The National Art Education Association (NAEA) conducted four Research Training Programs immediately preceding each of the 1968 NAEA Regional Conventions. The combined number of participants for all training programs was 194, composed of persons involved in elementary, secondary and university teaching, and in supervision and administration. The Project Director was assisted by four staff members at each training location. Instruction was planned to orient the participants toward the importance of developing researchable objectives by giving them a concentrated introduction to the phases of such an undertaking. The three principal objectives were for the participants to become able to (1) identify behavioral and conceptual objectives for art education, (2) write both objectives leading to unit construction and instructional processes and materials, and (3) identify and produce component parts of a unit and thus make these objectives operational for instruction and evaluation. The results of the participant performance indicated that the program objectives were successfully achieved. The project staff recommends the continuation and expansion of this type of training for art educators. (Author/DL)

FINAL REPORT
Project No. 8-0259
Grant No. OEG-3-8-080259-0027 (010)

PRECONFERENCE EDUCATIONAL RESEARCH PROGRAM
IN ART EDUCATION

June 1968

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

Final Report

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PRECONFERENCE EDUCATIONAL RESEARCH PROGRAM
IN ART EDUCATION

Dr. Asahel D. Woodruff, Project Director

The National Art Education Association

Washington, D.C.

June 1968

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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Contents

Summary

As a service to personnel and researchers in art education through-
out the nation, The National Art Education Association conducted four
intensive preconference research training programs on the design of edu-
cational concepts immediately preceeding each of the 1968 NAEA Regional
Conventions. Support for these programs was provided through NAEA funds
and a Research Grant by the U. S. Office of Education.

The four Preconference programs were held at the following times
and locations:

March 14-17, 1968 / Chase-Park Plaza Hotel / St. Louis, Missouri
(NAEA Western Regional Convention)

March 24-27, 1968 / Hotel Utah / Salt Lake City, Utah
(NAEA Pacific Regional Convention)

March 30-April 2, 1968 / Statler Hilton Hotel / New York City
(NAEA Eastern Regional Convention)

April 15-17, 1968 / Marriott Motor Hotel / Atlanta, Georgia
(NAEA Southeastern Regional Convention)

Each preconference met formally for 3½ days during the above designated
dates and provided approximately 24 hours of instructional and learning
time. (Due to time limitations, the sessions held at Atlanta were con-
solidated into 3 days by holding extra sessions during the evenings.)

The training activity concentrated on providing the participants
with a workable concept of the importance of developing researchable ob-
jectives and the research procedures which such an undertaking requires.
As a result of this training, the participants acquired skill in 1) dis-
tinguishing between behavioral objectives and other kinds of objectives,
2) writing behavioral and/or performance objectives to meet the general
goals of art education and 3) developing criteria based on behavioral
objectives by which they could properly evaluate their particular in-
structional programs.

Art educators and related members of the teaching profession were
invited to attend the programs. Although the training activity was es-
pecially designed to benefit art educators with terminal degrees, admin-
istrators and state department personnel interested in upgrading research
data and skills for productive research, participants included persons
engaged in all levels of teaching.

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The results of these research programs, as indicated in the follow-
ing final report, give evidence supporting the success of the training
activity and the degree to which the participants achieved the objec-
tives set forth. It is concluded by the project director, the planning
committee and the staff evaluators that a greater degree of expertise in
implementing the knowledge gained by participants is desirable. Recom-
mendations are made for continuing retraining and extending programs so
that maximum competencies can be developed and a greater number of per-
sonnel can be trained.

Introduction

The institutes were planned to orient the participants toward the importance of developing researchable objectives by giving them a concentrated introduction to the phases of such an undertaking. The immediate objective was to help participants acquire a workable concept of behavioral objectives, and familiarize them with the major types of behavior. It was assumed that by concentrating on selected objectives, identification of specific behaviors characterizing art education could be made which would clarify and simplify the task of planning and conducting research in art education.

Three principal objectives were set up. The participants were to become able to:

1. Identify both behavioral and conceptual objectives for art education.

2. Write behavioral and conceptual objectives for art education in a form which leads directly to unit construction and to instructional processes and materials.

3. Identify and produce the component parts of a unit to make a behavioral or conceptual objective operational for both instruction and evaluation.

The foregoing objectives required the acquisition by the participants of several supporting behaviors, of which eight are listed here.

1. Identify and discriminate accurately between the conditions for learning which are required to produce:

    a. A change in the overt behavior of a person

    b. A change in a particular concept in a person

    c. Retention of an item of verbal information

2. Recognize and discriminate between these kinds of process-consequence phenomena:

    a. A human decision-controlled act

    b. An empirical event or process in nature

    c. A consequence produced by a human or an empirical act

    d. A composite act-consequence sequence

3. Recognize and discriminate accurately between:

    a. A behavior (the actual act or event)

    b. A concept (a mental record of something)

    c. An item of verbal information

    d. A topical or other reference to phenomena or knowledge (a title or name, topic, term of reference) whether it is written out in full or merely named or alluded to

