of the time, this researcher chose not to expand the product. Twenty per cent requested slowing down the material, the major complaint on technical quality. In addition, two teachers claimed that two different tapes were unclear. These were reexamined and sent out on further
field tests. Since no other problems were recorded, this researcher concluded that the testers' audio equipment was possibly at fault. In reference to the 20 per cent of respondents requesting different examples during the review session, it was decided that Allen's (1) prescription for repetition should be maintained. Since no significant problems were encountered, revisions were not made at this stage.

Summary of Data Findings

Seventeen field tests were conducted: two preliminary tests, five main tests, and ten operational tests. A variety of schools and class settings were used for testing purposes, as Table VII shows.

**TABLE VII**

**FIELD TEST SETTINGS**

<table>
<thead>
<tr>
<th>School Setting</th>
<th>Class Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Urban District</td>
<td>Art Class</td>
</tr>
<tr>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Suburban District</td>
<td>Self-contained Class</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Parochial School</td>
<td>Media Room or Library</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Science Class</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

The table reveals that a variety of settings was used but that most testing was performed in large urban district
schools and in either special art or self-contained classes. The target audience, as specified in Chapter III, included sixth graders drawn from an urban setting. As shown in Table VII, thirteen of seventeen schools, or 76.52 per cent, were situated in an urban school district. Moreover, the target audience specified students drawn from either art classes or from self-contained classes during a period set aside for art. As the table reveals, fourteen of the seventeen class settings, or 82.35 per cent, correspond to the target stipulations.

The students generally fit the picture of the target audience as discussed in Chapter III. The socioeconomic status ranged from lower to low-middle income levels in the students' homes. This status was determined by faculty members based on each school's "Annual Improvement Report" for state accreditation purposes. This report identifies such school demographic information as average daily membership; the number of Title I students; the enrollment by ethnicity; the number of students on free lunch or on reduced lunch; and a district-relative index on socioeconomic status.

As determined by the income levels of the students' families, the socioeconomic status of the majority of students tested is similar to those outlined for the target audience. This is better illustrated in Figure 3.
The majority of students tested, as Figure 3 reveals, ranged in the lower end of the spectrum socioeconomically, with eleven lower income level ratings, twelve low-middle income level ratings, and eight in the middle income level category.

In summarizing the data findings of all seventeen tests, it was found that the vast majority of teachers felt the
product to be acceptable as presented. Most problems concerned slowing down the speed (21 per cent), adding an audible advance signal (21 per cent), and adding more information about the Egyptian culture (47 per cent). Each suggestion on the latter point, however, was different. Concepts that the teachers wanted to be further developed included the pyramids, papyrus, the Nile River, time lines, burial customs, and fashion.
CHAPTER BIBLIOGRAPHY


4. Smythe, Mark, teacher, personal telephone conversation, Dallas, Texas, November, 1983.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

FOR DISTRIBUTION OF MATERIAL

AND FOR FUTURE STUDY

Summary

Many educators have recognized the importance of including art history in the elementary art program. Many multi-media products are available for instruction in this area. However, the majority are geared to junior high or high school students, and the products available for the elementary school child are not historically ordered. A prototype of a slide-tape series for upper elementary art history students was needed.

A slide-tape presentation on one segment of art history, Egyptian Art, was produced based on an outline of study. This outline of study was developed by combining the Research and Development Model of the Far West Lab for Educational Research and Development, as outlined by Borg and Gall (2), and Kemp's (3) model for media production. In reference to the plan of study, storyboards and scripts for eventual production of Cave Art and Greek Art were also designed. These proposals were developed along several guidelines. The series was to be historical in nature and was to stress key
cultural ideas while examining the relationship between the culture and the art produced. Moreover, students were to be directed in analyzing pieces of art. Finally, the presentations were designed for low to middle mental ability viewers utilizing Allen's (1) prescriptions.

The study reviewed the literature and analyzed the target audience and the media selection. The planning stage involved defining project specifications and writing objectives and content outlines for Cave Art, Egyptian Art, and Greek Art. A panel of experts then evaluated the progress. Treatments, scripts, and storyboards were designed for the three periods of art, and slides and an audio tape were produced for Egyptian Art. A second evaluation of the product was conducted by the panel of experts before field testing. Field testing proceeded on three levels, with questionnaire data being analyzed and the product revised before continuing. The preliminary field test was conducted in two schools with thirty students, and the main field test took place in five schools with 100 students. The last level of testing, the operational field test, utilized 200 students in ten schools.

