

DOCUMENT RESUME

ED 071 971

SO 005 271

AUTHOR Marinaccio, Louis M.
TITLE Creative Ceramic Design, Art Education: 6688.01.
INSTITUTION Dade County Public Schools, Miami, Fla.
PUB DATE 71
NOTE 34p.; Authorized Course of Instruction for the
Quinmester Program

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Art; *Art Education; Art Products; Behavioral
Objectives; *Ceramics; Course Content; Course
Objectives; Creative Expression; Curriculum Guides;
*Design; Guidelines; Learning Activities; Resource
Guides; Secondary Grades; Skill Development;
Techniques; *Visual Arts
IDENTIFIERS Florida; *Quinmester Program

ABSTRACT

A mastery of skills in creative ceramic arts is recommended for students in grades 9 through 12 before they attempt this quinmester course. Emphasis is upon students acquiring an understanding of the historical development of ceramics enabling them to identify outstanding ceramics of the past; basic kinds of ceramic art and ceramists from various countries; and several outstanding contemporary American ceramists. Other objectives are for students to master a working knowledge of clay preparation and handling, clay forming, decorating, glazing, and firing. The format, in outline form, includes information on rationale, guidelines, objectives, course content, suggestions for setting up criteria for evaluation, and pupil resources. Related documents are SO 005 207, SO 005 269, SO 005 273, and ED 061 232. (SJM)

ED 071971

AUTHORIZED COURSES OF STUDY FOR THE **QUINMESTER PROGRAM**



DADE COUNTY PUBLIC SCHOOLS

5005271

ART EDUCATION
Creative Ceramic Design
6688.01

DIVISION OF INSTRUCTION • BULLETIN IQ • JANUARY 1972

ED 071971

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY.

CREATIVE CERAMIC DESIGN
(Tentative Course Outline)

6688.01

ART EDUCATION

Written by: Louis M. Marinaccio

for the

DIVISION OF INSTRUCTION
Dade County Public Schools
Miami, Florida
1971

DADE COUNTY SCHOOL BOARD

Mr. William Lehman, Chairman
Mr. G. Holmes Braddock, Vice-Chairman
Mrs. Ethel Beckham
Mrs. Crutcher Harrison
Mrs. Anna Brenner Meyers
Dr. Ben Sheppard
Mr. William H. Turner

Dr. E. L. Whigham, Superintendent of Schools
Dade County Public Schools
Miami, Florida 33132

Published by the Dade County School Board

Copies of this publication may be obtained through

Textbook Services
2210 S. W. Third Street
Miami, Florida 33135

TABLE OF CONTENTS

I.	COURSE TITLE.....	1
II.	COURSE NUMBER.....	1
III.	COURSE DESCRIPTION.....	1
IV.	RATIONALE.....	1
V.	COURSE ENROLLMENT GUIDELINES.....	2
VI.	COURSE OF STUDY OBJECTIVES.....	2
VII.	COURSE CONTENT	
	Definition and background.....	4
	Clay preparation and handling.....	9
	Clay forming.....	10
	Decorating.....	13
	Glazing.....	15
	Fitting ceramic ware.....	17
VIII.	EVALUATION.....	18
IX.	RESOURCES FOR PUPILS.....	23
X.	BIBLIOGRAPHY.....	29

I. COURSE TITLE

CREATIVE CERAMIC DESIGN

II. COURSE NUMBER

6688.01

III. COURSE DESCRIPTION

An opportunity for the student to develop further skill in forming larger and more complex hand-built pots requiring building in sections and combining.

Mastery of skills described in Creative Ceramic Arts is recommended.

IV. RATIONAL:

Ceramic and pottery arts have occupied an important place in man's life from the Neolithic period until the present time. Objects made from clay are durable, functional, and esthetically pleasing. The contemporary application of ceramic clays are as diversified as any material which is used creatively.