4. Identify high-priority behaviors and concepts in human life for art education programs

5. Write a behavioral statement in a form which matches each of these behaviors:

    a. A human decision-controlled act, both linguistic and nonlinguistic

b. An empirical event or proce-3 in nature

  c. A composite act-consequence sequence

6. Write a conceptual statement for these specific instances of a concept:

  a. A set of steps that constitute a process or act

  b. A personal feeling or want

  c. An object, condition, or other state of being

  d. A set of relationships

7. Identify the concepts and instrumental competencies required to perform a stated behavior

8. Identify the form and content of test items to match a discrimination behavior

Of the eight behavioral objectives, the first five were believed possible of achievement at a preliminary level within the three and a half days of the institutes. The other three would remain for subsequent attainment. Thereafter it would be directly possible to design research studies in art education, based on measurable objectives, and to assess the independent variables such as content and process in terms of measurement of actual gains in the dependent variable, the target behaviors in learners.

Methods

Participants were selected as follows:

A call for participants was made to all NAEA members through the NAEA newsletter, the Journal, ART EDUCATION, and the NEA reporter. Direct mail announcements were also sent to college and university art departments and state departments of education. Application forms and admittance procedures were attached, requesting information on the candidates' type of professional employment, their educational background, specific competencies, the amount of time devoted to teaching and research, and their reasons for attending the research training programs. (See page 27, Appendix A, sample Application Form.)

It was originally intended that the training program would be essentially provided for participants who had completed terminal degrees or who had a substantial amount of graduate study, and who had been oriented toward research methods. However, because of the high degree of training and interest which all applicants indicated, the selection committee decided to accept all candidates who were able to attend, except in those Preconference locations where housing and training facilities could not accommodate them. Although nearly twice as many as were anticipated attended, no candidates were rejected.

Enrollments at the four training programs:
Two hundred fifteen applications were received, resulting in 194 participants attending: 32 at St. Louis, 31 at Salt Lake City, 85 at New York and 46 at Atlanta.

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Those applicants who were not able to attend were either 1) unable to get released time from professional responsibilities or 2) were unable to arrange schedules compatible with the preconferences or with personal commitments.

Participants had these characteristics:

Although there was considerable variation in individual educational backgrounds, data taken from application forms revealed that the participants had strong educational experience. Further, the greatest percentage of participants were engaged in college or university instruction while smaller numbers were employed in elementary and secondary education, and in administration or supervision. Many participants (particularly university persons) indicated a percentage of their time is devoted to active research design; however, no computation is made of this factor. The participants' levels of education and professional employment are indicated (by percentages) in the chart below.

E D U C A T I O N

Ph. d or D. Ed. degrees	30%
Graduate work beyond masters degree	23%
M. A. or M. S. degrees	41%
B. A. or B. S. degrees	6%

P R O F E S S I O N

Elementary and Secondary Personnel	32%
University Personnel	50%
Supervision and Administration	8%

Planning and Evaluation Meetings

A planning meeting was held January 11-12 in Washington, D.C. to organize and make final preparations for the training programs. Following the institute activities, a final evaluation and report meeting was held, May 16-17. Procedures for the institutes; the findings and recommendations for this report were formulated through the cooperative efforts of this planning group. Those who attended are Dr. Harlan Hoffa, Dr. Gordon Kensler, Dr. Edward Mattil, Dr. Robert Paxson, Dr. Asahel Woodruff, Dr. Charles Dorn, Dr. Stanley Madeja and Dr. H. James Marshall (see Appendix A, page 27).

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The Operational Pattern: Training sequence and experiences

First Day
1. The pre-institute test.
2. Introduction to the behavioral objectives for the institute, and the concepts on which they depend.
3. The nature of human behavior, and its change process.
    Conceptual discussion
4. Advantages of behavioral objectives.
    Conceptual discussion
5. Study period: To read "First Steps in Building a New School Program."

Second Day
6. Identifying significant behaviors in art.
    Conceptual discussion
    Trial--naming sample behaviors from the possible behavioral models or roles.
7. What a behavioral objective is, and how to state it.
    Conceptual discussion
    Trail--writing a behavior of each kind.
8. Linguistic (Type 1) behaviors that reveal conceptual discrimination.
    Conceptual discussion
    Trial: Identifying the justifications for aesthetic judgments.
        (i.e. the criteria and the processes that make up such qualities as artistic, creative, etc.)

Third Day
9. Promoting behavioral change in school. (The conditions that make behavioral change possible)
10. The task analysis of a behavioral objective.
    Conceptual discussion
    Trial: Making a task analysis for two or three behaviors.
11. Formulating useful statements of components of the behavioral objectives.
    Conceptual discussion
    Trial: Identifying the nature of each component, stating the components, incorporating vocabulary and verbal information where needed.
12. Rerun of all the steps in the process, if time permits.
    Identifying a behavior
    Stating the behavior
    Task-analyzing the behavior
    Identifying each component psychologically
    Stating the components
    Review of the guidelines

Fourth Day
13. Other behavioral concepts involved in the work of the Institute.
    Conceptual discussion
14. Summary by the Project Director.
15. Post-institute test.
16. Report of Institute Evaluator.