Testing was done in a variety of settings including thirteen sites in a large urban district, two schools in a suburban district, and two parochial schools. In addition, students were drawn from diverse class settings: seven art classes, seven self-contained rooms, two media centers, and
one science class. The socioeconomic status of tested students ranged from lower to middle income levels, but the majority were almost equally spread over the lower and low-middle ranges. The socioeconomic designations were determined by the faculty members based on information in each school's "Annual Improvement Report" for state accreditation purposes. The majority of the faculty members who conducted the testing were not art or history majors in college. The questionnaire data from the teachers indicated the product to be generally acceptable. There were three areas of concern. Twenty-one per cent requested a slower rate of speed and an audible advance signal. Forty-seven per cent pressed for more information on the Egyptian culture. The varied topics that they suggested were the pyramids, burial customs, fashion, time lines, the Nile River, and papyrus.

Conclusions

Based on the data findings from the three levels of field tests, the following conclusions appear to be warranted.

1. Many teachers and students want more information on the culture of ancient Egypt.

2. Due to lack of equipment or equipment shortages, some teachers need a tape with an audible advance signal.

3. The scripts and storyboards for Cave Art and Greek Art would lead to an acceptable product if the plan of study, as outlined in Chapter I, was followed.
Recommendations for Distribution of Materials and for Future Study

Based on the data findings of the field tests and on the conclusions of this study, the following recommendations are suggested for distribution of the material and for future study.

1. A study guide should be developed to accompany the slide-tape presentation on Egyptian Art. Items to be included are a statement of objectives and subject areas to which the package could be related. The content should be described with key ideas enumerated. Questions and activities for pre- and post-viewing need to be explained, and ideas for participation activities to be used during actual use could be mentioned. References to books and to other audiovisual materials on the subject would also be helpful inasmuch as many teachers and students desired more information on the culture of ancient Egypt. Finally, art projects to accompany and reinforce concepts learned in the presentation should be delineated. Sources for obtaining the necessary equipment and materials for these art projects should be provided.

2. An audible advance signal should be recorded on the second side of the tape in order to make its use more applicable to all school settings.

3. Slide-tape presentations on Cave Art and Greek Art should be produced and tested according to the outline of
study introduced in Chapter I. Since all planning and development of the storyboards for Cave Art and Greek Art have been completed and approved by the panel of experts, these presentations could be finished by filming, editing, and then recording the narration. Future topics covering the span of art history from Roman Art through Modern Art could then be designed, developed, and formulated to complete the series.
1. Allen, William H., "Intellectual Abilities and Instruc-
tional Media Design," AV Communication Review, 23
(Summer, 1975), 139-170.

2. Borg, Walter, and Meredith Gall, Educational Research,

3. Kemp, Jerrold E., Planning and Producing Audiovisual
APPENDIX A

OBJECTIVES FOR CAVE ART, EGYPTIAN ART, AND GREEK ART

I. Cave Art
After viewing the slide-tape presentation, 80 per cent of the students will orally:
1. Name and locate on a map one or two cave art sites (Lascaux or Altamira);
2. Locate on a time line the period of Cave Art within 5000 years;
3. Name the subject matter of Cave Art as mostly animals;
4. Identify one of two reasons as to why artists drew;
5. Name three of four key points on how artists painted (use of flint, lighting, how brushes and how paint were made);
6. Identify one of two subjects and two of three materials used in sculpture.

II. Egyptian Art
After viewing the slide-tape presentation, 80 per cent of the students will orally:
1. Locate Egypt on a map to the degree that Egypt surrounds the northern Nile River;
2. Locate Egyptian Art on a time line within 500 years;
3. Name four of six key points that make Egyptian culture special;
4. Identify typical Egyptian architecture as pyramids made of sun-dried bricks;
5. Identify why pyramids were made (to house the dead);
6. Identify typical Egyptian paintings as having figures with chest forward and head and feet in profile.
7. Identify typical Egyptian sculpture as being stiff due to a rigid society.

