R E P O R T   R E S U M E S

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THE EFFECTIVENESS OF THREE MOTIVATIONAL METHODS (MEDIA,
SUBJECT MATTER, AND COMBINATION MOTIVATIONS) IN AN ART
PROGRAM IN THE ELEMENTARY GRADES.
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    THE MAJOR OBJECTIVE WAS TO DETERMINE THE RELATIVE
EFFECTIVENESS OF THREE METHODOLOGICAL APPROACHES TO THE
TEACHING OF ART IN THE ELEMENTARY SCHOOL. QUESTIONNAIRES
ASKING HOW MUCH PERSONAL INVOLVEMENT, ART QUALITY,
UNIQUENESS, AND PRIDE WERE GENERATED BY EACH MOTIVATIONAL
TREATMENT WERE COMPLETED BY OBSERVERS AND ART TEACHERS FOR 90
LESSONS. EACH GRADE LEVEL RECEIVED FIVE SERIES OF A WIDE
VARIETY OF ART MATERIALS. EACH SERIES USED ALL THREE
TREATMENTS. FOR EXAMPLE, IN A JEWELRY SERIES, THE SUBJECT
MOTIVATION WAS ANIMAL CLAY PINS, THE MEDIA MOTIVATION WAS
PASTE JEWELRY, AND THE COMBINATION MOTIVATION WAS PLANT FORMS
IN CLOISONNE. ANALYSES OF VARIANCE SHOWED SUBJECT AND
COMBINATION MOTIVATIONS TO BE MORE EFFECTIVE ON THE STUDENT
INVOLVEMENT CRITERIA, AND COMBINATION MOTIVATIONS TO BE MORE
EFFECTIVE ON THE ART QUALITY CRITERIA. IN SIXTH GRADE,
COMBINATION MOTIVATION WAS MOST EFFECTIVE, SUBJECT SECOND,
AND MEDIA LEAST EFFECTIVE (THE AGE OF REALISM). IN FOURTH AND
FIFTH GRADES, COMBINATION WAS BEST, MEDIA SECOND, AND SUBJECT
MOTIVATION LEAST EFFECTIVE (THE AGE OF TINKERING). IN SECOND
AND THIRD GRADES, SUBJECT MOTIVATION WAS MOST EFFECTIVE (AN
AGE OF SYMBOLS). NO DIFFERENCE WAS FOUND AT FIRST GRADE. (TC)

FINAL REPORT

Project No. S-388
Grant No. OE-6-10-052

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(Media, Subject Matter, and Combination Motivations)

IN AN ART PROGRAM IN THE ELEMENTARY GRADES

February, 1967

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Office of Education
Bureau of Research

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(Media, Subject Matter, and Combination Motivations)

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Project No. S-388
Contract No. OE-6-10-052

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THE EFFECTIVENESS OF THREE MOTIVATIONAL METHODS

(Media, Subject Matter, and Combination Motivations)

IN AN ART PROGRAM IN THE ELEMENTARY GRADES.

I. INTRODUCTION

A. __Problem__. How can elementary school children in art
class be most effectively motivated by the teacher?
Should the teacher usually give a combination motivation--
one which contains both subject matter ideas and a dis-
cussion of the properties of the media? Is one or the
other emphasis more important at certain grade levels;
for example, do sixth graders need more media motivation
than first graders? Irregardless of grade level, is one
type to be preferred to reach certain teaching goals?
At which grade levels do students respond more enthusias-
tically to subject matter motivations? This investigation
attempts to shed some light on questions such as these.

B. __Background__. To some extent, for the purposes of study,
these two methods, subject vs. media, have been artificially
dichotomized. Certainly most art teachers use a blend of
the two methods, yet, on visiting classrooms, one can also
see this teacher relying strongly on theme motivations,
another employing material motivation. While the advocates
of both philosophies recognize, and, to greater or lesser
degrees, make use of the other, nevertheless, two approaches
to motivation stand out. These two approaches bear some
resemblance to the schism among aestheticians between the
expressionists, such as Croce and Collingwood, and the
formalists, such as Bell and Fry. Viktor Lowenfeld was
an art educator · who emphasized subject matter motivations,
especially those dealing with the child's experiences.
These motivations revitalized past experiences of the child
and made him more sensitive to his environment. "...the
individual's sensitivity toward perceptual, intellectual,
and emotional experiences is deepened and integrated into
a harmoniously organized whole."

On the other hand, the experimentation-oriented media
motivation stresses the rich and varied manipulative
possibilities of the media. This approach, rather than
emphasizing subject matter, themes, and past experiences

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as motivation, stresses the creative growth achieved through the experience of manipulating the media itself. Ivan Johnson expressed this philosophy as follows: "Creative action is dependent on a permissive atmosphere in which opportunity prevails to manipulate, explore, evaluate, and achieve in a fluid process a solution that is self-satisfying." Victor D'Amico, inclined toward media motivation, criticized over-emphasis on subject-child-experience as follows: In the new education the opposite is too often true--all the emphasis is put on the child as an individual, but the motivation, processes and tools for developing individuality remain vague and confused."

With these divergent philosophies in mind, this study attempts to evaluate the relative merits of each approach. The criteria used in this study are based upon the amount of interest, attention span, and involvement generated in the pupils by these respective methods and upon amount of aesthetic quality and design quality in the works produced.

C. Review of Related Art Education Research. Basic to the area of art education in the public schools is the premise that motivation becomes a major factor in the growth and aesthetic output of the child. In surveying the field of art education research, few empirical studies were found which dealt with questions of motivational effectiveness. Research has shown that motivation of various types tends to increase aesthetic growth. Empirical studies in the field such as Lansing's and Kendrick's showed that motivation in art lessons does effect the end product in terms of aesthetic growth; discussion motivation, e.g., "we do chores," was most effective, field trips preceeded by discussion were next, and mechanical audio-visual motivations were least effective. McVitty's study showed that motivations involving strong interaction and participation between student and teacher were most effective in aesthetic growth.

Burkhart reported that both subject matter "if" questions and media "how" questions are necessary for art gains. He finds suppositional "if" questions necessary for originality of idea; the media "how" questions are necessary to develop preparedness.

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The differences in motivational effectiveness brought about by greater physical and mental maturity have been investigated by Gaitskell and Douglas. Gaitskell reported that her research showed that kindergarten children in the manipulative stage worked best without teacher motivation. She also reported that kindergarten children in the later symbolic stage soon exhaust their own ideas and require some motivation. Douglas reported that the aesthetic growth of the second graders was greater when they chose their own subject matter, although their frustrations heightened under free theme choice (our findings have corroborated both of her conclusions).

The value of experiences in varied media is supported by Heberholz's study of second graders which showed that those who were exposed to clay modeling were able to draw better figures. However, the research of Mattil, Beitrel, and others showed that while student satisfaction was greater using varied media, their aesthetic growth was not as great.

D. Objectives. The major objective underlying this study was to determine the relative effectiveness of three methodological approaches to the teaching of art in the elementary school. One of the motivational techniques used was subject matter motivation. Writers such as Lowenfeld, Keiler, Dewey, Barkan, and Knudsen feel that one of the most valid forms of art motivation in the elementary grades is that which is based on the past life experiences of the participating child. Art then becomes an expression and vital means of interpreting one's self in conjunction with one's environment through subject matter motivation.

Contrasted to the subject motivated art lesson is the media motivated art lesson, which finds its basis in the rich, beautiful, and varied manipulative possibilities offered by the media. Writers such as Hoover, Johnson, D'Amico, and Erdt are not at all opposed to subject motivation, but, indicate in their writings a distinct leaning toward media motivation. These educators tend to feel that the experimentation and direction with the plastic qualities of the art media becomes a major important motivational force for art.

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II. METHOD

A. <u>The Measuring Instrument</u>. The goals of this study are to investigate the effectiveness of these methods in the elementary grades. Several criteria will be used; some emphasizing personal involvement, others emphasizing art quality.

The personal involvement criteria include amount of involvement, pride, intensity of working behavior at 10, 20, and 30 minutes, amount of intellectual and emotional expression.

The art quality criteria include use of media, use of design principles, overall art quality, development of technical proficiency. (see attached instruments in the appendix).

B. <u>The Motivational Treatments</u>. One of the most creative aspects of the study was the devising of motivations which were primarily subject matter, media, or combination types. In order to control for the variation of materials, the teacher presented all three types of motivations using similar materials. (The lessons were presented in differing orders for each series.)

An india ink and water color series given in a sixth grade will serve as an example.