V. COURSE ENROLLMENT GUIDELINES

- A. Pre-vocational
- B. Recommended for grades 9-12
- C. Prerequisite: Creative Ceramic Arts

VI. COURSE OF STUDY OBJECTIVES

Competencies expected of the student upon completion of the behavioral objectives of this course in writing or orally:

A. Definition and background

The student will be able to:

1. Identify outstanding ceramics of the past.
2. Display a knowledge of the basic kinds of ceramic art and ceramists from England, Holland, Belgium, Italy, Germany, Denmark, Sweeden, Finland, Norway, and Japan.
3. List several outstanding contemporary American ceramists.

B. Clay preparation and handling:

The student will be able to:

1. Differentiate between residual and sedimentary clays.
2. List several types of clay.

C. Clay forming

The student will be able to:

1. Construct ceramics requiring building in sections and combining.
2. Demonstrate the method of forming several types of lids for covered jars and urns.
3. Identify the necessary tools used to work in ceramics.
4. Identify the work of several outstanding ceramists from the Ceramic League of Miami.

D. Decorating

The student will be able to:

1. Demonstrate techniques of decoration that enhance and fit the form.
2. Exhibit a working knowledge of decorative techniques as employed by contemporary American ceramists.

E. Glazing

1. Explore and analyze glaze results.
2. Exhibit a working of glaze texture through analysis of works of contemporary ceramists.

F. Firing ceramic wares

1. Demonstrate the proper procedure for stacking the kiln for bisque and glaze firing.
2. Identify and analyze firing defects due

to poor construction, underfiring, and
overfiring of ceramic ware.

VII. COURSE CONTENT

A. Definition and background

1. Historical

a. Prehistoric

b. Egyptian

c. Ancient Near East

d. Asia

(1) India

(2) China

(3) Korea

(4) Japan

e. Classical

(1) Crete

(2) Greece

(3) Etrusca

(4) Rome

f. Byzantium (Rome)

g. Islam

h. Pre-Columbian

i. Renaissance in Europe

2. Contemporary European and Japanese
ceramists

a. England

(1) Bernard Leach

- (2) Lucie Rie
- (3) Michael Cardew
- (4) Katherine Pleydell-Bouverie
- (5) Murray Fieldhouse
- (6) Janet Leach
- (7) Kenneth Clarke
- (8) James Tower
- (9) David Ballantyne
- (10) Bryan Newman
- (11) Ian Auld
- (12) Rosemary Wren
- (13) Waistrel Cooper

b. Holland

- (1) Adrick Westenenk
- (2) Susanne Taub
- (3) Lies Cosyn
- (4) Sonja Landweer
- (5) Jan de Rooden
- (6) Maryke van Vbaardinger
- (7) Hans de Jong
- (8) Johnny Rolf
- (9) Jan van der Vaart

c. Belgium

- (1) Pierre Caille

d. Italy

- (1) Guido Gambone

- (2) Salvatore Meli
- (3) Gian Baltista Valentini
- (4) Carlo Zauli
- (5) Nino Caruso
- (6) Leoncillo
- (7) Germano
- (8) Alda Ajo
- (9) Enrico Casmassi

e. Germany

- (1) Karl Scheid
- (2) Hubert Greimert
- (3) Klaus Schultze
- (4) Walter Popp
- j) Heiner Balzar
- (6) Ursula Scheid
- (7) Heinz H. Engler
- (8) Hildegard Storr-Britz

f. Denmark

- (1) Kristen Weeke
- (2) Helle Allpass
- (3) Finn Lynggard
- (4) Eva Staehr Nielsen
- (5) Lisa Engquist
- (6) Gutte Erickensen
- (7) Niels Refsgaard
- (8) Conny Walther

g. Sweden

- (1) Stig Lindberg
- (2) Carl-Harry Stalhane
- (3) Marianne Westman
- (4) Sylvia Leuchovius
- (5) Hertha Bengston
- (6) Karin Bjorquist
- (7) Britt Louise Sundell-Nemes
- (8) Tom Moller
- (9) Gert Moller
- (10) Hertha Hillfon
- (11) Wilhelm Kage
- (12) Gunilla Palmstierna