III. Greek Art

After viewing the slide-tape presentation, 80 per cent of the students will orally:

1. Locate Greece on a map of Europe;
2. Locate Greek Art on a time line within 200 years;
3. Name two things that characterize early Greek painting and sculpture (stylized, free standing);
4. Name the key idea that influenced Classical sculpture and architecture (perfection/ideal beauty);
5. List two key ideas each about Classical sculpture and architecture (perfection, S-curve; Parthenon, columns);
6. Name one characteristic each about Hellenistic sculpture and architecture (action and emotion; Ionic columns).
APPENDIX B

CONTENT OUTLINES FOR CAVE ART, EGYPTIAN ART, AND GREEK ART

Cave Art

I. Where
   A. Lascaux, France
   B. Altamira, Spain
   C. Live near the caves, seeking shelter in them during bad weather or enemy attacks

II. When
   A. Old Stone Age (Paleolithic Era)
      1. Begins around 35,000 B.C.
      2. Ends around 8000 B.C.
   B. Artists flourished around 15,000 B.C.

III. Why they painted
   A. Animals important
      1. Food
      2. Clothing from the hide
      3. Tools from the bone
      4. Twine from the tendons
   B. Magical/religious reasons
      1. Bring game to the hunt
      2. Protect hunters

IV. How they painted
   A. Lamps to see
      1. Made with twine
      2. Made with animal fat
   B. Scratched outline with flint
   C. Paint
      1. Grind natural things (berries, stones)
      2. Mix with animal fat and water
      3. Colors of red, yellow, brown, violet, black
   D. Brushes
      1. Crushed twigs
      2. Possibly fur bristles

V. Subjects
   A. Mostly animals
   B. Style
      1. Stylized (simple and no extraneous detail)
      2. Fairly realistic
         a. Shapes
         b. Colors
         c. Textures
V. B. 3. Flowing lines
4. No concern for placement on cave walls
5. Outlined in black
6. Stipple effect by spraying through tubular bones

VI. Sculpture
A. Materials used
1. Stone
2. Clay
3. Bone
B. Subjects
1. Animals
2. Female figures
   a. Called "Venus"
   b. Used for religious rites

Egyptian Art

I. When and where
   A. 3000 B.C. - 1100 B.C.
   B. See map

II. Culture
   A. Society
      1. Rigid society
      2. Pharaoh got divine power from the gods
      3. Preserved body (in death) could ensure everlasting life with the gods
   B. Developments
      1. Hieroglyphics
      2. One of first civilizations to use bricks, paper

III. Art
   A. Architecture
      1. Pyramids
         a. Why built -- to preserve dead body
         b. How built
            (1) Sealed burial chamber in center
            (2) Took many men, many years
      2. Funerary temples
         a. 1500 B.C.
         b. Massive with use of columns
   B. Painting
      1. Combine frontal and profile views
      2. Stylized
      3. Frozen
   C. Sculpture
      1. Cubic
      2. Frozen
      3. Larger figures most important people
Greek Art

I. Where and when
   A. Mainland Greece
   B. 800 B.C. - 150 B.C.

II. Early periods
   A. Geometric (800 B.C. - 650 B.C.)
      1. Stylized
      2. Geometric decorations
   B. Archaic (650 B.C. - 480 B.C.)
      1. Painting
         a. Signed works
         b. Somewhat more realistic; stylized still
      2. Sculpture
         a. Importance of athletes
         b. Olympic games
         c. Stylized
         d. Stiffness and stance similar to Egyptian
         e. Differences
            (1) More free standing
            (2) Holes between arms and legs and body

III. Classic period (480 B.C. - 323 B.C.)
   A. Painting
   B. Sculpture
      1. Ideal beauty
         a. Proportion and balance
         b. Perfection of form
         c. Importance of man
         d. Greek beauty referred to as "Classic"
         e. Elegant
         f. S-curve
      2. Phidias
   C. Architecture
      1. Parthenon
         a. Ictinus and Callicrates as architects
         b. 448 B.C. - 432 B.C.
         c. To impress
         d. Proportion
         e. No cement used; stones cut to fit exactly
      2. Columns (Doric)

IV. Hellenistic period (323 B.C. - 150 B.C.)
   A. Greek civilization spreads
      1. Examples include democracy and theatre
      2. Alexander the Great
   B. Sculpture with action and emotion
   C. Architecture with Ionic columns
APPENDIX C

CONTENT OUTLINES QUESTIONNAIRE

1. The length is adequate for a sixth grade audience.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

2. The coverage of the body of knowledge is adequate for this audience.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

3. Information is accurate.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

4. The information is important to a beginning course.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

5. Objectives are evident.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

6. Objectives are relevant to a sixth grade audience.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

7. Subconcepts and details are relevant to the objectives.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

8. Content is free from implied messages that contradict the objectives.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

Comments:
APPENDIX D

TREATMENTS FOR CAVE ART, EGYPTIAN ART, AND GREEK ART

Cave Art

After the title slide, Alfie the Elf introduces himself and invites the audience to join him on his trip back through time. He asks their assistance in answering four questions which are based on the objectives. A map is shown with Altamira, Spain, and Lascaux, France, featured. A time line is then presented with Cave Art marked off.