1. Media Motivation--ink line on wet and dry paper, water color blending on wet and dry paper.
2. Subject Matter Motivation--three ghost stories from <u>Famous Ghosts in American Homes</u> were read, from which the children picked one to illustrate with ink and water colors.
3. Combination Motivation--three Greek myths were read for the theme motivation; for the media motivation, students painted on wet paper with ink and water color, let it dry, then with crow quill pens, delineated shapes and figures.

The following descriptions give the reader a fuller sense of the manner in which the three types of motivations were used with the same materials. (In order to control for the extraneous variable of different materials, each material was presented in all three types of motivations.)

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TITLES OF SOME OF THE LESSONS PRESENTED

SERIES	GRADE	SUBJECT MATTER MOTIVATION	MEDIA MOTIVATION	COMBINATION MOTIVATION
WATER-COLOR	6	memory painting of model	dry brush, chizroscuro	microscope slides, analogous colors
CLAY SCULPTURE	6	clay jewelry, insect themes	furnace cement	Rennaissance theme, bas relief
WATER-COLOR	5	Visitors to our class	wet into dry, dry technique	Rennaissance Fresco painting
CRAYON	4	family portrait glued to mesonite, saw into jigsaw puzzle	limited palate	playground action, value contrast
JEWELRY (GLASS)	4	Clay Glazed Animal Pins	Egyptian Paste jewelry	Plant life Cloissonne; enamel on copper
WATER-COLOR	4	Famous Ghosts	Classical watercolor technique	musical instrument still-life, Dry brush

The instructors who presented the lessons were expert teachers with a great amount of experience. Mr. Pete J. Carr, who presented third, fourth, fifth, and sixth grade lessons is Assistant Professor of Art and Supervisor of Elementary Art, Burris Laboratory School, Ball State University; he has had 15 years of public school teaching experience. Mr. Gerry Mendelson, who presented first, second, and sixth grade lessons is currently on the faculty of the Department of Art Education, Indiana University, has been Assistant Professor of Art at Ball State University, and has had many years of public school teaching experience.

Each lesson presented was evaluated by approximately four observers who were in the classroom watching the students. The observers, who were college juniors preparing to be elementary and art teachers, judged the students on how intensely they were working after 10, 20, and 30 minutes, amount of interest, pride, etc. The art teacher judged his own lesson on questions of an

aesthetic nature, which the observers would have found difficult to answer--such as amount of emotional and intellectual expression, use of materials, use of design principles, art quality, and degree to which the lesson fulfilled the teacher's educational objectives.

C. Design. 525 observations were made, of 87 lessons, in 19 classes at two schools. The fourth and fifth grade samples had to be combined. Approximately 100 observations on 17 lessons in 4 classes were collected at each grade level.

D. Analysis. The data was analyzed by one- and two-way analyses of variance for each of the 19 questions for each grade level. A total of 140 one-way analyses of variance were made, plus 19 two-way analyses of variance. Also, four chi square were done on the take-home products criterion.

III. RESULTS

A. <u>Presentation of Table of Results.</u> The table presents the statistical results of the study. The meaning of these numbers follows immediately in sections B, C, D, and E. Reading down the left margin, one sees the 17 criteria: percent of the class working at ten minutes, 20 minutes, need for no help, good student questions, involvement, uniqueness, etc. Scanning across the top margin, one sees the results for each grade level, followed by the average across grade levels. Beneath the grade level appears the abbreviations med, com, and sub; these stand for media motivation, combination motivation, and subject matter motivation. The mean for three motivations follows.

F1 is the result of the analysis of variance on the methods. <u>If</u> this number approached the .05 level of significance (4.0 was usually significant at .05), then, another analysis of variance was made on only the best treatment vs. the worst treatment. This score is called F2. One asterisk following a score means it was significant at the .05 level; two asterisks mean it was significant at the .01 level.

B. <u>6th Grade-Combination Best, Media Worst.</u> A very strong preference for combination motivation over media motivation was revealed in the sixth grade. The eight measures which clearly favored one motivation all showed the <u>combination</u> motivation to be most effective. The eight measures which showed one motivation to be less effective all showed <u>media</u> motivation to be least effective at this grade level. Combination motivation was shown to be most effective on the following measures:

Children were working more intensely at <u>30 minutes</u> (F=3.3*) (see footnote) and had more emotional expression (3.6*). The children's art products showed more <u>uniqueness,</u>

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*The F results of the analyses of variance are reported in parentheses after the finding. If it is significant at the .05 level one asterisk follows it; if significant at the .01 level two asterisks follow it; F scores between the most and least effective treatments are given.

Observer's Sheet

	GRADE 1						GRADE 2						GRADE 3					
	Med.	Com.	Sub.	Mean	F_1	F_2	Med.	Com.	Sub.	Mean	F_1	F_2	Med.	Com.	Sub.	Mean	F_1	F_2
10 min.	8.1	9.7	9.3	9.1	3.0	4.3*	8.6	8.7	9.6	8.9	.8		8.6	7.5	8.9	8.4	6.7**	14.4**
20 min.	6.9	7.3	7.6	7.5	.1		8.2	7.7	3.2	8.0	2.1	5.8*	6.6	7.8	3.3	7.8	6.3**	10.8**
30 min.	6.9	6.4	6.2	6.3	.0		7.5	6.3	8.5	7.5	2.6	7.4*	4.5	7.2	7.7	6.4	3.7*	5.7*
Need for no help	6.8	7.5	6.4	6.9	1.4	2.1	6.5	5.8	6.0	6.1	.5		6.4	5.5	5.0	5.7	1.1	
Need for no help in Subject	8.4	6.6	7.5	7.5	3.7*	6.4*	7.4	6.0	7.4	6.9	1.5		7.3	7.6	7.3	7.6	.1	
Need for no help in Media	8.5	3.0	7.4	7.9	1.3		5.9	6.7	6.7	6.4	.7		7.0	6.2	7.2	6.3	.7	
Study Questions	1.6	2.3	3.0	2.5	5.3*		3.5	3.3	3.7	3.5	.1		2.2	2.4	2.7	2.4	.2	
Involve- ment	6.6	6.5	6.5	6.5	.0		7.2	6.5	7.8	7.2	2.2	4.5*	4.8	7.3	7.3	6.9	5.3**	8.6**
Uniqueness	5.3	5.0	5.1	5.1	.1		5.8	6.6	7.4	6.7	6.7		5.4	4.2	5.4	4.9	.5	
Pride	5.2	5.7	5.7	5.6	.5		6.4	6.3	7.4	6.7	1.9		5.8	6.2	6.7	6.2	1.0	

Teacher's Sheet

	GRADE 1						GRADE 2						GRADE 3					
	Med.	Com.	Sub.	Mean	F_1	F_2	Med.	Com.	Sub.	Mean	F_1	F_2	Med.	Com.	Sub.	Mean	F_1	F_2
Intellect- ualize	2.7	6.0	6.7	5.1	7.3*	11.0**	2.3	5.3	7.7	15.4	8.2**	20.**	4.3	5.5	5.0	4.9	.4	
Emotion- alize	5.3	4.3	4.7	4.8	.5		7.0	5.7	6.0	6.2	.8		5.0	6.0	4.7	5.2	.1	
Art Quality	5.3	4.3	4.7	4.3	.6		7.0	5.7	6.0	6.2	1.9		5.0	6.0	4.7	5.2	.1	
Media Use	5.7	5.3	5.4	5.4	.3		5.7	5.7	6.3	5.9	.7		6.0	6.0	6.3	6.1	.0	
Design	5.0	5.3	5.3	5.2	.5		5.3	6.0	5.3	5.5	.3		4.0	4.5	5.3	4.9	.3	
Technique	5.7	5.0	4.7	5.1	1.4		5.0	5.3	5.3	5.2	.2		5.0	4.5	4.3	4.6	.1	
Teacher's Objectives	5.3	5.7	5.7	5.5	.2		5.3	6.0	5.7	5.7	.6		3.3	5.0	4.3	4.2	.2	