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Results and Findings

Results

All indications are that reasonable achievement of objectives one to five was accomplished, and six and seven were introduced briefly but not carried to any degree of achievement. In addition to observation by staff members of the progress of participants, the following evidences of results have been compiled:

Pre and Post Training tests were administered to all participants in continuous attendance at the sessions. In some instances, where participants did not complete the test in the prescribed time or where the reliability of their performance was in question, scores were not included in the final computation of data. The difference in the number of participants attending and those whose test scores were computed is reflected in the statistical chart below:

Pre and Post Training mean scores resulting from performance on evaluation instrument

City \ Statistic	test	sample size	mean	standard deviation	mean of the difference	t	df	P
St. Louis	Pre	29	28.2	8.1	8.5	7.5	28	.001
	Post	29	36.6	6.2				
Salt Lake	Pre	30	25.2	6.7	11.3	11.3	29	.00s
	Post	30	36.5	6.4				
New York	Pre	67	22.6	7.1	10.5	11.5	66	.001
	Post	67	33.1	7.8				
Atlanta	Pre	37	23.0	8.7	10.8	10.7	36	.001
	Post	37	34.1	8.8				
combined	Pre	163	24.1	7.8	10.4	20.0	162	.001
	Post	163	34.6	7.7				

General Comments

1. The four regions were essentially similar in their performance prior to the institutes.
2. The four regions showed approximately the same amount of gain at the end of the institutes.
3. Each region showed a significant gain (p .001) in demonstrating the institute objectives as a result of the institute.

Special Note

The magnitude of change in test performance after 3½ days of instruction is, in each case, clearly impressive. The next questions one might ask are: (1) What shall be a minimally acceptable skill in defining art objectives as specific behaviors at both the local and national levels? (2) Are the most successful "graduates" of each institute now ready, as a group, to begin working on art objectives at the national level?

Evaluators' Reports

1. Summary and evaluation of Research Training Program at St. Louis Dr. Meryl E. Englander, evaluator.

The staff and the participants undertook a difficult and complex task in addressing themselves to writing behavioral objectives for courses in art. The difficulty was illustrated with a worksheet by Dr. Ecker in which the participants were asked to write behavioral exhibitions (evidence) that the learners had achieved the objectives as commonly championed for art education. For example, personal "expression," "qualitative aesthetic judgments,"'serving and feeling visual relationships," "gain personal satisfaction through expression," etc.

Unflinchingly the task was undertaken. It seemed to me that the conference attempted to bring together three elements. (1) The translation of notions, held by professional art educators, into discernable objectives. (2) The writing of these objectives in behavioral terms so that we would know that which we were teaching as well as the criteria and measurement of their respective achievement. (3) The underlying psychology which hopefully would help the participants differentiate, but yet connect the observable behaviors with the inferred constructs. The achievement of such an undertaking would typically take a full year of study.

Since it will creep in anyway let me state at the outset two concerns which I had about the conference. First, quantatively and qualitatively it was too much of an undertaking. Presumably, the participants had at best a hazy idea of psychology, and to give them the whole package was too much to digest. Second, because the task was extensive, Dr. Woodruff had to present the materials orally and rather intensively.

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It seemed to me, that in so doing he had to violate much of that which he contended in the content of his presentations.

Be that as it may, the reaction of the participants could be described only in the most positive terms. Each worked very hard. I have never seen a group work more patiently and arduously. They attended the meetings, paid attention, asked questions and took lengthy notes. Morale remained high. They did not seem to share my concerns. One of my personal conclusions from this conference was that if one has learners who are intent on learning (as the participants surely were,) one can go after a broad and complex package. Perhaps I have been softened by the indifference of students enrolled in college classes for 3, 4, or 5 units of B or C grades.

The staff utilized three phases to achieve their ends.

Phase I. Content was directly presented to the participants: They in turn took voluminous notes, asked questions, and tried to understand. Dr. Ecker was to present a format of art education, but he did not have an opportunity to fully develop his ideas because of the lack of time. He pointed out that curricular questions focus on: what, to whom, by whom, in what order, by what methods, to what criteria, and to what ends. For this group, with their background and interest in art education one might presume everyone had a fair idea of the art education curricula beforehand. Fortunately, Dr. Ecker has published his position, and it is well known in the field. Also, the group discussions gave him the opportunity to develop his position with at least some of the participants.

Dr. Clark lectured on the nature of measurement and the importance of thinking of the outcomes of education in behavioral terms. That is, learning can be demonstrated only by what the learner <u>can do</u>. Dr. Clark pointed out that in the field of philosophy general and nonoperational descriptions are appropriate but for <u>communication</u> and <u>pedagogy</u> it is <u>necessary</u> to be both <u>specific</u> and <u>behavioral</u>. Operationality means that it can be explicitly measured. If it is operational you need not intuit or infer its existence; you can observe and quantitatively measure it. Operational and behavioral are synonomous. If you use terms like "to know" or "to understand" for your objectives, they are open to multiple interpretations. With such objectives you may bypass arguments, but you will also bypass communication, teaching, and measurement. Finally, the means might be in the present, but the ends (objectives) will be in the <u>future</u>. In conclusion, objectives ought to be stated in the future, as specifically as possible, and in terms of observable (measurable) behaviors. In writing behavioral objectives Dr. Clark warned us to include:

1. <u>When</u> and <u>under what</u> circumstances we would want the behavior
2. What <u>specific behavior</u>
3. To what <u>degree</u> or how much (minimal competence by what criteria)

To perceive art education in this way we need to understand that which lies behind the learners' specific behavior. To help us understand this, Dr. Woodruff outlined by means of a cybernetic model the internal mechanisms of operational observable behavior. This model is described in detail in <u>First Steps in Building A New School Program</u>.