The first pictures set the scene. A cave is shown, and then examples of how animals were used by early men are presented. Next, several examples of Cave Art are shown emphasizing the possible religious reasons for painting animals. In addition, artistic style is discussed.

Several slides are devoted to how early artists painted, including a rendition of painting in the cave by lamplight; scratching the outline of the figure; and use of colors and placement. An example is shown of possible artistic tools. Sculpture is then examined by noting materials and subject matter, and artistic style is discussed.

The last section is devoted to review. A map and a time line are again shown as are several other slides of Cave Art. Alfie the Elf asks the original questions, the answers to which are printed on the slide. The final frame
shows Alfie the Elf waving good-bye and extending an invitation to join him on his next trip.

**Egyptian Art**

After the title slide, Alfie the Elf introduces himself and invites the audience to join him on his trip back through time. He asks their assistance in answering four questions which are based on the objectives. A map is shown featuring Egypt, and a time line is presented with Egyptian Art marked off.

The first picture is of King Tut followed by frames of the pyramids, an interior view of the pyramid, and a pictorial representation of how they were built. Several frames show a later funerary temple and examples of columns that were used. Wall paintings are shown emphasizing the typical Egyptian stance of a figure. Next, sculpture is discussed with several examples emphasizing style: rigidity, larger figures being more important, stylization, Egyptian stance. The last art slide shows an example of hieroglyphics cut into stone.

The last section is a review. Alfie asks assistance in answering the original questions. A map and time line are provided. Alfie shows a card reminding the viewer of key points about Egyptian culture. The pyramids are reshowed, as are examples of painting and sculpture. The final shot shows Alfie waving good-bye and offering an invitation to join him on his next trip.
Greek Art

After the title slide, Alfie the Elf introduces himself and invites the audience to join him on his trip back through time. He asks their help in answering four questions which are based on the objectives. A map is shown of Greece, and a timeline is presented with Greek Art marked off.

Early Greek Art is explained in the next six slides. Geometric Art is shown with a vase painting and a close-up of the stick figures in the painting. Archaic Art is explained with a more realistic vase painting and two examples of sculpture -- female and male statues. Egyptian and Greek sculptures are then compared.

The Classic period is discussed with a slide of a vase painting and several pieces of sculpture. The Discus Thrower, a Hermes figure, and a Parthenon grouping are featured. The Parthenon itself and its columns are examined as examples of Classic architecture. The columns are then compared to an Egyptian example.

The Hellenistic period is explained with a bust of Alexander the Great, the Laocoon group, and a Nike figure. An outdoor theatre and a small temple with Ionic columns are shown, and the Ionic order is compared to the Doric order.

Alfie then asks for help in answering the original questions. A map and time line are shown, and examples of work seen earlier are again presented. Answers are printed on the slides. In the parting shot, Alfie waves good-bye and invites the viewer to join him on his next trip.
Hi! My name is Alfie the Elf. I'm going on a trip back in time on my magic snailship. I'll be looking at "Cave Art.-- When and where it took place; How and why they painted; Subjects; and Sculpture.
3 Will you come, too? I'll need your help in answering some questions.

1. When and where is Cave Art found.

2. What did Cave artists paint? Why?
1. (text)
2. (text)
3. How did they paint?

4. What subjects and materials were used for sculpture?
7 Ready? Let's go!

8 Here's where we're going--to Europe. We'll see Altamira, Spain and Lascaux, France.
And here's how far back in time we must go. Even though the Old Stone Age, or Paleolithic Era, lasted from about 35,000 B.C. to about 8000 B.C., cave artists flourished from around 15,000 B.C.

By the time of the cave artists, man had lived near the caves rather than in them. Then, they could seek shelter in the caves during bad weather or enemy attacks.

see Myron p. 12
Early man depended a lot on animals, not only for food but also for clothing made from the hide, tools made from the bone, and even twine made from tendons.

