

STATEMENT OF PERMISSION TO COPY

In presenting this paper in partial fulfillment of the requirements for an advanced degree at Montana State University, I agree that the Library shall make it freely available for inspection. I further agree that permission for extensive copying of this paper for scholarly purposes may be granted by my major professor, or, in his absence, by the Director of Libraries. It is understood that any copying or publication of this paper for financial gain shall not be allowed without my written permission.

Signature Andrew M. Kujawa
Date 24 July 1978

USE OF OUTSIDE RESOURCES PERTAINING TO THE
DEVELOPMENT OF A CERAMIC PROGRAM
ON THE JUNIOR HIGH LEVEL

by

ANDREW MICHAEL KUJAWA

A professional paper submitted in partial fulfillment
of the requirements for the degree

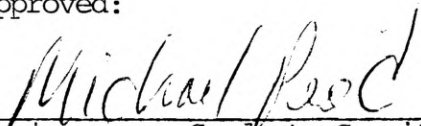
of

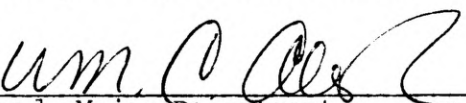
MASTER OF ART

in

ART

Approved:


Chairperson, Graduate Committee


Head, Major Department

Graduate Dean

MONTANA STATE UNIVERSITY
Bozeman, Montana

August, 1978

TABLE OF CONTENTS

	Page
ABSTRACT.....	iv
INTRODUCTION	1
Purpose Of Alternate Budgeting.....	1
Background.....	2
Initial Funding.....	2-3
RESOLUTIONS OF PROBLEMS REQUIRING ADDITIONAL FUNDS.....	4
Art Club.....	4-5
Government Funding.....	5-8
Community Resources.....	8-9
PROFESSIONAL RESOURCES.....	10
Area Residents.....	10
Professional Groups.....	10-11
Publications.....	11
SUMMARY	12
APPENDIX	13
Kiln Modifications.....	14
Itemized Statement.....	15
Publications.....	16

ABSTRACT

Several ways of developing resources for a junior high ceramic program which are shown in this paper are:

- (1) budgetary funding
- (2) art club projects
- (3) federal funding
- (4) community resources

Using these resources, the ceramic department at West Junior High, Butte, Montana has evolved from two wheels and an electric kiln to a separate studio containing twelve wheels, a pug mill, a slab roller, a clay extruder, a dough mixer and a separate kiln area with a down draft gas kiln and a Raku kiln.

1. INTRODUCTION

1.1 Purpose Of Alternate Budgeting

This paper explores various methods of developing and financing a ceramic program in a junior high school, with emphasis on the utilization of outside resources. Since many school districts award art programs a low priority in monetary matters despite the fact that such a program requires a large capital outlay to furnish the necessary equipment and materials, the initiator will have to have, in many instances, recourse to alternate means and carefully planned goals to establish a viable program. The art teacher who desires to initiate and maintain a well-rounded program must develop and exploit resources outside the conventional budget. The foregoing is particularly pertinent in today's atmosphere of community resistance to increased education costs in public schools. This is not only apparent in Montana, but throughout the United States. Proposition 13 in California is a perfect example of this. The public outcry for "back to basic" scholastic programs bodes ill for so-called "non-academic" areas such as art. I feel that I should point out here that recent government studies have shown art as a very important subject for early childhood development, if not as important as the three R's. My objective in this work is to show how personal experience and initiative on the part of the teacher can overcome these obstacles.

1.2 Background

This paper specifically describes my experience at West Junior High School, Butte, Montana as a teacher of ceramics. The conditions I encountered when I began my present assignment in the fall of 1973 were highly unsatisfactory in the ceramic area. The art department at that time was equipped with two kick wheels, one of which did not work, and a small electric kiln. Related tools and materials such as glazes were almost non-existent. There was no designated ceramic area, and the equipment was crowded into a corner of the general art room and used infrequently or not at all.

My first task in the development of a well-rounded ceramic program was to identify the primary problem areas and seek realistic solutions. The problems in order of importance were:

- (1) how to increase present budget,
- (2) how to acquire the needed physical space,
- (3) how to implement a sound ceramic curriculum.

The thrust of this paper deals principally with problems of the budget.

1.3 Initial Funding

The budgetary fund for the Art Department of West Junior High was \$1500 in 1973. In the next two years because of increased enrollment in the ceramic classes and student enthusiasm for the art program, I was able to show a need to build up the department. Our principal

was able to see justification for additional increases in our budget to \$2200 in 1974 and to \$2800 in 1975. The following year I had a \$3200 budget approved by the school principal, but unfortunately the School Board had been forced to cut all budgets in the district by 20% for that year. This cutback was in effect again last year, and even now the budgetary future is uncertain.