h. Finland

- (1) Francesca Lindh
- (2) Anja Jaatinen
- (3) Liisa Hallamaa
- (4) Birger Kaipainen
- (5) Toini Muona
- (6) Kay Franck
- (7) Marjukka Paasivirta
- (8) Kyllikki Salmenhaara

i. Norway

- (1) Rolf Hansen
- (2) Richard Dubourgh

(3) Erik Ploen

j. Japan

(1) Guzo Kamiguchi

(2) Toyozu Arokawa

(3) Shoji Hamada

(4) Kenkichi Tomimoto

(5) Kitaoji Rosanjin

(6) Mineo Kato

(7) Kanjiro Kawai

(8) Osamu Suzuki

(9) Totaro Sakuma

(10) Shimaoka Tatsuzo

(11) Yoshimichi Fujimoto

(12) Kazuo Yagi

3. Contemporary American Ceramists

a. Sheldon Carey

b. Gertrud Natzler

c. Otto Natzler

d. Carlton Ball

e. Peter Voulkos

f. Paul Soldner

g. Theodore Randall

h. Karl Martz

i. Robert Turner

j. Lyle Perkins

k. Marquerite Wildenhain

1. Antonio Prieto
 - m. Daniel Rhodes
 - n. Herbert Sanders
 - o. Warren MacKenzie
4. American Indian
- B. Clay preparation and handling
1. Methods of preparing and handling clay.
 - a. Wedging
 - b. Kneading
 - c. Conditioning
 - d. Storing
 2. Classification of clays
 - a. Primary or residual clay
 - b. Secondary or sedimentary clay
 3. Types of clay
 - a. Earthenware clays
 - b. Stoneware clays
 - c. Fire clays
 - d. Ball clays
 - e. Porcelain clays
 4. Equipment and tools
 - a. Wedging boards with cutting wire
and canvas
 - b. Pug mill
 - c. Large heavy duty cans and crocks.

- d. Plaster and setstone bats
- e. Large natural sponges
- f. Flexible rubbers

C. Clay forming

1. Advanced methods in forming hand-built pottery.
 - a. Pinch
 - b. Coil
 - c. Slab
 - d. Drape
 - e. Combined methods
2. Forming larger and more complex hand-built pottery.
3. Forming hand-built pottery requiring 3 building in sections and combining.
4. Forming with a large quantity of clay.
5. Forming stacked hand-built pottery.
6. Forming and attaching several medium and large sized spouts.
7. Forming lids for covered jars and urns.
 - a. Flat-inset
 - b. Curved-inset
 - c. Flanged
 - d. Recessed-knob
 - e. Rose-jar

8. Welding two or more large sections together.
9. Forming advanced larger and more complex hand-built pottery requiring building in sections and combining.
 - a. Vases
 - b. Pitchers
 - c. Bottles
 - d. Teapots
 - e. Covered jars
 - f. Covered urns
 - g. Cups and saucers
 - h. Lugged bowls
 - i. Double-wall pots
 - j. Casserole dish with lid
 - k. Plates
 - l. Closed forms
 - m. Sectional forms
 - n. Free forms
 - o. Open forms
 - p. Sectional forms
 - q. Hanging forms
10. Constructing four forms in such a manner that they can be stacked or used as separate pots.
11. Constructing free-standing forms with slabs of clay.

12. Constructing a multi-spouted vase.
13. Equipment and tools
 - a. Plaster or setstone bats
 - b. Large natural sponges
 - c. Dampbox
 - d. Polyethylene plastic bags
 - e. Aluminum modeling, decorating wheel -
8, 10, 12, 14-inch head.
 - f. Boxwood modeling tools 6-inch length
 - g. Boxwood wire modeling tools - 8 inches
 - h. Fettling and potter's knives
 - i. Flexible scrapers - 2" x 4" half moon
 - j. Finishing rubbers 2-1/8" x 3-1/2"
 - k. Metal dividers or compass
 - l. Metal or wooden calipers
 - m. Metal turning loop tools
 - n. Sgraffito tools