Because animals were so important to early man, he would do anything to make sure that they were caught. What do you think those arrows mean in this cave picture from Altamira?
Perhaps early man thought that if he painted pictures of animals, the animals would be easier to catch—as if by magic! Do you think these deer, found at Lascaux, were easier for early man to catch?

These paintings were found deep inside the caves at Lascaux, also perhaps for magical and religious reasons. We say that they are drawn in a "stylized" manner. This means that all bulls look the same, no matter who drew them, and that they are very simple. What kinds of animals can you recognize? (Pause) Deer and . . . ?
To paint inside those dark caves, early man used lamps made of twine and animal fat. He also made wooden scaffolds so he could paint up high.

Many paintings had the outline of the animal cut or scratched into the cave first, such as this bison from Altamira. Is it realistic? Do you see the use of texture under the neck area? It certainly seems realistic!
Scratching the outline into the cave wall was done with stone tools such as flint.

Then the animals were outlined in black...

See Samachson p. 10

See McMullen plate 5
... and painted with many different colors, except for blue and green. What colors do you notice in these cave paintings from Lascaux? (Pause)

see McMullen plate 4

(Pause) Can you tell that the artist didn't care about where the animals were placed?

see Samachson plate 16
Paint was made by grinding natural things such as berries or stones and mixing it with water and animal fat. Brushes were made of crushed twigs and may have had fur bristles. Sometimes paint was even sprayed on by blowing it through a hollowed out bone.

How does the Lascaux cave artist make the animals realistic in terms of shape, color, and texture? Are the lines stiff or flowing? (Pause) The animals look realistic because the artist added the texture for hair and used shapes and colors similar to what the real animal looked like.
Sculpture was usually carved in stone or clay, such as this clay bison from France or . . .

see Ruskin p. 5

... the artist cut lines into bone, as this French bison shows. How are lines used here? (Pause) Of course, for adding texture and for making the shape. Do you think the artist used the shape of the bone as is to make the bison or did the artist carve the shape?

see Myron p. 57
What animal do you see emerging from this cave wall in France?

Statues of women, called Venuses, were used for religious rites. The Venus of Willendorf is one famous example.
Let's see what we remember. When and where might we find Cave Art?

What subject did cave artists paint? Why?
29

How did they paint in caves?

composite of slides 15 and 21

30

What subjects and materials were used for sculpture?

composite of slides 23 and 26
I really enjoyed our trip through time. You were so helpful. I hope you'll come with me on my next trip. Bye now.
Picture Sources for Cave Art


Neurath, Marie, and Muriel Turner, They Lived Like This in the Old Stone Age, New York, Franklin Watts Co., 1970.


Hi! My name is Alfie the Elf. I'm going on a trip back in time on my magic snailship. I'll be looking at "Egyptian Art-- When and where it took place; the culture; and their art: architecture, painting, and sculpture."
3. Will you come, too? I'll need your help in answering some questions.

1. When and where does Egyptian art take place?

2. What makes Egyptian culture special?
3. How does Egyptian architecture look? Why?
Ready? Let's go!

Here's where we're going--Egypt.
And here's how far back in time we must go -- about 3500 B.C. to about 1000 B.C.

Do you know who this is? His name is King Tutankhamun, but we call him King Tut for short. He was a pharaoh, or king, of Egypt from 1360 B.C. to 1350 B.C. Pharaohs thought they ruled everything because their gods gave them such power.
These pyramids were built by pharaohs such as Tut to hold their bodies after they died. You see, ancient Egyptians thought the body needed to be preserved forever if it was to have a life with the gods after death. The pyramids were made of sun-dried bricks or cut stone so they, too, could last forever.

This interior view of a pyramid shows the burial chamber in the center where the mummy of the pharaoh and all his treasures would be placed. As the servants left the pyramid, they would pull a certain stone out and cause an avalanche of rocks to fill the hall and seal the pyramid.
It took many men to make these mountains of stone, and there were no machines like we have today to help. The pharaoh Cheops used over 100,000 men for twenty years to build his pyramid!