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Rather than trying to analyze this model I will try to present it in a
simpler form. The model has three components: Input, output, and inter-
vening variables.

The input is that which the person takes in through the five senses
from the environment. The five senses are the only means to contact the
person.

The behavior of the person is the output. He speaks; he frowns; he
moves his hands, feet, etc. These responses are the only way the person
can influence his environment, express himself, or demonstrate his feel-
ings, yearnings, and learnings. It is only through the nature of this
output, the responses, that we can tell if he has learned. From these
responses we must infer his feelings, thoughts, knowledge, etc. That
which is inferred makes up the intervening variables.

The intervening variables have three components. The first is a
perceptual screen. Here all of the input is interpreted by the person.
Although, this is necessary it is also hazardous since it means that the
input is inevitably distorted to fit and reflect the person's expecta-
tions, motives, and past experience. There is a belief system, a con-
ceptual field that judges that which has been perceived. This is the
second component. Here we combine that which is already known to the
perceived input and send it on its way to the decision making component.
The task of the decision making component is to predict, to anticipate
the consequence of various actions. After considering alternatives the
person decides to act and does so. This act is the output.

Some of that which we teach is simple and requires little involve-
ment of the intervening variables. It is a short direct circuit between
input and output. Such learnings may be accomplished through simple con-
ditioning. Such an example may be the cleaning of brushes. Other learn-
ings are more complex and involve the inferred but unseen, and unmeasur-
able by direct methods intervening variables such as feelings, expecta-
tions, self respect, beliefs, values, motives, bases for differentiation
and decision making, etc. These are crucial to the desired behavior;
they may even be the desired behavior, but since we cannot observe or
measure them we must be content with the output which inevitably follows
if in fact the desired variables do exist.

Since this is an art group, I cannot resist doing my bit pictorially:

input (hear) ⟶ ⟶ output (facial expression)

Perception
Conceptual
belief
formation
⟵ input (see)

Intervening
Variables ⟶
⟵ input (smell)

Decision
making
⟵ input (taste)

⟶ output (talk)

⟶ output (produce)

⟶ output (go)

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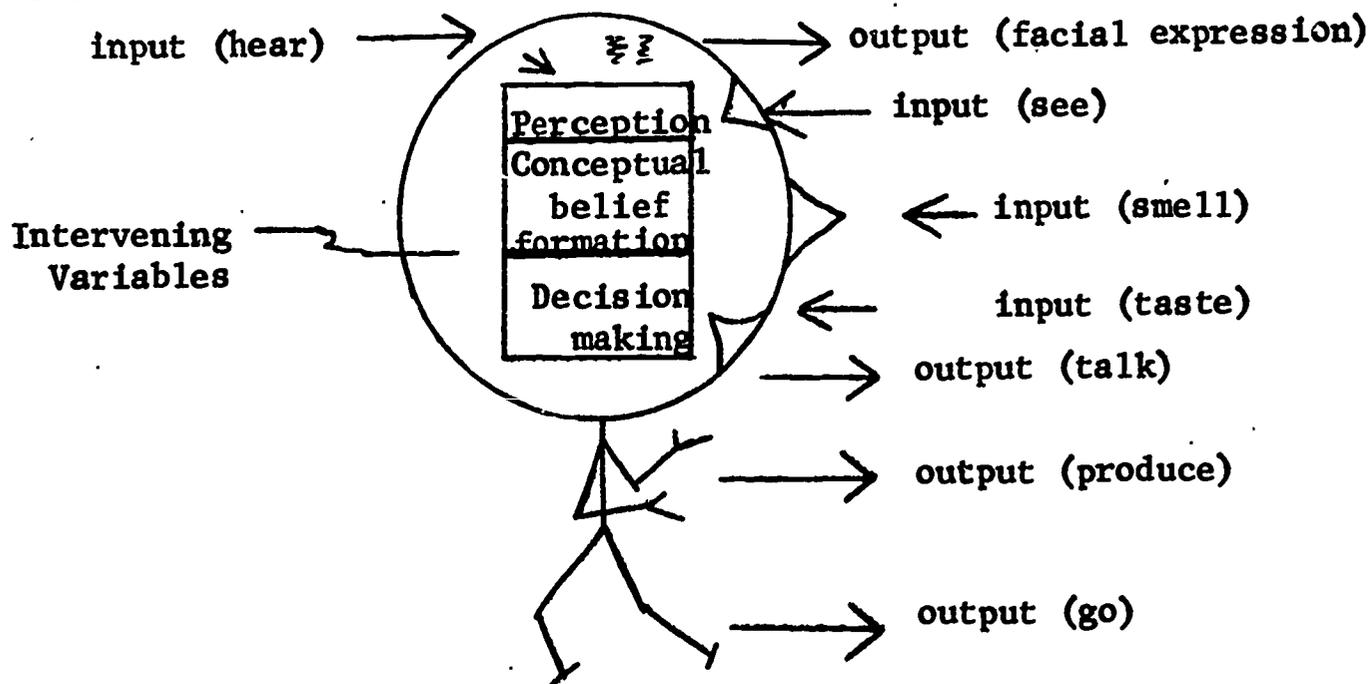
Phase II. Practicum. It was not all listening. Periodically, we broke up into small groups to discuss the ideas and to try our hand at the writing of objectives. My observation and informal feedback from the participants leads me to conclude that if not the most beneficial, this was the most satisfying phase. This is not to deny that Phase I was not a necessary requisite to the success of the writing of the objectives. But in Phase II the participants found that they could state heretofore esoteric goals in terms of explicit behavior. In Phase II the participants found the unexpressable to be expressable.