Observer's Sheet

	GRADE 4 & 5						GRADE 6						GRADE 1-6 Ave.		
	Med.	Com.	Sub.	Mean	F_1	F_2	Med.	Com.	Sub.	Mean	F_1	F_2	Med.	Com.	Sub.
10 min.	8.4	8.6	8.2	8.4	.2		7.9	8.3	7.7	7.9	.5		8.3	8.6	8.7
20 min.	9.3	9.5	8.1	9.0	7.2*	10.7**	7.8	8.2	8.1	8.0	.2		7.7	8.9	8.4
30 min.	3.9	9.1	7.7	8.6	3.3	4.5*	7.1	8.0	7.3	7.5	1.8	3.3	6.9	7.3	7.6
Need for no help	5.7	6.3	6.2	6.1	.4		6.4	7.1	7.3	6.9	2.4		6.4	6.4	6.2
Need for no help in Subject	6.3	6.3	7.4	6.8	1.0		6.6	7.7	7.7	7.3	2.6		7.3	6.9	7.5
Need for no help in Media	6.5	7.5	7.1	7.0	.9		6.9	7.7	7.9	7.4	2.3		6.8	7.2	7.2
Study Questions	4.7	4.1	4.0	4.3	.4		3.4	2.8	3.1	3.1	.9		3.1	3.1	3.3
Involvement	6.4	7.6	7.4	7.3	2.3		6.4	6.4	6.6	6.4	.2		6.4	6.9	7.1
Uniqueness	6.3	5.9	6.8	6.3	.4		6.2	7.0	6.8	6.6	.4		5.8	5.2	6.3
Pride	5.7	7.0	6.7	6.4	3.2*		5.1	5.7	5.4	5.8	1.6	2.5	5.6	6.3	6.4

Teacher's Sheet

	Med.	Com.	Sub.	Mean	F_1	F_2	Med.	Com.	Sub.	Mean	F_1	F_2	Med.	Com.	Sub.
Intellectualize	6.5	6.8	4.2	5.9	3.5	6.5*	4.5	6.6	7.5	6.2	5.2*	4.2*	4.1	6.1	6.2
Emotionalize	6.3	6.0	5.3	5.9	.4		4.7	6.4	6.1	5.7	2.0	3.6	5.7	5.7	5.4
Art Quality	6.3	6.0	5.3	5.8	.4		4.7	6.4	6.1	5.3	2.0	4.1*	5.6	5.7	5.4
Media Use	6.5	7.3	4.3	6.0	3.3*	8.3*	6.3	7.3	6.3	6.7	1.0	2.5	6.0	6.1	5.7
Design	6.0	6.7	3.7	5.5	4.3*	9.0*	5.7	7.0	6.1	6.3	1.4	2.3	5.2	5.9	5.1
Technique	5.5	7.7	3.3	5.5	10**	18.**	6.8	6.9	6.3	6.7	.2		5.6	5.9	4.8
Teacher's Objective	7.0	8.5	4.3	6.6	4.0*		5.3	7.3	6.4	6.9	2.0	4.1	5.2	6.6	5.3

pride (2.5), art quality (4.1*), best use of media
(4.1*).

Media motivation was least effective for producing
art quality (4.1), emotional expression (3.6*) and intel-
lectual expression (3.3), fulfillment of the teacher's
educational objectives (4.1*), unique products, and
pride in the product (2.5). Students needed most help
both in media (3.0) and theme ideas (3.0), under the media
motivation.

Most intellectual expression was attained through the
subject matter motivations (5.22*).

C. 4th and 5th Grade--Combination Best, Subject Matter
Worst. Fourth and fifth grade students were working most
intensely at 20 minutes (10.3**) and 30 minutes (4.5*) on
the combination motivations. On combination motivation
lessons, they were most involved and had greatest pride
in their products (3.18*). On combination motivation
lessons, students showed most technical proficiency
(18.6**).

Subject matter motivation at the fourth and fifth
grade level was the least effective method. The worst
use of design principles (9.0*), least technical pro-
ficiency (18.6**), least fulfillment of the teacher's
educational objectives (4.02*), least intellectual
expression (6.5*), and poorest use of media (8.5*)
occurred during subject matter motivations.

D. 3rd Grade- Subject Matter Best, Media Worst. At the
3rd grade level, subject matter was found to most intensely
involve the students at 10 minutes (4.9*), at 20 minutes
(10.6**), and at 30 minutes (5.7*). Subject matter
motivation produced greatest involvement (8.6*) and more
pride.

The teachers' answers did not reveal any differences
regarding the greater effectiveness of one motivation.

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*The F results of the analyses of variance are reported
in parentheses after the finding. If it is significant
at the .05 level one asterisk follows it; if significant
at the .01 level two asterisks follow it; F scores between
the most and least effective treatments are given.

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E. <u>2nd Grade- Subject Matter Slightly Better</u>. At the
second grade level, subject matter motivation more in-
tensely involved the students after 20 and 30 minutes
(5.4*, 7.4*). It also generated more involvement (4.5*),
more uniqueness (3.3), more pride (2.5), and more intel-
lectual expression (24.0**). However, media motivation
produced greater emotional expression (4.0) and slightly
more art quality.

F. <u>1st Grade</u>. At the first grade level, no one motivation
was shown to be superior. Combination motivations resulted
in least need for help (2.1) and most intense working
after 10 minutes (4.3). Best student questions and the
greatest intellectual expression occurred in subject
matter motivations (7.2*) and (18.0**).

G. <u>Treatments Effective Across Grades</u>. <u>Pride</u>, <u>uniqueness</u>,
<u>involvement</u>, and <u>intellectualizing</u> all favored subject
motivation. (F=4.3*, 1.0, 3.0*, 8.4**). This indicates
that students were able to put more of themselves into
the subject motivations. Indeed, that is frequently the
teacher's goal in giving subject motivations; for example,
Viktor Lowenfeld's motivations always stressed the impor-
tance of the student putting himself and his experiences
into his art--in order for greatest creative, personality,
and mental growth to take place. This investigation also
found that, for all three times (10 minutes, 20 minutes,
and 30 minutes) (F's .5, .8, .8) subject motivation was
slightly favored, then combination, then media;
these differences were not at all significant however.

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*The F results of the analyses of variance are reported
in parentheses after the finding. If it is significant
at the .05 level one asterisk follows it; if significant
at the .01 level two asterisks follow it; F scores between
the most and least effective treatments are given.

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SUBJECT MOTIVATION BETTER ON PERSONAL INVOLVEMENT CRITERIA

Criterion	Mean for all Grades			F
	Subject	Combination	Media	
Pride	6.4	6.3	5.6	4.3*
Uniqueness	6.2	5.7	5.8	1.0
Involvement	7.1	6.9	6.4	3.0*
Intellectualizing	6.2	6.0	4.0	8.4**
10 minutes	8.7	8.6	8.3	.5
20 minutes	8.4	8.2	7.8	.8
30 minutes	7.5	7.4	6.9	.8

On the other hand, the study also found a little
supporting evidence for those opposed to Lowenfeldian
child-centered methods. These experts, such as D'Amico,
who lean toward media motivation, felt that "art" was
being short-changed in such child-centered, quasi-thera-
peutic emphases. Subject motivation did tend to be slightly
less effective on two criteria, technical proficiency and
art quality (F's 2.1, .8).

However, on all of the "art" criteria (use of design
principles, use of media, technical proficiency, and art
quality), combination motivation was as good, and usually
better, than just media motivation alone.

COMBINATION AND MEDIA MOTIVATIONS SLIGHTLY BETTER ON ART
CRITERIA

Criterion	Mean for all Grades			F
	Combination	Media	Subject	
Art quality	5.7	5.7	5.3	.8
Technical profi-ciency	5.9	5.6	4.8	2.1
Use of media	6.3	6.0	5.3	.7
Use of design principles	5.9	5.2	5.2	1.4

Combination motivation, in addition to being slightly
most effective on the art criteria, was almost as effective
as subject mativation in terms of the seven personal-in-
volvement criteria (see previous chart).