Later rulers carved their tombs into cliffs, like this Funerary Temple of Queen Hatshepsut.
Often these later temples had highly decorated columns such as this example from the Temple of Amon at Karnak.

see Milton p. 80

see Hureau p. 147
Some rooms in the pyramids had wall paintings such as this tomb of Seti I. Do you notice anything strange about how this man's chest is drawn in relation to the rest of the body? His chest is facing forward, but his legs and head are turned sideways!

see Milton p. 71

This wall painting from another tomb in Thebes illustrates an important man hunting in the marshes. Did you notice he is much taller than the others? This shows just how important he is. And look how he's standing -- chest forward and legs and head sideways. Could you stand that way?

see Casson p. 114
The statues of Prince Rahotep and his wife, Nofret, show how sculpture was made. Society in Egypt was very strict and rigid. How would you describe this statue?

see Donadoni p. 30

Pharaoh Mycerinus, standing with two goddesses, once again shows the stiff artistic style of the Egyptians. The pharaoh has one foot forward, but is he going anywhere? Why is he larger than the goddesses? Of course, because of his importance.

see Donadoni p. 34
We say that Egyptian painting and sculpture are "stylized." This means all figures, for example, look much the same. This statue of the goddess Selket looks very similar to . . .

see Gilbert plate 25

... King Tut.

see Gilbert plate 12
The Narmer Palette shows the Pharaoh Narmer defeating his enemy. Is his body pictured the same way as other Egyptian figures?

This pharaoh, Seti I, has many things to tell. The Egyptian writing, called hieroglyphics, is picture writing. The Egyptians were one of the first cultures to write, either in stone (like we see here) or on paper. Did you know the Egyptians were one of the first cultures to use paper?
Let's see now . . . Where is ancient Egypt? Where should we mark off their culture on the time line?

Can you name some things that we should remember about Egyptian culture?
Can you describe how architecture was made and why? That's right -- the pyramids were for housing the dead pharaohs.

see Garbini p. 24

How are Egyptian figures painted? I'll give you a hint: How is the chest drawn in relation to the head and legs? (Pause) That's it -- chest forward; legs and head sideways!

see Casson p. 114
How would you describe the basic shape of this example of Egyptian sculpture? Cubic, of course. Why did the artist sculpt in this stiff and stylized manner?

see Donadoni p. 30

I really enjoyed our trip through time. You were so helpful. I hope you'll come with me on my next trip. Bye now.
THE END

(Background music)
Picture Sources for Egyptian Art


Hall, Alice J., "Legacy of a Dazzling Past," *National Geographic*, 151 (March, 1977), 293-312.


Hi! My name is Alfie the Elf. I'm going on a trip back in time on my magic snailship. I'll be looking at "Greek Art-- When and where it took place; Early Art; Classic Art; and Hellenistic Art."
Will you come, too? I'll need your help in answering some questions.

1. When and where does Greek art take place?

1. (text)

2. Name 2 things that characterize early Greek painting and sculpture.
1. (text)
2. (text)
3. What Greek idea influenced classical sculpture and architecture? Name & characteristics of this art.

4. Describe Hellenistic sculpture and architecture.
Ready? Let's go!

We'll go to the mainland of Greece.
And here's how far back in time we must go—around 800 B.C. until 150 B.C.

The first type of art found in the Greek culture is in a "Geometric Style." It is called that because of the geometric decorations seen on the vase. What geometric lines and shapes do you see? Circles, triangles, and . . . .

see Brilliant p. 18
The figures are stylized—they all look the same. The picture shows a funeral procession before the burial of a dead body. Can you tell which is the dead person?

see Strong p. 42

The Archaic phase of art developed after the Geometric. This vase painting by the artist Exekias is of Achilles and Ajax playing drafts. What game does it look like? Are the figures more realistic than on the funeral vase we just saw? Of course!

see Brilliant p. 75
Archaic sculpture is stylized such as this example called "Kore," the Greek word for girl. All the statues look much the same and they are all smiling.

see Boardman p. 79

Many Archaic statues were of nude male athletes from the Olympic games. Did you know the Greeks started the first Olympic games? These statues are very stiff and they stand...

see Ruskin p. 55
. . . like some Egyptian statues we saw. The difference is that they are more free standing. That means there are spaces between the arms and legs and the body so that the statue actually stands on its own.

The Classic period came after the Archaic, around 480 B.C. to 323 B.C. This painting from the inside of a cup shows how much more graceful and realistic the figures are now. Did you notice that the lines showing leg muscles have even been drawn in?
The Discus Thrower by Myron shows how the Classic period of Greek sculpture has influenced our tastes even today. The Greeks thought that people were most important and that their form must be portrayed as being perfect.