Phase III was a demonstration that educational objectives could be stated and that these objectives could thus be evaluated. The evaluation was done via the pre and post conference test, and it was first-hand evidence of that which the conference hoped to accomplish.

One thing for certain, croquettes will never again taste the same. For some of us art curricula will never again be the same.

2. Summary and evaluation of Research Training Program at Salt Lake City Dr. Ronald H. Silverman, evaluator.

This evaluation is an attempt to estimate the extent to which this Institute was successful in accomplishing its stated objectives. It is not in any way based upon the participants' responses to the pre and post test phase of the Institutes; the changes in performance that occur on these tests may not correlate significantly with the evaluator's impressions since his receiving apparatus lacks their precision and also because his reactions are related to other kinds of phenomena.

The basic questions to be answered are: how successful was this Institute; what were its more important accomplishments and obvious difficulties; and what are some of the alternative avenues of utilizing the ideas and materials this Institute has generated? In keeping with the theme of the preconference training session, one would have to estimate its success by identifying and examining relevant behaviors from which inferences could be made that are related to one's conception of what constitutes success. For example, one could assert that maintaining a genuine and sustained interest on the part of the participants serves as an indicator of success. This was indeed accomplished; everyone was in attendance at every session. This evaluator is willing to accept such a level of attendance as a behavioral manifestation of genuine and sustained interest in the proceedings of the Institute.

Overt expressions such as: "Wow, this stuff is great," or "I want a copy of that chart," or "I really appreciate this opportunity to analyze how learning occurs," or "Yes, I've been guilty of pushing the recipes-for-making-art approach, but now I have some important alternatives which should greatly improve the quality of my art teaching," or "I feel I have grown tremendously" are also behavioral manifestations. They are examples of observed linguistic behavior which can lead to the conclusion that this was a successful event especially when these kinds of testimonials outnumber by far such comments as: "Man, am I confused."

Of course, these are rather obvious examples of the behaviors one can utilize as a basis for assessing success.

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There also are subtle manifestations which require keener observational powers and which are probably less reliable as referents because they involve the utilization of a broader range of reactions from one's idiosyncratic response repertoire; i.e., less obvious and more involved behaviors may be open to wider interpretation because of the variety and complexity of their component parts.

For example, one may evaluate the extent to which participants were capable of identifying behavioral objectives for art education by examining the content of the discussions during the various briefing and practicum sessions; a sampling of written objectives appearing on the work sheets could also be examined. One illustration of these forms of behavior would be interpreting in behavioral terms one of the objectives of the NAEA position statement; namely, "the student should demonstrate, to the extent that he can, his capacity to have intense involvement in and response to personal visual experiences." One of the participants wrote that intense involvement is demonstrated behaviorally when the student brings to class additional works attempted at home, and when talking in class refers to particular art works or artists studied earlier, and further, when he works diligently without interruption.

An example of demonstrated abilities to make objectives operational for both instruction and evaluation was provided by another participant who wrote: that the student will create from a five pound piece of clay a free standing, self supporting form which is non-representational.

If all the participants were thinking at this level and if all produced objectives of this caliber, this evaluator would conclude that the Institute was eminently successful in achieving its stated objectives. Although this level of behavior was not observed in either the verbal or written statements of all of the participants, most of them appeared to display sufficient expertise at formulating statements which were at least minimally adequate as behavioral objectives for art education.

As the Institute progressed, there were many instances of individuals moving from confusion and inadequate statements to clarity and precision in stating objectives which met the criteria presented by Drs. Woodruff, Ecker, and Clark.

As far as accomplishing its stated objectives, it is this observer's impression that this Institute was indeed successful. There are, however, other events which have contributed to this positive assessment. Participants were provided with an opportunity to review, through a most lucid and comprehensive presentation, the dynamics of learning which included a clarification of such often misunderstood terms as perception, conception, objects, events and values as well as the relationships that exist between and among these phenomena. They were also confronted with the fact that intelligence is only a construct and not directly observable; this is also true of many other notions that we have unfortunately come to take for granted as entities with which we can deal directly such as appreciation and creativity.

Participants also grappled with the idea that utilizing language to express ideas which are relevant to the visual arts is a valid form of behavior in the art class. Appropriate verbal language possesses the potential for being a potent device for developing abilities to identify, comprehend, evaluate, and even produce ideas which are relevant to visual-aesthetic dimensions of experience.