The Art Department budget has to be used to purchase not only expendable supplies but also equipment. In the process of building up the total art program, the budget had to be spent on a printing press, brushes, easels, and jewelry supplies, etc. The capital outlay for these other items cut the budget so that initially very little money could be directed toward the ceramic program.

Since the Art Department at West was not initially equipped to run an art program which dealt with different art related disciplines, it became apparent that to fund a ceramic program, under existing conditions, would involve minimal growth over an extended period of time.

2. RESOLUTIONS OF PROBLEMS REQUIRING ADDITIONAL FUNDS

2.1 Art Club

Because of the situation with budgetary funds, I found it necessary to find some alternate means of funding. An art club was started for two reasons. First, it offered another opportunity for those students interested in art to get together and work on special interests outside of the classroom. Secondly, it was a regulatory unit within the school that could sell items, have fiscal control of monies, and could eventually purchase needed equipment. Examples of money raising projects of the art club were:

- (1) silk screening t-shirts
- (2) printing a school calendar
- (3) poster work
- (4) pottery sales
- (5) bake sales

The most financially rewarding of these ventures has been the silk screening of t-shirts because of the various outlets and the demand for these items. Athletic groups, PTA's, the Pep Club, and the intramural teams have been especially responsive. Some of the money realized from these projects has been used to purchase two Shimpo wheels. These electric wheels, although more expensive than kick wheels, compensate for the physical size of most junior high students who have difficulty manipulating a kick wheel. It is, however,

important that an individual seriously pursuing the craft of ceramics should be able to use the kick wheel because it gives the craftsman a greater degree of intimacy with his materials and better control of them.

2.2 Government Funding

Another successful avenue has been through Federal Funding. There are various programs linked to the Department of Health, Education and Welfare (HEW), and our own State Department of Public Instruction which should be investigated and taken advantage of. I feel that it is a responsibility of every art instructor to get some of our taxes working for us. I first became aware of these programs through contact with Ray Campeau, the Chairman of the Art Department at Bozeman High School.

I also obtained additional information about Federal Funding through our school district's Director for Federal Funding. This information is also available through the Office of Public Instruction, Helena, Montana. On request I was able to find out about various grants and matching funds. The proposal format, obtained from Director of Federal Funding, was as follows:

- (1) title cover
- (2) short narrative
- (3) statement of need

(4) goals and objectives

(5) summary

My first request was made for funding a Raku kiln. I had decided to ask for funds for a Raku kiln because it offers an early art experience that is an exciting, quick introduction to the fundamentals of ceramics. The Raku process of glaze firing can be accomplished in a scheduled class period, and quick results can be stimulating to children of the junior high age. The money for this kiln was granted through the Elementary Secondary Education Act (ESEA), Title IV, Part C, Incentive Grants. This grant is set up to provide funds to develop unique classroom projects. These funds allowed the purchase of fire brick, propane tank and burners for construction of the Raku kiln. The design for the kiln was obtained through published plans and contact with other potters.

My next effort was to secure funds for equipment through the Title III, Incentive Grant, which had a 60-40 ratio of matching funds. These funds enabled the Art Department to acquire jewelry and lapidary equipment and a pug mill. A Walker pug mill was located at a local ceramic concern. Because its production was mainly slip-cast, low temperature white ware, this local store had found the pug mill largely superfluous and was willing to sell it to our school. The price we agreed upon was \$850. This item normally costs \$1400, which meant that with the grant, we had to budget only \$340 for the pug mill.

I feel that the addition of a pug mill to a junior high ceramics program is justified because of the trial and error attempts of beginning students which necessitate extensive re-use of clay.

Unfortunately this type of grant is no longer available, but it was of great help to our department. Title III is now incorporated in ESEA, Title IV, Part C. This particular program eliminates the need for matching funds but increases the competition for acquiring the grants. Having to finance 40% of the grant did narrow the field of those applying for funds.

In the school year 1976-77, two large additions to the pottery studio were a dough mixer and a gas kiln. I found out the local Buttrey Foods outlet was expanding and their dough mixer was available. They were willing to sell it to our school for \$200. At the time, no departmental money was available, but my administrator told me to submit a letter to the Superintendent of Schools, as the District had access to surplus funds. I contacted the superintendent and the School Board and explained that with this purchase we would not only be able to benefit our own program but also provide a means for other schools in the district to use this mixer. I went on to explain that if we had the mixer, we would then be able to buy clay in powdered form and realize a substantial savings to the district. This was approved and the district bought the dough mixer for the Art Department.