How has Myron forced the viewer to move his eye around the whole statue? Here's a hint: Use your finger to follow the outside lines, starting at the head.
This is the god Hermes with the Child Dionysos, by the sculptor Praxiteles. This elegant figure has perfect balance and proportion, stressing the Greek belief of the importance of human-kind.

Follow the curve of the body with your finger. Many other sculptors will learn from the Greeks and Praxiteles how to sculpt that "S-curve."
Phidias, the sculptor of this relief, was one of the most famous of all Greek sculptors. He designed all the sculpture, including this Centaur and fallen warrior, for the famous Parthenon.

The Parthenon was a temple built by Ictinus and Callicrates around 440 B.C. How impressive it looked when finished!
Even though it's been damaged, it is still a beautifully proportioned building.

What is truly amazing is that no cement was used. Each stone was cut to fit exactly in its place.
The Egyptian culture used columns, but the Greeks certainly perfected their beauty. These columns from the Parthenon are called Doric. Their bowl-shaped tops look . . .

see Ruskin p. 84

. . . similar to the Egyptian columns we saw.

see Milton p. 80
This is Alexander the Great, a Greek leader during the next period, the Hellenistic period. He conquered many lands and spread Greek ideas far and wide, such as . . .

see Eppinger p. 61

. . . the love of theatres or the democratic form of government. This outdoor theatre at Epidaurus looks a little like our football stadiums of today.

see Hale p. 238
Action and emotion are seen in this Hellenistic sculpture. Laocoon and his sons are being punished by the gods. Can you find the two snakes that are crushing them? Did you notice how emotional Laocoon's face is?

see Ruskin p. 116

This Nike of Samothrace represents victory. There's certainly action in it even though she is standing still. How can you tell the wind is blowing? Here's a hint: Look at her dress.

see Brilliant p. 358
Hellenistic architecture, such as the Temple of Athena Nike, shows another order of column that the Greeks perfected. The Ionic column has a curled top . . .

see Munro p. 45

. . . rather than the bowl-shape of the Doric.
Let's see now . . . when and where does Greek art take place?

Can you name two things that characterize early Greek painting and sculpture?
What Greek ideas influenced Classic Greek sculpture and architecture?

Can you name two characteristics of Classic Greek sculpture . . .
How would you describe Hellenistic sculpture and architecture?
I really enjoyed our trip through time. You were so helpful. I hope you'll come with me on my next trip. Bye now.

(Background music)

THE END
Picture Sources for Greek Art


APPENDIX H

STORYBOARD QUESTIONNAIRE

1. The vocabulary is suited to a sixth grade audience.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

2. The learner is prepared for the objectives with advance organizers.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

3. Content is organized for the viewers.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

4. Attention is directed to information to be learned in the presentation.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

5. Responses are elicited from the learner.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

6. Feedback on the correctness of response from the learner is given.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

7. Moderate speed of picture flow for this audience is evidenced.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

8. Objectives are achieved.
   Strongly Agree  Agree  Undecided  Disagree  Strongly Disagree

Comments:
APPENDIX I

PRODUCT QUESTIONNAIRE

Technical Quality

1. There is a smooth flow from one picture or idea to the next.
   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

2. Narration aids in the continuity with a moderate speed.
   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

3. Narration supports the visuals.
   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

4. Quality of the visuals is clear in terms of focus, color, and exposure.
   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

5. Quality of the sound is clear and understandable.
   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Design Quality

1. The length is adequate for the audience.
   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

2. Vocabulary is suited to the learner.
   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

3. The learner is prepared for the objectives with advance organizers.*
   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

* An advance organizer is introductory material in the form of an outline of topics to be covered.
4. Content is organized for the viewer.
   - Strongly Agree: Agree
   - Strongly Disagree: Disagree
   - Agree: Agree
   - Undecided: Undecided
   - Disagree: Disagree

5. Attention is directed to information to be learned in the presentation.
   - Strongly Agree: Agree
   - Strongly Disagree: Disagree
   - Agree: Agree
   - Undecided: Undecided
   - Disagree: Disagree

6. Responses are elicited from the learner.
   - Strongly Agree: Agree
   - Strongly Disagree: Disagree
   - Agree: Agree
   - Undecided: Undecided
   - Disagree: Disagree