Those in attendance considered the possibility that both scope and sequence may evolve from first developing an adequate repertoire of behavioral objectives, and further, that this inductive approach may also serve as a viable method for educing those concepts which are concerned with defining the structure of art. In addition, participants were informed that sources for objectives exist not only in the content of our subject matter and art products but also in the observable behavior, both linguistic and nonlinguistic, exhibited by the variety of practitioners associated with the many manifestations of the visual arts: painters, aestheticians, critics, architects, etc.

A most illuminating exposition of the limited educational value of statements such as "I like it" or "I don't like it" was also provided. It was carefully pointed out that such statements were of little value to the learner because they lacked any logical dimensions which, of course, are required for the existence of discussion, argument, and analysis.

The major difficulties of this Institute were, in the evaluator's view, not directly ascribable to the proceedings. They were rather, a reflection of some of the deficiencies in the state of the art of art education itself, for example: the over-emphasis upon developing abilities for producing and responding to the physical properties of art products. It became apparent to this observer that when examples of behavioral objectives were cited by both staff and participants they most frequently dealt with the behaviors involved in organizing media and identifying qualities such as textural differences, value nuances, organic and geometric shapes, etc. The social, psychological, and philosophical components of aesthetic behavior were seldom dealt with, not because of any particular aversion to these important aspects of our field, but simply, as a consequence of the overemphasis upon the art-making phase of art education which has prevailed and which is now just beginning to be supplemented by the kinds of concerns reflected in Dr. Ecker's presentation. He called our attention to what should now be obvious to all those attending the Institute: art education is concerned with talking and reading about art, and critically examining art, as well as making art. It should be clear that we no longer can assume that making art will automatically eventuate in developing abilities to deal with art ideas. And, as Dr. Woodruff reminded us, skills in art are only the technical means for dealing with art ideas; they can be learned through practice. Identifying, recognizing, comprehending, and evaluating are aspects of behavior requiring conceptual referents which are acquired only by thinking about perceptual inputs.

Another difficulty with this Institute, which is also a reflection of the state of the art, was the slight confusion engendered by having to shift gears from dealing with the conceptual schemes devised by Drs. Clark and Woodruff that appeared to be based within a psychological universe of discourse to the formulations of Dr. Ecker which are anchored within a philosophical universe of discourse. The requisite behavioral and conceptual referents needed to cope with their various approaches to explanation were not always available, and their absence tended to act as a deterent to communication.

The final topic of this evaluation relates to how the ideas and materials generated by this Institute might be utilized to improve our professional practice.

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By attempting to make specific what we intend to accomplish we will
eventually be forced to grapple with those extremely important issues of
what, why, how, and to whom we will teach. But we will no longer be con-
tent to merely cite the vague admonitions found in the archives of art
education as our sources for goals while neglecting the specifics that
will enable us to ultimately achieve them. We will rather, spell-out
what we as individuals can do, within the particular milieu in which we
function, to efficiently develop those behaviors which are the referents
of visual-aesthetic literacy.

Worthwhile behavioral objectives can be powerful devices. They can
help us and those we teach to understand and accomplish important goals.
They can serve as a practical means for telling administrators, parents,
and board members, who are often uninformed about the arts, what we seek
to accomplish. They can enable us to devise evaluative instruments which
are at once effective and objective, and thereby remove evaluation in
art from the arena of subjectivity which has been instrumental in prevent-
ing art courses from being considered as valid requirements for entering
our colleges and universities.

Most importantly, dealing with art education from a behavioral point
of view can enable us to make explicit what it is we really know about
art; we will also discover what we do not know. However, we need not
merely sit and stew over our ignorance because we now have the means for
examining our subject and the behaviors of those who work in the field of
art. And, through the process of "selective abstracting" we can continue
to generate additional objectives which will truly contribute to the con-
stant improvement of our professional endeavors.

3. Summary and evaluation of Research Training Program at New York City
   Dr. Robert Lathrop, evaluator.

I feel a little bit out of place appearing before you and presuming
to tell you what has happened during the last three and a half days, since
all of you have been more active in the process than I. I think, however,
that because I am from a field other than art education I have a little
different perspective on what has been going on in the last few days than
do you as an active participant.

What I am going to try to describe is what I saw going on these past
three and a half days, and I will attempt some subjective interpretation.
In a way it would have been better if Dr. Woodruff had made his summary of
remarks after my presentation rather than before, because I tend to get
somewhat more specific than he did and his remarks may be a better way to
end the conference than mine. If at some points I seem to be critical,
please excuse the tone of my remarks because I do not mean to be unkind.
I think, however, that there may be some things that I have observed that
will be useful to the instructional staff or will add a little perspective
to some of your own feelings.

I think we are all agreed that the instructional staff worked very
hard and that they came to the conference well prepared and made a very
conscientious effort to accommodate to the needs of the group. I do not
know whether you are aware of it, but after each session the instructional
staff met and tried to evaluate what had gone on during that session,

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deciding what redirection, if any, was necessary for the next session. I think they should be commended, and I think your ovation after Dr. Woodruff's closing remarks indicates your affection for him and the other members of the staff.