SUBJECT MOTIVATION BETTER ON PERSONAL INVOLVEMENT CRITERIA

PRIDE
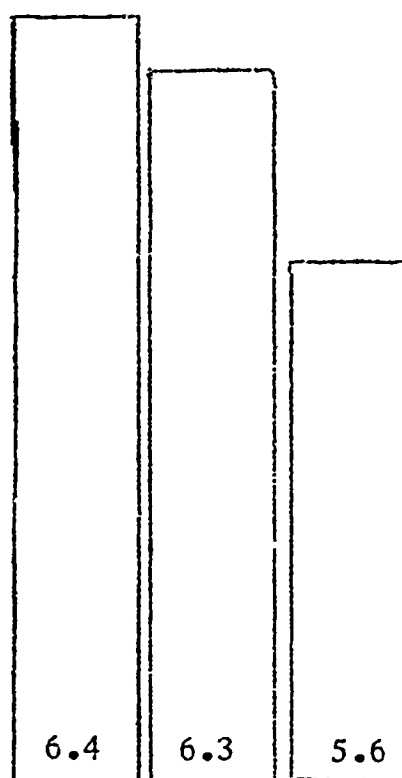
6.4	6.3	5.6
sub.	com.	med.

students pride in work
sig. at .05

UNIQUENESS
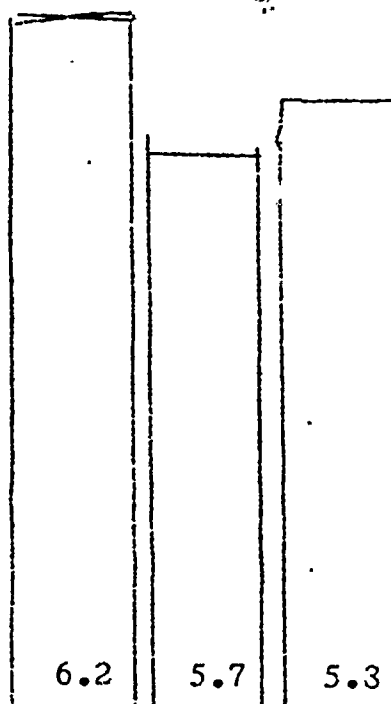
6.2	5.7	5.3
sub.	com.	med.

uniqueness vs. sameness

INVOLVEMENT
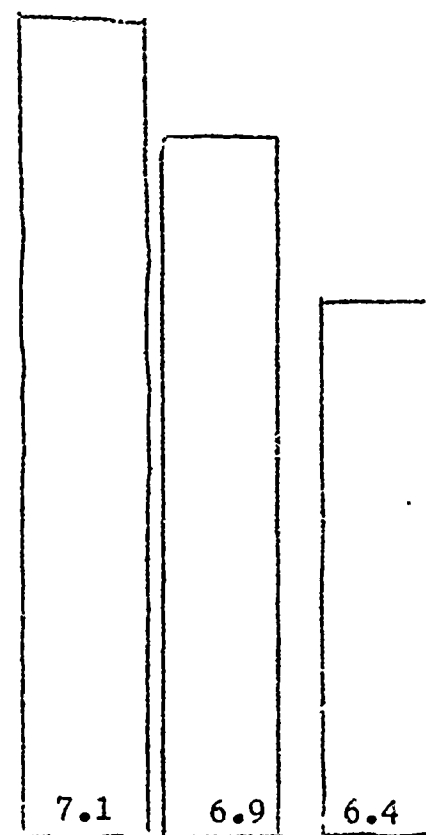
7.1	6.9	6.4
sub.	com.	med.

involvement with lesson
sig. at .05

INTELLECTUALIZING
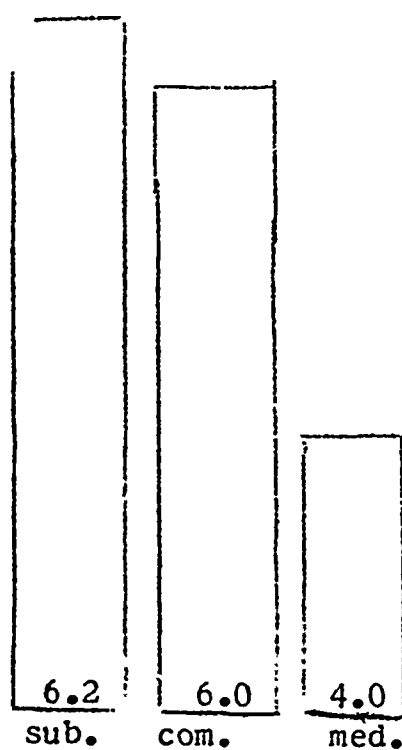
6.2	6.0	4.0
sub.	com.	med.

amount of intellectuali-
                    zing
    sig. at .ol

20 MINUTES
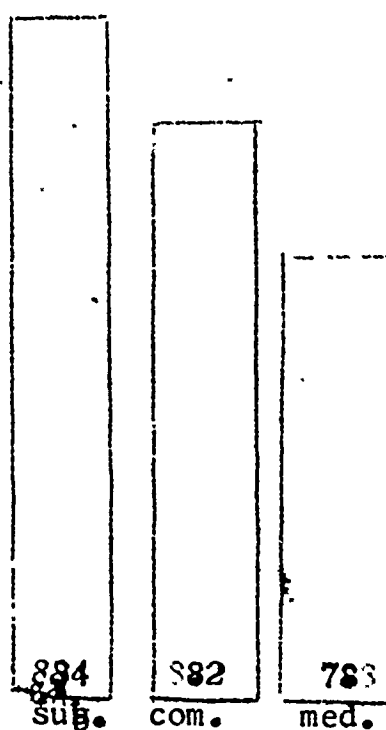
884	882	783
sub.	com.	med.

per cent of students
deeply engrossed

30 MINUTES

775	741	69
sub.	com.	med.

per cent of sutdents
deeply engrossed

COMBINATION AND MEDIA MOTIVATIONS SLIGHTLY BETTER ON ART CRITERIA

ART QUALITY

5.7	5.7	5.3
com.	med.	sub.
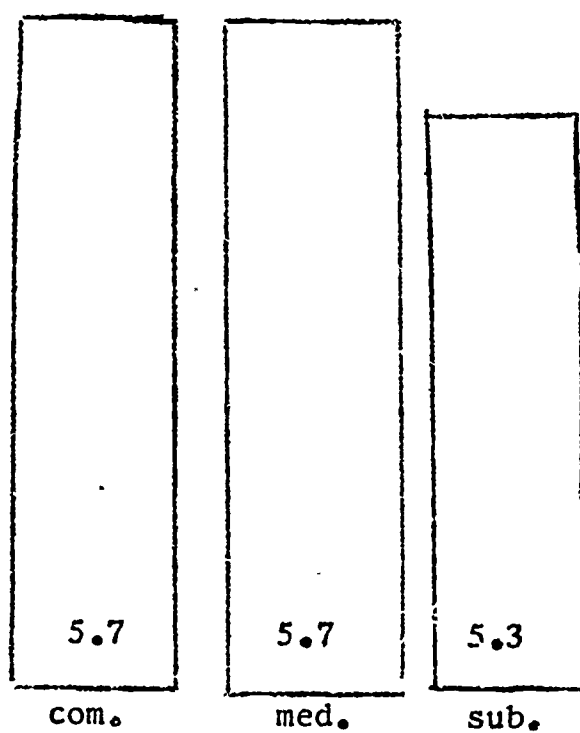
artistic quality of the work

TECHNICAL PROFICIENCY

5.9	5.6	4.8
com.	med.	sub.

development of technical proficiency

USE OF MEDIA

6.3	6.0	5.3
com.	med.	sub.
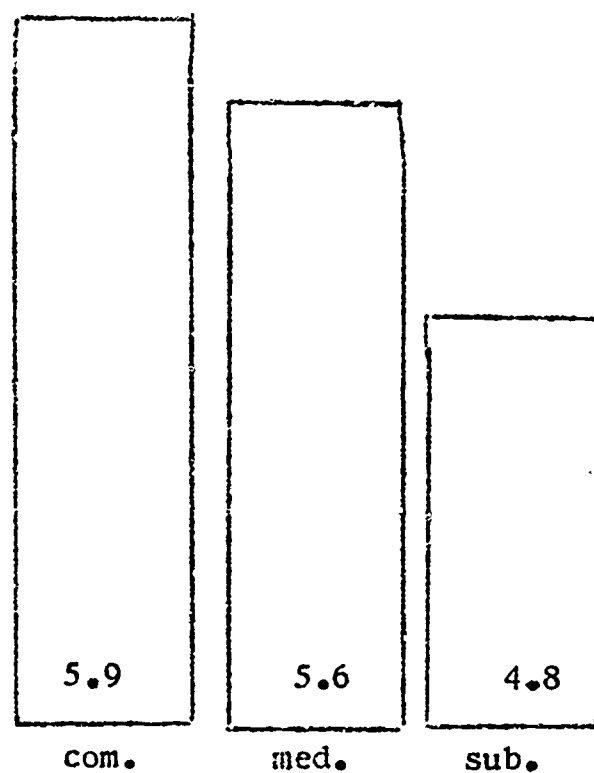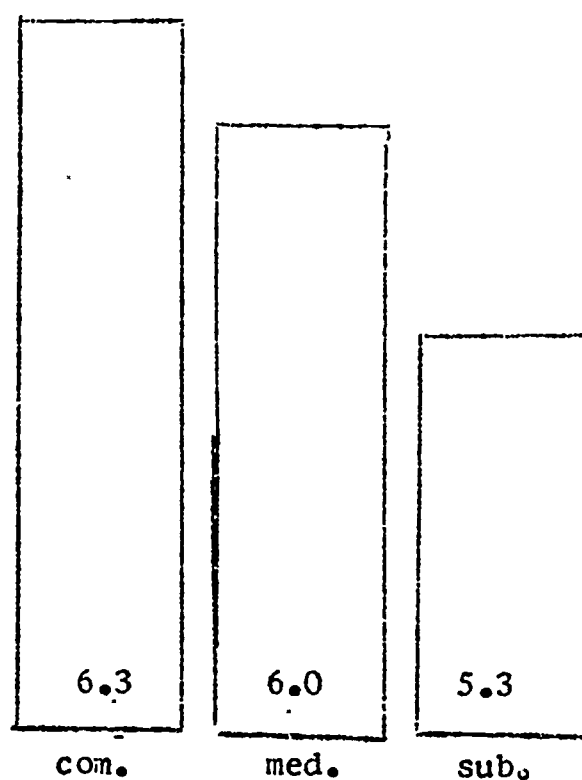
how well media was used