14. Ceramic League of Miami-Resource People

Virginia L. Davis	Edmund O. Weyhe
Chili Emerman	Barbara Garrett
Geri Popenoe	Marilyn Sherwood
Lynn Glatstein	Natalie B. Linder
Janel Lund	Juanita May
Genevieve McCrea	Marie Furman
Mary Grabill	Elinor Jensen

Inga Lukat	Chris Rosean
Richard Bugdal	Jean Guthrie
Josephine Kamp	Carol King
Evelyn C. Smiley	Fran Williams
Irene Batt	Dorothy Bosco
Marcy Dunn	Nettie Wintie
Edythe Powell	Virginia C. Stemples
Mary J. Acosta	Edna DeLine
Jacquelyn Ferguson	Henry Gordon
Lillian H. Stoff	Terry Weinberger
Joy Lindskold	Davi Justi
Janet Festinger	

D. Decorating

1. Methods of decorating

- | | |
|------------------|-----------------------|
| a. Incising | n. Terra sigillata |
| b. Sgraffito | o. Impressing |
| c. Carving | p. Applique |
| d. Embossing | q. Sprigging |
| e. Stamping | r. Excising |
| f. Texturing | s. Slips and engobes |
| g. Stenciling | t. Inlay |
| h. Wax resist | u. Underglazes |
| i. Mishima | v. Underglaze crayons |
| j. Satsuma | w. Rubber resist |
| k. Slip painting | x. Semi-matt |
| l. Slip trailing | y. Overglazes |
| m. Spraying | z. Matt |

2. Materials for decorating

a. Tools

- (1) Decorating wheel
- (2) Slip trailers
- (3) Plastic bags
- (4) Large round or flat brushes for glaze and slip application
- (5) Bamboo brushes, large and medium for wax resist and other use
- (6) Small pointed brushes for detail
- (7) Flexible scraper, half-moon shape
- (8) Steel plaster and clay modeling tools for sgraffito, blending, incising, scraping, etc.
- (9) Elephant ear sponge
- (10) Professional boxwood tool
- (11) Steel loop modeling tool
- (12) Fettling knife
- (13) Pencils and india ink
- (14) Plastic water container

b. Consumable materials

- (1) Slip
- (2) Plaster of paris
- (3) Engobes
- (4) Stencil paper

- (5) Wax resist
- (6) Rubber resist
- (7) Underglaze
- (8) Overglaze
- (9) Gloss
- (10) Semi-matt
- (11) Matt

E. Glazing

1. Methods of glazing

- a. Dipping
- b. Pouring
- c. Brushing
- d. Spraying

2. Equipment and tools

- a. Glazing bowl
- b. Pitcher
- c. Two sticks
- d. Mesh metal sieve
- e. Metal glaze tong
- f. Glaze brushes -- soft hair, flat 1/2" to 1"
- g. Ceramic spray booth with exhaust fan, stand, and filter
- h. Sprayer outfit with gun-compressor
- i. 120 mesh sieve

3. Types of glazes
 - a. Low-temperature glazes
 - (1) Alkaline glazes
 - (2) Lead glazes
 - b. Middle-temperature glazes
(Bristol glazes)
 - c. High-fired glazes
 - (1) Stoneware glazes
 - (2) Porcelain glazes
4. Glaze textures
 - a. Transparent
 - b. Opaque
 - c. Gloss
 - d. Matt
5. Glaze defects
 - a. Defects due to clay body
 - (1) Pinholes and bubbles
 - (2) Sandpaper surface
 - (3) Blistering
 - b. Defects due to application
 - (1) Blisters and pinholes
 - (2) Scaly surface
 - (3) Running
 - (4) Chipping
 - (5) Dryness

(6) Cracking

(7) Bubbles and blisters

c. Defects in glaze composition

(1) Shivering

(2) Crazeing

(3) Dull surface on gloss glaze

(4) Crawling

(5) Pinholes and bubbles

F. Fitting ceramic ware

1. Preparing ware for firing

a. Drying

(1) Storing (drying cabinet)

(2) Bone dry

2. Procedure for firing kiln

a. Familiarizing with kiln manual

b. Applying kiln wash

c. Stacking kiln for bisque firing

d. Stacking kiln for glaze firing

e. Measuring and managing kiln temperature

(1) Cones

(2) Pyrometer

f. Following firing schedule

g. Following cooling schedule

h. Removing ware from kiln

3. Defects due to improper firing

a. Shattering

- b. Cracking
- c. Warping
- d. Blistering
- e. Pinholing
- f. Glaze crawling
- g. Melting
- h. Crazing

VIII. EVALUATION

It is essential to establish a criteria for evaluating the progress of the student in an art experience. Evaluation in ceramic art cannot be rigid to the extent that it will inhibit creative expression. Creativity is unique and personal.