With regard to the calibre of the participants, since I was not at the other two institutes, my judgment must be absolute rather than relative. I was very much impressed with the kinds of questions that were raised at the general sessions. I felt they were extremely relevant and to the point; there were times when I wished that the person chairing the group would have managed the question differently; however, I think by-and-large the group asked very thoughtful questions and the staff made a serious attempt to honor them. I think that the group was too large and the room too small. As I eavesdropped in the corridors after the sessions and heard people talking about things that they would have liked to have been able to raise as questions but could not because there just was no time, I became convinced that smaller groups would have allowed more people to become actively involved. It seems to me that in the future some sessions with groups this size may be workable, but when you want to really get the groups involved and to deal with the personal concerns that they have, I think that the groups should be smaller.

In respect to the content of the Institute, it seems to me that it took about a day and a half for the group to get together with the pur- pose of the instructional staff. I noticed a fair amount of resistance to the idea the first day and a half; but finally there seemed to be a kind of breaking point at which several people said, "Well, I may not really be sold on the idea, but at least I came here with the purpose of finding out what I could, and I will fight off my resistance to the idea and at least give it a try." I think that this resolution was necessary, but that it took too long for it to happen. I also sense that there were a number of people who were confusing what is essentially a technique with a philosophical point of view. Even though I am a psychologist, my field is measurement, and I have grown up with the idea professionally of stating things in operational behavioral terms, I do not believe for a minute that all the things that take place in educational interaction are possible to describe or observe behaviorally, at least not in this point of time. We may get to that point sometime in our measurement sophisti- cation, but we are not there now. When we talk about stating some of the things that go on in an educational experience in behavioral terms, we are not implying that all things should be, can be, or must be. I think what we are saying is that when it is possible to think in behavioral terms there is a real advantage in doing so; we do not need to be as am- orphous as we have been, but this is not to say that all things that we regard as important as teachers or as human beings can at this time be described behaviorally.

I think I was surprised at the inability of the instructors to move some of the people in the groups in their thinking. I suppose I should not be surprised at close-mindedness; I suppose we are all human. I would hope, however, to see more in a discipline which prides itself on open-mindedness with regard to its subject matter, to also regard it as a desirable trait in thinking about professional matters.

So much for the general observations about the staff, the par- ticipants, and the content.

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I would now like to turn your attention back to thinking about some of the individual sessions. I think the idea of the pre-test and the post-test is a useful one. In many ways I felt that it might have been given before the session really began--perhaps as something which you could have brought with you. I think it slows down the tempo when you come to a meeting--excited and enthusiastic--and then stop for thirty minutes to take a test. I also have some concerns about the items in the pre-test. I am not exactly naive about test writing, and I had some difficulty understanding some of the questions. I suspect that since you have just gone through the post-test maybe you have some of the same type of concerns. I do think the general concept of the pre-test and post-test is an effective way of measuring at least what cognitive changes have taken place during the period of the Institute.

I am very sorry that the instructional materials, which I think are very meaty, could not have been made available to you before this session. I was privileged to have some of them beforehand, and I read through them several times before I got here and then again when I arrived. Each time I read through them I found something else. I think now that if you were to read through them again, seriously, in light of what has been going on in the last few days, you would find still more provocative ideas. I think they represent the condensation of a lot of thought and effort on the parts of Dr. Woodruff and Dr. Ecker, and I hope that you will not set them aside in your files and not take another look at them. I think there are many stimulating and exciting ideas in them. I also think that some of the groups had trouble relating Dr. Woodruff's conceptual model to an existing reference. He describes the problem of learning as one or relating a linguistic concept to an actual reference. I think some of you have trouble relating what he was talking about (linguistically) to what you knew about art education and learning. I think that diagonal line that was on the diagram was causing problems for some of you.

I had the impression that for many, what was going on during the lectures had little to do with what was going on in the practicums. You sat and listened and participated in the discussions in the morning; then you went to the practicum in the afternoon--it was almost as if the morning had never taken place, and I think that if these two could be tied more tightly together that it would improve the effectiveness. I think some of you also had trouble recognizing the fact that what Dr. Woodruff was presenting as a model was an intellectual prosthesis: a way of thinking about how learning takes place. I am sure that if you would talk to Dr. Woodruff, he would agree that he does not really know (in a philosophical sense) any more than anyone else how learning takes place. This is a tool to allow you to get at the learning problems. I think that if you use it you will find that it works very well in many situations. At least you should try it where you think it might work.

The work "model" has been a bit troublesome in this conference. It does have a variety of references. Dr. Ecker used it one way, and I use it another, and I suppose you in the field of art education have still another concept of what the word means. I think a word like "model" is an awkward one to use.

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A question about the usefulness of the behavioral approach to stating objectives in the "plastic arts" is not, as I see it, a metaphysical question--it is an empirical question. We could spend forever, I suppose, talking about whether or not it would be useful to use behavioral objectives in a given circumstance, but eventually we have to get to the point of trying it out. If, after you give it a fair try, you decide that it does not work, then I would say discard it or at least set it aside; but until you have tried it I do not think there is a metaphysical justification for saying that it will not work. Maybe it will not, but I believe it deserves a try.