7. Feedback on the correctness of response from the learner is given.
   - Strongly Agree: Agree
   - Strongly Disagree: Disagree
   - Agree: Agree
   - Undecided: Undecided
   - Disagree: Disagree

8. Moderate speed of picture flow for this audience is evidenced.
   - Strongly Agree: Agree
   - Strongly Disagree: Disagree
   - Agree: Agree
   - Undecided: Undecided
   - Disagree: Disagree

9. Objectives are achieved.
   - Strongly Agree: Agree
   - Strongly Disagree: Disagree
   - Agree: Agree
   - Undecided: Undecided
   - Disagree: Disagree

**Content Quality**

1. Deletions are required. Yes No
   - Comments:

2. Additions are required. Yes No
   - Comments:

3. Important points have been left out. Yes No
   - Comments:

4. Some pictures should be replaced. Yes No
   - Comments:

5. Additional pictures need to be made. Yes No
   - Comments:
Dear ________:

I am a doctoral candidate at North Texas State University, and my dissertation project involves development of a chronological course of study in art history/appreciation for sixth graders. The scope of the project entails:

1. Using design principles for low to middle mental ability viewers to include learner preparation through the use of advance organizers; verbal and visual outlines of the content; verbal and visual direction of attention to the content; elicitation of responses; feedback on correctness of responses; and moderate speed in narration and picture flow;

2. Utilizing a series that is historical in nature, of which this set is one;

3. Providing guidance for the student on how to analyze a piece of art work;

4. Expressing one or two key ideas on the culture of the time;

5. Relating the art produced and the culture.

I would appreciate your reviewing and testing the enclosed set of slides and audio tape and then critiquing its validity and appropriateness on the enclosed questionnaire.

I greatly appreciate your assistance and look forward to hearing from you soon.

Yours truly,

/s/

Julie Norman
BIBLIOGRAPHY

Books


Bullough, Robert V., Creating Instructional Materials, Columbus, Ohio, Charles E. Merrill Publishing Co., 1978.


__________, and Sheila Onuska, Through the Arts to the Aesthetic, St. Louis, CEMREL, Inc., 1977.

National Information Center for Educational Media, NICEM Index to Educational Slides, Los Angeles, University of California, 1980.

__________, NICEM Index to 35mm Educational Filmstrips, Los Angeles, University of California, 1977.


Articles


______________, "How Basic is Aesthetic Education? Or Is 'Rt the Fourth R?" *Language Arts*, 54 (September, 1977), 631-637.


Eisner, Elliot W., "The Arts as a Way of Knowing," Principal, 60 (September, 1980), 11-14.

__________, "Toward a New Era in Art Education," Studies in Art Education, 6 (Spring, 1965), 54-62.

Engel, Martin, "Getting Serious About Arts Education," Principal, 60 (September, 1980), 7-10.

Erickson, Dona, "You Are There," Arts and Activities, 76 (October, 1974), 30-31.


Garbett, Peggy Smith, "Media Teaching and the Arts: It's All Communication," Audiovisual Instruction, 24 (October, 1979), 12-14.


Hatfield, Thomas A., "Things You Need to Know About Developing an Arts Program," Principal, 60 (September, 1980), 24-27.

Heidt, Erhard U., "Differences Between Media and Differences Between Learners: Can We Relate Them?," Instructional Science, 9 (December, 1980), 365-391.

Howard, Margaret B., "Arts Education -- Have We Come to Our Senses?," Principal, 60 (September, 1980), 15-19.


Olson, Janet L., "Think of the Possibilities," *School Arts*, 82 (November, 1982), 31-35.


---


**Reports**


Lowe, Florence, Art Appreciation Studies for the Fourth and Fifth Grades, Austin, Tx., University of Texas Bulletin, 1940.


Lowe, Florence, Fifty Studies for Elementary Art Appreciation, Austin, Tx., University of Texas Bulletin, 1933.


Texas Education Agency, Education Through Art -- Elementary School, Austin, Tx., TEA, 1980.

Publications of Learned Organizations


Newspapers


Interviews


Schulz, Dee Ann, panel of experts, personal telephone conversation, Dallas, Texas, November, 1983.

Smythe, Mark, teacher, personal telephone conversation, Dallas, Texas, November, 1983.

Williams, Earle, panel of experts, personal telephone conversation, Commerce, Texas, November, 1983.