The product itself cannot be evaluated without taking into consideration the process the student experienced from inception to completion. In addition, evaluation must include evidence of the growth of the individual in relation to his attitude, interest, ability to complete a project, how well he can use his past experience toward problem solving, respect for his own ability and the rights of others.

Evaluation is of vital importance to the student's development. It helps to determine the growth of

the student so that the teacher can further motivate and guide the student toward his fullest self-development, creativity and aesthetic growth.

The criteria established for evaluation will vary due to individual differences among students and teachers. Each teacher must determine his own goals and formulate standards for evaluation always keeping in mind that evaluation must be positive as well as constructive.

The following are some suggestions in setting up criteria for evaluation:

1. Has the student learned to evaluate his own pottery as well as that of others with consideration to the sensuous quality of the clay, form, and content?
2. Has the student designed the entire object with an awareness of space, form, movement, order, relationship of parts to the whole, and good color organization?
3. Has the student expressed his ideas creatively in the medium in an original and meaningful way?

4. Has the student developed a sensitivity to the material?
5. Does the student express his ideas and individuality in clay?
6. Has the student become aware that texture results from an interaction of the clay and the tools?
7. Is the student aware of the difference between tactile and visual textures?
8. Has the student become sensitive to the expressive qualities of the different clay materials and tools?
9. Is the student aware that improper use of material and tools results in poorly constructed forms?
10. Is the student aware that variety can add interest to forms but too much can destroy it?
11. Does the student react empathically to clay in terms of three-dimensional forms?
12. Is the student familiar with good ceramic art of the past and present?
13. Is the student able to identify from contemporary ceramists the ways in which the craftsmen manipulate their tools and materials?

14. Has the student developed good work habits?
15. Has the student's behavior outside the art class improved as a result of his art experience?
16. Has the student developed a respect for his personal ability?
17. Has the student developed a respect for the rights of others?
18. Has the student acquired increased efficiency in handling materials and tools?
19. Has the student developed the ability to carry the project through to completion?
20. Has the student learned the firing process and how to use it to its fullest advantage?
21. Has the student developed good craftsmanship and yet retained the natural qualities of the clay?
22. Has the student learned to form pottery correctly so it does not warp or crack?
23. Is the product suited for the purpose for which it was made?
24. Does it incorporate the principles of good ceramic design?
25. Is the product the one best suited for work in clay?

26. Is the product well constructed?
27. Does the product indicate individuality and expressive quality?
28. Does the glaze fit the form?
29. Has the student improved in attitude, interests, and development of technical skills?

IX. RESOURCES FOR PUPILS

A. Books

General

Ball, F. Carlton and Lovoos, Janice, Making Pottery without a Wheel, New York: Rheinhold, 1965.

Holfsted, Jolyon, Step-by-Step Ceramics, New York: Golden Press, 1967.

Kenny, John B., Ceramic Sculpture, New York: Greenberg, 1953.

_____, The Complete Book of Pottery Making, Philadelphia: Chilton, 1949.

Nelson, Glenn C., Ceramics, A Potter's Handbook, New York: Holt, Rinehart, Winston, 1966.

Norton, F. H., Ceramics for the Artist Potter, Massachusetts: Addison-Wesley, 1956.

Sanders, Herbert H., Pottery and Ceramic Sculpture, California: Lane, 1964.

Suspensky, Thomas G., Ceramic Art in the School Program, Massachusetts: Davis, 1968.