At this same time I also applied for an ESEA, Title IV, Part B Grant for materials to construct a gas kiln. These funds are allocated to every school district in Montana. The guidelines for these are as follows: "...funds shall be used to provide library, media materials, instructional materials and equipment, guidance counseling, and testing materials." Our district has been allocated \$20,000 for each of the past two years, and these funds are dispersed throughout the district usually in \$1000 increments to schools showing various needs which meet the above guidelines. In the Title IV proposal I stated that with the purchase of materials, students would profit in two ways. The students would help construct the kiln and gain first-hand knowledge and understanding of the procedure and the work involved. Secondly, a gas fired kiln would add a whole new spectrum of glaze possibilities. This proposal was accepted, and in the spring of 1977 we built the kiln. (See illustration and itemized statement in the Appendix pp 14 and 15)

This last year monies were also acquired through Title IV, Part B, to purchase a Brent model C pottery wheel, a slab roller, and a clay extruder.

2.3 Community Resources

The community at large is also a place to look for additional help. I have been able to draw on various contacts throughout the

community for support. One way this has been realized is by making contact with various area industries. I had worked a period of years in the mining industry and knew of different salvageable material available from the Anaconda Company. I was able to acquire pipe and fittings for burners on our gas kiln as well as fencing to go around our kiln area. I took the precaution of fencing the kiln for both safety and security reasons. The fence limited the possibility of vandalism and allowed me to control the access into the kiln area. Two wheels were fabricated at one of the Anaconda Company boiler shops from dimensions I had abstracted from a purchased wheel. The Montana Power Company donated the gas supply line which we installed from the West Junior High School's main supply line to our kiln area.

Generating community interest in the school's art program has made access to its resources more readily available. I have endeavored to accomplish this through various means, such as students demonstrating their ceramic skills at local art shows. We gained exposure for our program by written acknowledgements and the presentation of finished pieces created by the ceramic department to those who had helped out either in materials, expertise, or support. The usual response we received to this has been, "Thank you. If there is anything else we can do to help you, let us know."

3. PROFESSIONAL RESOURCES

3.1 Area Residents

In developing a ceramic program one must not only be able to procure materials but also to draw on resources which relate to the instruction and understanding of a wide scope of ceramic art. Locally I have found only one part-time practicing potter, but there are other areas of the state where many individuals are working in the craft. By having some of them come to our school to put on demonstrations, we have found that these individuals and others in different art fields constitute a valuable and willing reservoir of expertise and experience. For example, John Ward of Victor, Montana, gave a demonstration in dry throwing techniques, thereby giving the students an opportunity to experience another point of view.

3.2 Professional Groups

Professional groups are a ready resource. In Butte we have chapters of the Montana Institute of Art (MIA) and the Montana Arts Council (MAC). Also membership in the Montana Art Educators (MAE) has been very beneficial because of the opportunity for the exchange of ideas relating to art in education. These groups are made up of professional artists, educators, and interested lay people. By belonging to these groups, we can influence the choice of workshops held and the individuals who present them statewide. They offer

educators a chance to talk over problems and ideas together on a statewide basis.

3.3 Publications

The base of any art curriculum is a good library. Up-to-date books, periodicals, and slides must be purchased, and the funds for these can often be obtained through the library and audio-visual departments of the school, instead of coming from the Art Department budget. At West Junior High we have found this to be a viable way to obtain resources. A list of books and films which we have obtained in this way are included in the Appendix on page 16.