USE OF DESIGN PRICIPLES

5.9	5.2	5.2
com.	med.	sub.
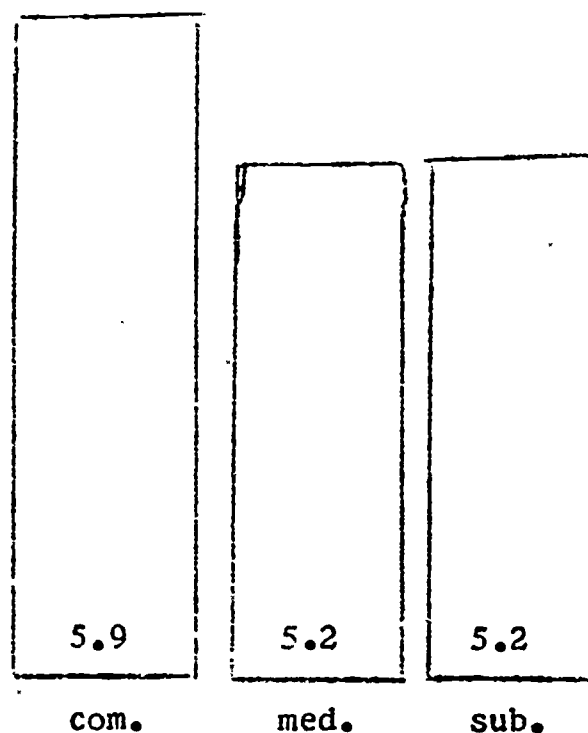
how well design pricinles were used

So, a main recommendation of this study is that, when the art teacher is in doubt as how to motivate, a combination motivation will probably be most effective. Even if a media ("art") idea as the basic goal, the combination motivation would still be suggested.

There are two exceptions to the general recommendation fo combination motivation. If "take home products" are the desired goal (for example, Christmas gifts for Mom and Dad) media motivation is recommended. If personal expression is the desideratum, subject motivation rather than media motivation should be used.

Take home products: Media motivation produced more products which reached home. (chi square significant at .05), The procedure for this phase of the study was as follows; all the childrens' art work was handed back at the end of the year. Phone calls were made that evening to the parents, asking them which art works reached home. Our premise was that children would throw away the art works they did not want their parents to see.

PIECES OF ART WORK WHICH CHILDREN TOOK HOME--CHILDREN IN GRADES 3 TO 6

	Reached home	Didn't reach home
Media	138	80
Combination	113	72
Subject	110	101

x^2 significant at .05 level

One would expect media motivation to result in more presentable products. This was what this study found-- that children in grades 3, 4, 5, and 6 did bring more of the media motivated art works home.

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IV. DISCUSSION

The preceding chapter, III Results, has described which motivational methods were most and least effective at each grade level, and in general. Chapter V, Conclusions, Implications, and Recommendations, which follows the present chapter, interprets these main results in terms of application for the public school teacher. In a sense, V is the most important chapter, for its recommendations will have most impact on educational change.

The present chapter, IV, contains a discussion of some other results of the study. Findings of lesser interest have been reserved for this chapter, in order that the preceding and following chapters would have greater clarity. While the general reader may not find much of interest here, the following findings may be helpful to another researcher.

A. <u>Grade Level Differences Across Treatments</u>. Which grade levels were most involved, had most pride, greatest art quality, etc.? These findings came out of the two-way analyses of variance. Significant differences at the .05 and .01 levels were found for <u>all</u> the personal involvement criteria (10, 20, 30 minutes working, involvement uniqueness, pride, intellectualizing). This means that, irregardless of which treatment was given, certain grades did better than others. In general, as we might expect, the upper grades did better than the younger grades. This was true for working at 30 minutes, good student questions, uniqueness, and technical proficiency. Younger grades did better on working at 10 minutes, probably due to their shorter, more intense working span.

However, the study was not designed to answer these questions, since different judges, rather than the same judges, judged the different grades. Judges weren't told to judge the students in relation to other students in grades <u>1 to 6</u>; instead, they were told to judge the students in relation to the students' usual class work.

Yet, the wane and ebb of the criteria at different grade levels did suggest some possible hints for future studies. Many of the criteria were lower in third and sixth grade and high in fourth and fifth grade. It may

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be that the dips in third and sixth grades are equivalent
to those creativity drops that Torrance found in fourth
and seventh grades; the precocity and effects of edu-
cational enrichment upon the lab school students might
account for the year earlier development.

B. Treatment Across Grades. In addition to the overall
advantages of one or another motivation discussed in the
previous chapter, significant treatment differences were
revealed on two other questions. As would be expected,
significant differences (at the .01 level) were found that
least subject matter direction was given during media
motivation and least media motivation given on subject
motivations. This merely shows that, in the observers'
judgments, the teachers did give much less media help on
the theme motivated lessons and much less theme help on
the media motivated lessons. In other words, the teachers
were able to administer different treatments.

C. Two-Way Analysis of Variance. Results from grade,
treatment, and interaction of grade and treatment are
listed in this section. Results of general interest have
been presented in the chapter RESULTS. In brief, subject
motivations (across grades) were best on personal in-
volvement criteria with combination motivation being almost
as effective. Combination and media motivations were
most effective on art quality criteria. Results of less
general interest were presented in sections A and B of
the present chapter, concerning grade differences.

The following table of F scores merely lists all
results from the 2-way analysis of variance which were
significant at the .05 and .01 levels.

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CRITERIA	TREATMENT	GRADE	INTERACTION	CRITERIA	TREATMENT	GRADE	INTERACTION
10 min. work.		2.*		Intellectualize		3.**	3.**
20 min. work.	4.**	2.*	3.*	Emotionalize			
30 min. work.	6.**	3.**	3.**	Art quality			
Need for no help	4.**		2.**	Use of Media Design Principles			
Need for no help in subject							
Need for no help in media	3.**		2.**	Technical proficiency		3.*	2.*
Student questions	8.**		3.**	Teacher's objective			
Involvement	3.*	2.	2.**				
Uniqueness	7.**		3.**				
Pride	7.**		3.**				

D. <u>Take Home Products at Specific Grade Levels</u>. Media
motivation produced more take home products, as was dis-
cussed in the previous chapter. However, the disturbing
aspect of this finding is that it is directly contrary
to the main conclusions of the study. Grade three found
subject motivation best and media motivation worst of all
other criteria which differentiated, but strangely more
of the media motivated works reached home (significant
.1). Grade six found combination motivation best and
media motivation worst on the other criteria, but more
media motivated works were taken home (significant beyond
.01). Most strange is the finding in grades four and five
in which combination motivation was best and subject
motivation worst on several criteria; here, many more
subject motivated works were taken home (significant
beyond .01).

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These strange reversals seem to suggest that take-home products may be a completely different factor, unrelated to personal involvement and art quality. It might suggest that some children are aware of a great difference between their values and those of their parents, feeling that if he (the child) expresses himself in the work, the parent will not like to see the expression. It also brings to mind Getzels' finding--craftsmanship correlating with presented problems, originality correlating with student self-discovered problems. Transposing his findings to this study, it suggests that media motivated craftsmanly projects were taken home, whereas subject motivation's unusual products were too strange or messy to be exhibited to the parents.