Prehistoric

Cles-Reden, The Realm of the Great Goddess, Englewood Cliffs: Prentice-Hall, 1962.

Graziosi, Paolo, Paleolithic Art, New York: McGraw-Hill, 1960.

Huyghe, Rene, Larousse Encyclopedia of Prehistoric and Ancient Art, New York: Prometheus Press, 1962.

Leroi, Gourhan Andre, Treasures of Prehistoric Art, New York: Harry N. Abrams, Inc., 1967.

Egyptian

Raphael, Max, Prehistoric Pottery and Civilizations in Egypt, New York: Phantom, 1947.

Savage, George, Pottery through the Ages, New York: Pelican, 1954.

Walters, H. B., History of Ancient Pottery, London: Murray, 1905.

Woldering, Irmgard, The Art of Egypt, New York: Greystone Press, 1963.

Ancient Near East

Childs, V. Gordon, New Light on the Most Ancient East, London: Rontledge and Kegan Paul, Ltd., 1935.

Lloyd, Seton, The Art of the Ancient Near East, New York: Praeger, 1964.

Pope, Arthur U., A Survey of Persian Art, London: Oxford University, 1964.

Wilkinson, Charles K., Iranian Ceramics, New York: Harry N. Abrams, 1963.

Asia: (India, China, Korea, and Japan)

Auboyer, Jeannie and Goepper, Roger, The Oriental World, New York: McGraw-Hill, 1967.

Fourcade, Francois, Art Treasures of the Peking Museum, New York: Harry N. Abrams, 1970.

Lee, Sherman E., A History of Far Eastern Art, Englewood Cliffs: Prentice-Hall, 1964.

Munsterberg, Hugo, Art of the Far East, New York: Harry N. Abrams, Inc., 1968.

Rhodes, Daniel, Tamba Pottery, California: Kodansha International, Ltd., 1970.

Sanders, Herbert, H., The World of Japanese Ceramics, California: Kodansha International, Ltd., 1967.

Savage, George, Pottery through the Ages,
New York: Pelican, 1954.

Classical: (Crete, Greece, Etrusca, and Rome)

Arias, P. E., Greek Vase Painting, New York:
Pelican, 1954.

Marinatos, S., Crete and Mycenae, New York:
Harry N. Abrams, Inc., 1960.

Richter, G. M. A., Attic Red-Figured Vases,
New Haven: Yale Press, 1958.

Savage, George, Pottery through the Ages, New
York: Pelican, 1954.

Walters, H. B., History of Ancient Pottery,
London: J. Murray, 1905.

Wilson, Robert, Art Concept in Clay, Coral Gables:
University of Miami Press, 1957.

Byzantium: (Rome)

Anthony, Edgar W., A History of Mosaics, Boston:
Sargent, 1935.

Grabar, Andre, Byzantium, London: Thomas and
Hudson, 1966.

Islam

Lane, Arthur, Early Islamic Pottery, London:
Faber, 1939.

_____, Later Islamic Pottery, London:
Faber, 1957.

Savage, George, Pottery through the Ages, New
York: Pelican, 1954.

Pre-Columbian

Anton, Ferdinand and Dockstader, Frederick J.,
Pre-Columbian Art and Later Indian Tribal
Arts, New York: Harry N. Abrams, 1968.

Bernal, Ignacio, 3000 Years of Art and Life in
Mexico, New York: Harry N. Abrams, 1968.

Lehmann, Henri, Pre-Columbian Ceramics, New York: Viking, 1962.

Mason, J. Alden, The Ancient Civilizations of Peru, Baltimore: Penguin, 1957.

Westheim, Paul, The Sculpture of Ancient Mexico, New York: Doubleday and Company, 1963.

Renaissance in Europe

Goldscheider, Ludwig, Michelangelo's Models in Wax and Clay, London: Phaidon, 1962.

Honey, William B, Wedgewood Ware, London: Faber, 1949.

Liverani, Giuseppe, Five Centuries of Italian Majolica, New York: McGraw-Hill, 1960.

Charleston, Robert J., World Ceramics, New York: McGraw-Hill, 1968.