4. SUMMARY

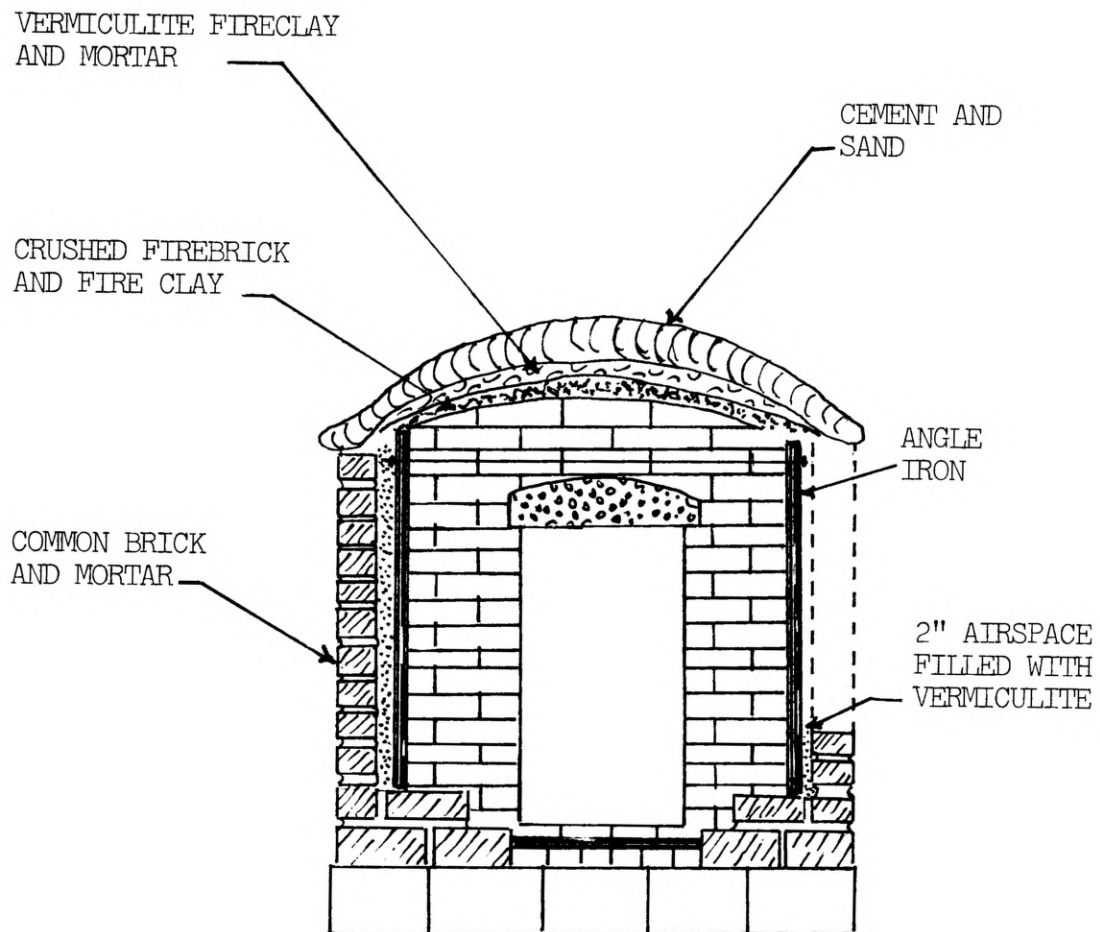
It has been shown that there are alternate ways of obtaining funds and resources for an art program. Through these methods, I have built a ceramic program that originally consisted of two wheels in a corner of my art room into a separate area containing twelve wheels, two kilns, a dough mixer, a pug mill, a slab roller, and a clay extruder, as well as a large selection of raw materials and associated tools.

In conclusion, I would like to state that the foregoing is offered only as a means of developing resources by which the physical necessities for a ceramic program can be obtained. An instructor must also have the personal motivation to seek out these resources and a solid background in ceramic education so that he can develop artistic and perceptual awareness as well as a degree of manual skill in his students.

APPENDIX

KILN MODIFICATIONS

2300° Insulating Fire Brick 24 Cubic Feet
Sprung Arch Kiln Modified for Protection
and Increased Insulation



Itemized statement submitted for gas kiln to ESEA, Title IV,
Part B, 1976.

4	Burner Nozzles	@12.50	\$ 50.00
30	Cinder Blocks	@ .49	\$ 14.70
200	Low Duty Fire Bricks	@ .36	\$ 72.00
300	Insulation Straight Bricks	@ 1.25	\$375.00
20	Feather Edge Skews Bricks	@ .60	\$ 12.00
10	Clipper Long Bricks	@ 1.57	\$ 15.70
200	Clipper Straight Bricks	@ .58	\$116.00
20	Empire Soaps Brick	@ .50	\$ 10.00
1	Pilot Safety Valve Shut off		\$ 6.00
1	Gas Pressure Guage		\$ 15.00
2	Yards of Concrete	@32.00	\$ 64.00
4	Burners	@26.00	\$104.00
2	Missou Castable 3000 Degrees		\$ 40.30
	total		\$934.75

List of publications acquired through Library Funds.

- Ball, F. Carlton
Lovoos, Janet Making Pottery Without A Wheel
Covers basic hand building
Van Nos Reinhold 1965
- Ball, F. Carlton Syllabus For Beginning Potters
Basic concepts in pottery and instruction
Keramos Books 1972
- Harvey, Roger Building Pottery Equipment
Shows how to build all equipment necessary
for a ceramic studio. One of the first
books I suggest to beginning instructors.
New York, Watson-Guption 1975
- Kriwanek, Franz F. Keramos
Presents the necessary technique of pottery
Keramos Books 1973
- Leach, Bernard A Potter's Book
Influential and inspiring
London, Faber 1976
- Rhodes, Daniel Kilns
Design construction and operation
Chilton Books 1968
- Rhodes, Daniel Clay and Glazes for the Potter
Indispensable reference
Rador, Penn. Chilton Books 1974
- Rhodes, Daniel Stoneware and Porcelain
Chilton Books 1959
- Riegger, Hal Raku, Art and Technique
New York Van Nostrand Reinhold 1974
- Skutt Educational Ceramics A basic Course In Pottery
A six-part color and sound film strip
presentation to augment teacher instruction