PIECES OF ART WORK TAKEN HOME

	3rd GRADE		4th and 5th GRADE		6th GRADE	
	Home	Not Home	Home	Not Home	Home	Not Home
Media	36	12	42	25	60	43
Combination	22	10	41	31	50	31
Subject Matter	26	22	45	10	39	69
	(Favors Media, significant .1)		(Favors Subject, significant .01)		(Favors Media, significant .01)	

E. Pilot Study: A pilot study was conducted before the actual experiment. It consisted of 22 lessons in grades 1, 2, and 3. During this study the treatments and the

measuring instrument were being devised. Only two methods were used, media and experience (subject) motivation.*

Statistical analysis was by t tests between scores on subject and media motivation. As the findings from grades one and two were very similar, the data for the two grades was combined. Grade three's data revealed contrasting findings.

The general conclusion was that grades one and two favored media motivation, whereas grade three favored subject motivation. Bear in mind that in our major experiment, grade three also found subject to be most effective and media least effective. Thus, one half of the findings from the pilot study clearly corroborate the findings of the main experiment. These were also the strongest conclusions of the pilot study, as the many .01 significant differences show (see chart following).

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*Two years ago when this project was first being delineated, Viktor Lowenfeld's heavy emphasis on the child's experience as a motivating factor weighed on our minds. The rather extensive degree to which he himself advocated themes in which the child did not actually physically participate in the past experience or imagined event was not realized by the investigators. "How would you feel if you were a Pilgrim's child---a bright color,---an old sick grandmother living in a slum?" Also we were not as aware of the works of Torrance, Getzels, and others which has emphasized the importance of fantasy themes, e.g. "The lion that wouldn't roar." Our thinking on this issue is climaxed in our concurrent U.S.O.E. supported project, "The Relation of Aesthetic Quality to Socio-Economic Variables (Culturally-Advantaged and -Disadvantaged), Motivational Variables (Realism and Fantasy), and Budget Variables (Found vs. Expensive Materials)." Carr and Clements, co-investigators. In this new study, Subject Motivation is split into two types, realism (experience) and fantasy. (Also Media motivation is split into two types, free and costly materials). Therefore, the label "experience" motivation which was used during the pilot study has been changed to the more accurate and educationally meaningful term, "subject" motivation.

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However, the major study found no difference among treatments in first grade and mixed conclusions in second grade, in which personal involvement favored subject motivation while art quality tended toward media motivation. In the pilot study, on the other hand, personal involvement criteria (working at 30 minutes), involvement, and need for help criteria (need for help, help in subject) favored media motivation. Thus, the pilot findings from grades one and two did not support the findings of the main experiment. For this reason, the data of the main experiment was interpreted conservatively at grades one and two.

Findings of the pilot study are as follows:

First and second grade results favor media motivations over experience motivations.
Third grade results favor experience motivations over media motivations.

SPECIFIC FINDINGS OF THE PILOT STUDY
(*=sig. at .05; **= sig. at .01*) to scores between treatments

	GRADES 1&2 (all favor media)	GRADE 3 (experience)
Working Intensity at 20 minutes	.5	4.4**
Working Intensity at 30 minutes	1.5	3.9**
Involvement	3.0**	2.1*
Need for No Help	3.1**	3.5**
Need for No Help in Subject idea	1.8	2.3*
Need for No Help in Media	1.4	2.0

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CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

A. <u>Grade Six</u>. The greater interest in combination and
subject motivations in grade six, (at this level, media
motivation was least effective) seems to reflect the sixth
graders' interest in trying to capture the subject, their
concern for pictorial representation, chiaroscuro, per-
spective, their interest in myths, ghosts, adventure,
biography, history.

Erdt emphasized the sixth graders' intellectual
strength and his interest in integrated art activities.
At this level a unit studies or core curriculum approach
is often used. In this study, for example, a sex educa-
cation discussion was followed by figure drawing, his-
torical study of the Rennaissance was combined with bas-
reliefs.

Lowenfeld, in describing the sixth graders' psuedo-
realistic stage, emphasized their social awareness and
capacity for self-identification. He suggested lessons
in the figure's proportions and motions. Knudsen
and Christensen described the students' interest in
making objects appear as they actually are. Gaitskell
recommended figure drawing, portraits, still-life, land-
scape drawing, and perspective lessons for the sixth grade
level. D'Amico cited their keen interest in the human
figure and self portraits. Wachowiak and Ramsay pointed
out the students' interest in human activities, the com-
munity, and world events, in their environment as a source
in perspective, the beginning of a phase of hero worship.
Jefferson contrasts the upper elementary child's concern
with naturalism to the younger child's interest in direct
methods. However, at this level, students often cannot
think of a good subject on their own and become self-con-
scious about the quality of their idea; thus, some subject
motivation seems to give them what they need.

This study found media motivation by itself, to be
the least effective method in the sixth grade. D'Amico
wrote of the upper elementary teacher's plight of being
beseiged by children totally uninspired by the art media
before them, asking what to do. Erdt states that the prob-
lem is to not let techniques dominate the child's thinking.

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Perhaps the students want more than just "playing with materials" at this age; maybe anticipating high school and entering puberty, they want to learn more about life, nature, history, and be able to represent it in their art. However, media motivation should certainly not be excluded. This study found the combination motivation (that is, the lesson with both subject and media moti- vation) was the most effective method. Also, many art educators stress the importance of teaching design prin- ciples and new media at this level. Rather, the recom- mendation of this study is that, at the sixth grade, media motivations should be combined with subject motivations.

B. Grades 4 and 5. This study found combination moti- vation to be most effective at the fourth and fifth grade levels; media motivation was next and subject motivation was least effective.* Barkan describes the fourth grade as a time children love to tinker and build with a variety of tools and materials. He found construction activities which utilize their manipulative skills are a constant challenge and source of interest. His effective teachers spent time on helping children become aware of specific ways to do art work well. Cole found the comments "Bump the sides" and "Make it your own way," to be effective in the fourth and fifth grades. Erdt found nine year olds enjoy working with new materials, eager to improve skills, and asking many questions about technique. Lowenfeld wrote, concerning the 9-11 year old "gang age," "Getting acquainted with the functions and qualities of materials is the main aim." Linderman and Heberholz suggest, in the years of "beginning realism," 9-12, that teachers provide the child with opportunities to experi- ment and explore materials, stressing the skillful handling of materials. (Linderman and Heberholz contrast this to motivations for age 4 to 9, of stories, films, animals, plants, people in action.) Thus, this study recommends a variety of media be introduced in the fourth grade, and that motivation, while including subject stimulation, should emphasize ways of working with the materials.

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*Data from fourth and fifth grades was combined for pur- poses of statistical analysis. Approximately 70 per cent of the data was from fourth grade.

Subject matter motivation was found to be least
effective in grades four and five. During the fourth
grade, children become aware that they just can't "draw"
well enough to suit them, and, for this reason, are not
enthused by projects that demand they portray their in-
adequacy in representing subject matter. Knudsen found
that in the fourth grade children begin to feel self-con-
scious of how they draw and wish they could express them-
selves more realistically than they are able. In the upper
elementary years, Barkan found a sharply reduced security
in personal intuitive feelings, a focus on factual ac-
curacy at the expense of imaginative ingenuity. Lowenfeld
cited their growing critical awareness. Knudsen found that
it is often necessary to redirect the fifth grade child's
art expression into imaginative topics since children have
overly great expectations for realism, which they dis-
couragingly cannot achieve. Torrance has reported drops
in creativity in the fourth grade. It appears that, in
terms of art education methods, motivation should emphasize
media motivation, which call forth the child's natural
interest in manipulation, rather than subject motivation
which may embarrass the self-critical child. However, it
should be remembered that the most effective motivational
method at this level was the combination motivation.

C. Grade Three. At the third grade level, this study found
subject motivation most effective, combination next, and
media motivation least effective. Art educators appear
agreed on the value of subject motivation at this level.
Knudsen stated that third grade children are happy to
express their feelings through symbolic shapes. Erdt
wrote that eight year olds are enthusiastic imaginative
participants in dramatic play. Kaufman called the schematic
7 to 9 year period "the most distinctive period of child
art, the one that parents gush over...(the child experiences)
a natural state of symbolic satisfaction." Lowenfeld
emphasized the importance of giving the child the op-
portunity to use his concepts as living experience; he
advocated motivations characterized by the words "we,"
action (are doing), and "where." Linderman and Heberholz
suggested stories, people in action, animals as motivations
for the lower elementary grades. It appears that at this
age children are happy to portray life around them in
their art work. They are proud of their newly found
ability to represent things and do not care too much for
technical directions.