B. Suggested periodicals for pupils

Ceramics Monthly
Box 4548
Columbus, Ohio 43212

Craft Horizons
29 West 53rd Street
New York, N. Y. 10019

School Arts
50 Portland Street
Worcester, Mass. 01608

Design Quarterly
1710 Lyndale Avenue
Minneapolis 3, Minn.

C. Suggested places to visit

Grove House School of Art
3496 Main Highway
Coconut Grove, Florida 33133

Sandpiper
2924 Florida Avenue
Coconut Grove, Florida 33133

Village Corner Gallery
1136 South Dixie Highway
Coral Gables, Florida

Lowe Art Museum
1301 Miller Drive
Coral Gables

Miami Art Center
7867 North Kendall Drive
Kendall, Florida

Ceramic League of Miami
7867 North Kendall Drive
Kendall, Florida

Miami Museum of Modern Art
381 N. E. 20th Street
Miami, Florida

Museum of Science-Planetarium
3280 South Miami Avenue
Miami, Florida

Grove House Gallery
3496 Main Highway
Coconut Grove, Florida

Fairchild Tropical Garden
10901 Old Cutler Road
Coral Gables, Florida

Fantastic Gardens
9550 S. W. 67th Avenue
Miami, Florida

Miami Seaquarium
Rickenbacker Causeway
Virginia Key, Florida

Crandon Park Zoo
Key Biscayne, Florida

Scholastic Art Awards Exhibition
Burdine's Department Store
22 East Flagler Street
Miami, Florida

Miami Studio Shop
2363 West Flagler Street
Miami, Florida

Bass Museum of Art
2100 Collins Avenue
Miami Beach, Florida

Japanese Gardens
MacArthur Causeway
Miami, Florida

Viscaya Art Museum
3251 South Miami Avenue
Miami, Florida

X. BIBLIOGRAPHY

Ball, F. Carlton and Lovoos, Janice, Making Pottery without a Wheel, New York: Rheinhold, 1965.

Charleston, Robert J., World Ceramics, New York: McGraw Hill, 1968.

Hofsted, Jolyon, Step-by-Step Ceramics, New York: Golden Press, 1967.

Kenny, John B., Ceramic Design, Philadelphia: Chilton, 1963.

_____, Ceramic Sculpture, New York: Greenberg, 1953.

_____, The Complete Book of Pottery Making, Philadelphia: Chilton, 1949.

Landis, Mildred., Meaningful Art Education, Peoria: Charles A. Bennett Company, Inc., 1951.

Leach, Bernard, A Potter's Handbook, Transatlantic Arts, 1951.

_____, A Potter in Japan, London: Faber and Faber, 1960.

Long, Lois Cilver, Ceramic Decoration, Indianapolis: American Art Clay Company, 1958.

Nelson, Glenn C., Ceramics: A Potter's Handbook, New York: Holt, Rinehart, Winston, 1966.

Norton, F. H., Ceramics for the Artist Potter, Massachusetts: Addison-Wesley, 1956

Parmelee, Cullen W., Ceramic Glazes, Chicago: Industrial Publications, 1951.

Rhodes, Daniel, Clay and Glazes for the Potter, Philadelphia: Chilton, 1957.

_____, Stoneware and Porcelain, Philadelphia: Chilton, 1959.

_____, Tamba Pottery, Philadelphia: Chilton, 1959.

Riegger, Hal., Raku Art and Technique, New York:
Van Nostrand-Rheinhold, 1970.

Sanders, Herbert H., Pottery and Ceramic Sculpture,
California: Lane, 1964.

_____, The World of Japanese Ceramics,
California: Kodansha International, Ltd., 1967.

Suspensky, Thomas G., Ceramic Art in the School
Program, Massachusetts: Davis, 1968.

Tart, Carlie, The Beginner and the Wheel, Indianapolis:
The American Art Clay Company, 1962.

Wildenhain, Marguerite, Pottery Form and Expression,
New York: Rheinhold, 1959.

Wilson, Robert, Art Concept in Clay, Coral Gables:
University of Miami Press, 1957.