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D. Grade Two. At this grade, subject motivation was slightly better; it produced much student involvement, more uniqueness, pride and intellectual expression, However, media motivation produced greater emotional expression and more art quality. This corroborates exactly Douglas' findings that second graders had more frustration when they were not told what to paint, but that aesthetic growth was greater when they chose their own subject. Barkan called the lower elementary level an age of fantasy, in which children love to dramatize, and engage in highly imaginative play. Wachowiak emphasized their love of make-believe, their creation of their own secret world. He stated that they can only grasp one idea at a time; perhaps, that is why in this study, combination motivation was not found to be superior on any criterion.

E. Grade One. At the first grade level no one motivational method was found to be superior. It appears that these children are interested in trying any media or theme. Any new experience is interesting the first time one tries it. D'Amico wrote, "Up to six years, the child is an instinctive creator, he requires little encouragement and almost no instruction." (From six to ten, D'Amico recommended trips to the zoo, the market, the bakery, the greenhouse, etc.) Erdt wrote that the six year old learns best by using his own initiative. Knudsen described the first grade child's ability to become completely involved.

F. Other Recommendations. This study has found that children tend to be more and less motivated by certain methods at different grade levels. These findings are supported by the writings of other art educators. Of course, these findings should not be applied dogmatically-- that only one kind of motivation should be used or that another kind shouldn't be used at a certain grade level. How often educational practices have, pendulum-like, swung from one extreme to the other! As more and more research in teaching methods is conducted, the value of "blending," combining, and using many different methods is made more clear. Too often the baby has been thrown out along with the bath water. However, if this study can reveal some hints regarding what methods may tend to be more or less effective, it will be of value.

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SUMMARY

The Effectiveness of Three Motivational Methods (Median, Subject Matter, and Combination Motivations) in an Art Program in the Elementary Grades*

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INTRODUCTION

Problem. How can elementary school children in art class work most effectively motivated by the teacher? Should the teacher usually give a combination motivation -- one which contains both subject matter ideas and discussions of the properties of the media? Is one or the other emphasis more important at certain grade levels; for example, do sixth graders need more media motivation than first graders? Regardless of grade level, is one type to be preferred to reach certain teaching goals? At which grade levels do students respond most enthusiastically to subject matter motivations? This investigation attempts to shed some light on questions such as these.

Objectives. The major objective underlying this study was to determine the relative effectiveness of three methodological approaches to the teaching of art in the elementary school. One of the motivational techniques used was subject matter motivation. Writers such as Lowenfeld feel that one of the most valid forms of art motivation in the elementary grades is that which is based on the past life experiences of the participating child. Art then becomes an expression and vital means of interpreting one's self in conjunction with one's environment through subject matter motivation.

Contrasted to the subject motivated art lesson is the media motivated art lesson, which finds its basis in the rich, beautiful, and varied manipulative possibilities offered by the media. Writers such as Hoover, Johnson, D'Amico, and Erdt are not at all opposed to subject motivation but indicate in their writings a distinct leaning

toward media motivation. These educators tend to feel that the experimentation and direction with the plastic qualities of the art media becomes a major important motivational force for art.

Combination motivation employs both subject and media help. For example, Burkhardt has reported that both subject matter "if" questions and media "how" questions were necessary for art gains. He found suppositional "if" questions necessary for originality of idea; the media "how" questions necessary to develop preparedness.

METHOD

The Measuring Instrument. The goals of this study are to investigate the effectiveness of these methods in the elementary grades. Several criteria have been used; some emphasizing personal involvement, others emphasizing art quality.

The personal involvement criteria include amount of pride, intensity of working behavior at 10, 20, and 30 minutes, amount of intellectual and emotional expression.

The art quality criteria include use of media, use of design principles, overall art quality, development of technical proficiency.

Treatment. The following descriptions give the reader a fuller sense of the manner in which the three types of motivations were used with the same materials. (In order to control for the extraneous variable of different materials, each material was presented in all three types of motivations).

TITLES OF SOME OF THE LESSONS PRESENTED

SERIES	GRADE	SUBJECT MATTER MOTIVATION	MEDIA MOTIVATION	COMBINATION MOTIVATION
WATER-COLOR	6	memory painting of model	dry brush, chiaroscuro	microscope slides, analogous colors
CLAY SCULPTURE	6	clay jewelry-insect themes	furnace cement	Rennaissance themes-bas relief
WATER-COLOR	5	visitors to our class	wet into wet, dry technique	Rennaissance Fresco painting
CRAYON	4	family portait glued masenite say into jig-saw puzzle	limited palette	playground action, value contrast
JEWELRY (GLASS)	4	clay glazed animal pins	Egyptian paste jewelry	plant life cloissonne; enamel on copper
WATER-COLOR	4	famous ghosts	classical watercolor technique	musical instrument still-life, dry brush

Observers. Each lesson presented was evaluated by approximately four observers who were in the classroom watching the students. The observers, who were college juniors preparing to be elementary and art teachers, judged the students on how intensely they were working after 10, 20, and 30 minutes, amount of interest, pride, etc. The art teacher judged his own lesson on questions of an aesthetic nature, which the observers would have found difficult to answer--such as amount of emotional and intellectual expression, use of materials, use of design principles, art quality, and degree to which the lesson fulfilled the teacher's educational objectives.

Design and Analysis. 438 observations were made, of 87 lessons, in 19 classes at two schools. The fourth and fifth grade samples had to be combined. Approximately 90 observations on 17 lessons in four classes were collected at each grade level. Data was analyzed by 140 one-way analysis of variance and 19 two-way analysis of variance.

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FINDINGS AND CONCLUSIONS

<u>6th Grade</u>. Combination motivation was most effective and media motivation was least effective on eight criteria which differentiated (<u>intensely working at 30 minutes, emotional expression</u>, uniqueness, pride, <u>art quality</u>, use of media, design, and <u>teacher's educational objectives</u>). (underlining means that the difference was significant at the .05 level).

The greater interest in combination and subject motivations in grade six seems to reflect the sixth graders' interest in trying to capture the subject, their concern for pictorial representation, chiaroscuro, perspective, their interest in myths, ghosts, adventure, biography, and history.

Erdt emphasized the sixth graders' interest in integrated art activities. At this level a unit study or core curriculum approach is often well used. Lowenfeld, in describing the sixth graders' pseudo-realistic stage, emphasized their social awareness and capacity for self-identification. He suggested lessons in the figure's proportions and motions. Gaitskell recommended figure drawing, portraits, still-life, landscape drawing, and perspective lessons for the sixth grade level. D'Amico cited their keen interest in the human figure and self-portraits. Wachowiak and Ramsay pointed out the students' interest in human activities, community and world events, and in perspective. Students seem to need subject motivation at this age when they are self-conscious of their own ideas.

This study found media motivation by itself, to be less effective in the sixth grade. D'Amico writes of the upper elementary teachers' plight of being beseiged by children totally uninspired by the art media before them, asking what to do. Erdt stated that the problem is to not let techniques dominate the child's thinking. Perhaps the students want more than just "playing with materials" at this age; maybe anticipating high school and entering puberty, they want to learn more about life, nature, history, and be able to represent it in their art. However, media motivation should certainly not be excluded.

This study found the combination motivation (that is, the lesson with both subject and media motivation) was the most effective method. Rather, the recommendation of this study is that, at the sixth grade, media motivations should be combined with subject motivations.

Grades 4 and 5. Combination motivation was most effective and subject matter motivation was least effective. The criteria which showed this were: working at 20 and 30 minutes, involvement, pride, technical proficiency, design, teacher's education objectives, intellectual expression, and use of media. Data from the fourth and fifth grades was combined for purposes of statistical analysis. Approximately 70 percent of the data was from fourth grade. Barkan described the fourth grade as a time children love to tinker and build with a variety of tools and materials. He found construction activities which utilize their manipulative skills a constant challenge and source of interest. His effective teachers spent time on helping children become aware of specific ways to do art work well. Erdt found nine-year-olds enjoy working with new materials, eager to improve skills, and asking many questions about technique. Lowenfeld wrote concerning the 9-11-year old "gang age," "Getting acquainted with the functions and qualities of materials is the main aim." Linderman and Heverholy suggest in the "beginning realism" years of 9-12, that teachers provide the child with opportunities to experiment and explore materials, stressing the skillful handling of materials. Thus, this study recommends a variety of media be introduced in the fourth grade, and that motivation, while including subject stimulation, should emphasize ways of working with the materials.

Subject matter motivation was found to be least effective in grades four and five. During the fourth grade, children became aware that they just cannot "draw" well enough to suit them, and for this reason, are not enthused by projects that demand they portray their inadequacy in representing subject matter. Knudsen and Christensen found that in the fourth grade, children begin to feel self-conscious of how they draw and wish they could express themselves more realistically than they are able. In the upper elementary years, Barkan found a sharply reduced security in personal intuitive feelings, a focus on factual accuracy at the expense of imaginative

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ness. Knudsen found that it is often necessary to redirect
the fifth grade child's art expression into imaginative
topics since children have overly great expectations for
realism, which they discouragingly cannot achieve. Tor-
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grade. It appears that, in terms of art education methods,
motivation should emphasize media motivation, which call
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rather than subject motivation which may embarrass the self-
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most effective motivational method at this level was the
combination motivation.

Grade Three. Subject motivation was most effective, media
motivation was least effective. The following criteria
showed that: Working at 10, 20, and 30 minutes, involvement,
and pride. Art educators appear agreed on the value of
subject motivation at this level. Kaufman called the
schematic seven to nine year period the "most distinctive
period of child art, the one that parents gush over. (The
child experiences a natural state of symbolic satisfaction)."
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"we" are doing (action) and "where". Linderman and Heber-
holy suggested stories, people in action, and animals as
motivations for the lower elementary grades. It appears
that at this age, children are happy to portray life
around them in their art work. They are proud of their
newly found ability to represent things and do not care
too much for technical directions.

Grade Two. At this grade, subject motivation was slightly
better; it produced much student involvement, more unique-
ness, pride, work at 20 and 30 minutes, and intellectual
expression. However, media motivation produced greater
emotional expression and more art quality. This cor-
roborates exactly Douglas' findings that second graders
had more frustration when they were not told what to paint,
but that aesthetic growth was greater when they chose
their own subject. Barkan called the lower elementary
level an age of fantasy, in which children love to dramatize
and engage in highly imaginative play. Wachowiak and Ramsay
emphasize their love of make-believe, their creation of
their own secret world. They stated that the children
can only grasp one idea at a time; perhaps, that is why,
in this study, combination motivation was not found to be
superior on any criterion.

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<u>Grade One</u>. At the first grade level, no one motivational method was found to be superior. It appears that these children are interested in trying any media or theme. Any new experience is interesting the first time it is tried. D'Amico wrote, "Up to six years, the child is an instinctive creator, he requires little encouragement and almost no instruction." (From six to ten D'Amico recommended trips to the zoo, the market, the bakery, the greenhouse, etc.) Erdt wrote that the six-year-old learns best by using his own initiative.

<u>Other Findings and Conclusions</u>. Across grade levels, subject motivation produced greater pride, uniqueness, involvement, and intellectualizing. Media motivation was least effective for promoting these personal involvement criteria. Thus, if the teacher, generally is seeking projects to personally involve the child, he may find subject and combination motivations more effective than media motivation.

However, if the teacher is seeking aesthetic quality in the works, he may find combination and media motivations to be slightly less effective on art quality, technical proficiency, use of media, and use of design principles. Media motivation produced more products which the children took home. (Thus, if Christmas presents for Mom is the desideratum, media motivation is recommended.)

In general, disregarding the specific advantages of subject and media motivations, combination motivation was as or more effective than either subject or media motivation alone. Thus, if a teacher is in doubt as to how to motivate, a combination motivation may probably be most effective.

Effectiveness of three Methodclogical Approaches (subject matter, media, and combination motivations) in the Elementary School Art Prcgram. Robert Clements, Gerry Mendelson, and Mona Lokey.

Your name	Lesson No.	Classrocm Teacher's name	Grade	Date

1. After 10 minutes of working time the following percent of students seemed to be deeply engrossed.

10	20	30	40	50	60	70	80	90	100

2. After 20 minutes of working time the following percent of students seemed to be deeply engrossed.

10	20	30	40	50	60	70	80	90	100

3. After 30 minutes of working time the following percent of students seemed to be deeply engrossed.

10	20	30	40	50	60	70	80	90	1C0

4. During this project the students' need for help of any kind was

Very great 1	Great 2	Def. above av. 3	Slightly above av. 4	Slightly below av. 5	Def. below av. 6	Small 7	Very small 8	Next to nothing 9	Nil 10

5. The students' need for help in subject matter ideas was

Very great 1	Great 2	Def. above av. 3	Slightly above av. 4	Slightly below av. 5	Def. below av. 6	Small 7	Very small 8	Next to nothing 9	Nil 10

6. The students' need for help in material manipulation was

Very great 1	Great 2	Def. above av. 3	Slightly above av. 4	Slightly below av. 5	Def. below av. 6	Small 7	Very small 8	Next to nothing 9	Nil 10

7. The amount of teacher media direction was

Very great 1	Great 2	Def. above av. 3	Slightly above av. 4	Slightly below av. 5	Def. below av. 6	Small 7	Very small 8	Next to nothing 9	Nil 10

8. The amount of teacher subject matter direction was

Very great 1	Great 2	Def. above av. 3	Slightly above av. 4	Slightly below av. 5	Def. below av. 6	Small 7	Very small 8	Next to nothing 9	Nil 10

9. The extent to which the questions which the students asked showed a struggle with important problems was

Very small 1	Small 2	Def. below av. 3	Slightly below av. 4	Slightly above av. 5	Great 6	Very great 7	Extremely great 8	Def. above av. 9

Remarkably, fantastically unbelievably great
        10

10. The student involvement, considering the lesson as a whole was

Minimum involvement 1	Poor 2	Def. below av. 3	Slightly below av. 4	Slightly above av. 5	Def. above av. 6	Good 7	Excellent 8	Extremely excellent 9

Remarkably Fantastically unbelievably great 10

11. How much uniqueness and individuality as opposed to sameness and copying appeared in the art work of the class

An extremely great amount of copying 1	A lot of sameness and copying 2	Much sameness & a little uniqueness 3	Def. more sameness than uniqueness 4	Slightly more sameness than uniqueness 5

Slightly more uniqueness than sameness 6	Def. more uniqueness than sameness 7	Much uniqueness and a little sameness 8	A lot of uniqueness and originality 9	An extremely great amount of uniqueness and originality 10

12. The students' pride in their own work was

Very small 1	Small 2	Def. below av. 3	Slightly below av. 4	Slightly above av. 5	Def. above av. 6	Great 7	Very great 8	Extremely great 9

Remarkably fantastically unbelievably great 10

ART TEACHER SHEET

U.S. Office of Education Research Project 292. Effectiveness of Three Methodological Approaches (Subject Matter, Media and Combination Motivations) in the Elementary School Art Program. Bob Clements, Gerry Mendelson, Pete Carr, and Mona Lokey.

Your Name Lesson No. Classroom Teacher's Name Grade Date

1. The amount of intellectualizing was

Very small	Small	Def. below av.	Slightly below av.	Slightly above av.	Def. above av.	Great	Very great	Extremely great
1	2	3	4	5	6	7	8	9

Remarkably, fantastically unbelievably great
    10

2. The amount of their own emotions which the students expressed in their work was

Very small	Small	Def. below av.	Slightly below av.	Slightly above av.	Def. above av.	Great	Very great	Extremely great
1	2	3	4	5	6	7	8	9

Remarkably, fantastically unbelievably great
    10

3. The overall artistic quality of the work was

Very small	Small	Def. below av.	Slightly below av.	Slightly above av.	Def. above av.	Great	Very great	Extremely great
1	2	3	4	5	6	7	8	9

Remarkably, fantastically unbelievably great
    10

4. The media was used

Terribly	Very poorly	Poorly	Def. less well than average	Slightly less well than av.	Slightly better than average	Def. better than av.	Very well	Extremely well
1	2	3	4	5	6	7	8	9

Remarkably fantastically well
    10

5. Design Principles were used

Terribly	Very poorly	Poorly	Def. less well than average	Slightly less well than av.	Slightly better than average	Def. better than av.	Very well	Extremely well
1	2	3	4	5	6	7	8	9

Remarkably fantastically well
    10

6. The development of technical proficiency was

Very small	Small	Def. below av.	Slightly below av.	Slightly above av.	Def. above av.	Great	Very great	Extremely great	Remarkably, fantastically unbelievably great
1	2	3	4	5	6	7	8	9	10

7. This approach in this media promoted my general education objectives

Terribly 1	Very poorly 2	Poorly 3	Def. less well than average 4	Slightly less well than average 5	Slightly better than average 6	Def. better than average 7

Very well 8	Extremely well 9	Remarkably fantastically well 10

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