One of the things to which I believe Dr. Woodruff alluded but which perhaps could be reinforced is the fact that the key to the cybernetic model is the feedback loop. The feedback loop provides a basis for self-correction, as it presumes that at the end of any experience there is some kind of an observational outcome which you can use to re-direct your effort the next time you go through the loop. The point, I think, of the conference was to make this information, this evidence of how well you did the first time through, as objective, as reliable, and as dependent upon behavioral change as possible. If, however, we choose a different model (a noniterative model,) a model which does not depend upon feedback, of course, the importance of this feedback information is relatively less important.

With regard to the practicums, I guess I have already suggested that I thought they got off to a rather slow start and really did not make good progress until Sunday afternoon. Even on Sunday afternoon there were some of the participants who were suggesting objectives which had, at least to me, no obvious way of measurement. I believe there are some covert outcomes in educational experiences which are very important, but unless they manifest themselves in some overt way, I have no access to them. The overt way may be linguistic or it may be performance, but in some way until I get feedback from that person as to what has happened, it remains a personal experience with him. It may be very important to him, but as far as my responsibility as an instructor to decide whether or not it is a useful experience to repeat, it remains with him, and I have no access to it.

In regard to the first presentation made by Dr. Ecker, I felt that the group warmed up considerably to Dr. Ecker's ideas probably because they were somewhat more familiar to them and were cast more obviously in an art education context. In the afternoon you got hung-up on the distinction between aesthetic judgments and psychological reports. It may be because what Dr. Ecker was presenting were really the conclusions of a syllogism, not the entire syllogism. Consider the following: Premise--if x has y, then it is good. A premise is something about which two people might legitimately disagree. I might say, "The painting has originality, and any painting which has originality is good." You might say no. I will agree that it has originality, but that is not important to me. So, the two of us might disagree on the premise.

The second line of the syllogism is x has y. This is an observational fact. Presumably two competent observers could agree on this characteristic of the art work aside from their personal likes or dislikes.

We, then, have the conclusion which Dr. Ecker presented--x has y, there-
fore it is good. I think you cannot separate those two earlier steps and
make sense of the conclusion.

Yesterday morning the group had a second chance to see Dr.
Woodruff's instructional model and to pursue further questions. In talk-
ing with people at lunch, I found there were still people who were having
trouble relating the model to the task of preparing behavioral objectives.
Now, obviously, I could not get around to talk to all of you, and I sup-
pose that there are still some of you (as he suggested in his summary)
who are having some trouble relating the content of the instruction (the
perceptual model) to the actual task of sitting down and writing the ob-
jectives. I detect, however, that there is some movement on the part of
others, and I regard this as a positive outcome of the Institute.

In summary, I felt the instruction was sincere, and I have heard
many positive remarks about the presentations. I believe there is no one
who has anything but respect for the people who made presentations, and I
trust you construe my observations in the same light. I have known Dr.
Woodruff for more than three years and known him professionally for longer
than that, and I have the greatest respect for what he has done and what
he is attempting to do in the field of art education.

One final comment, and then I will return to my role as a guest.
Among the material which you were supplied you have a paper titled Objec-
tives. According to this paper there were three (on the front page) which
I regarded as behavioral statements of desired outcomes for these series
of meetings. First, you should be able to identify both behavioral and
conceptual objectives for art education. I am quite sure, from sitting
in the sessions, that you do now know the difference between behavioral
and conceptual objectives and if given a list you could distinguish be-
tween them. Second, you should be able to write behavioral and concep-
tual objectives for art education in a form which leads directly to unit
construction and instructional processes and materials. If my perception
from going around to the various groups is accurate, then I would say that
maybe half of the group have met this objective. Third, you should be able
to identify and produce the component part of a unit to make a behavioral
or conceptual objective operational for both instruction and evaluation.
In my opinion, this third point has been largely unrealized.

If, however, any substantial number of you decide to try the
method of behavioral analysis, then I would say that the Institute will
have been a success--or in behavioral terms, the success of the seminar
is a function of the proportion of participants who increase the use of
observable student behavior as feedback information for instructional
planning. A serious evaluation of this Institute must await that kind
of behavioral observation.

4. Summary and evaluation of Research Training Program at Atlanta, Ga.
   Dr. Marylou Kuhn, evaluator.

Consider specifically with me where we have been these past two
days and how much we have accomplished. Look at the listing of behaviors
anticipated by the leadership as we entered the Institute. There are eight
behaviors. Let's consider them item by item, as the group came into contact
with them.

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"1. Identify and discriminate accurately between the conditions for learning which are required to produce (a) a change in the overt behavior of a person, (b) a change in a particular concept in a person, (c) retention of an item of verbal information."

This was accomplished through repeated use of the terms "overt behavior" and "concept" as the primary ingredients in exercises designed to point up the functions in the cause/effect relationships present in learning and teaching. The "Guide to Effective Teaching" bears directly on this item.

"2. Recognize and discriminate between these kinds of process-consequence phenomena (a) a human decision-controlled act, (b) an empirical event or process in nature, (c) a consequence produced by a human or an empirical act, (d) a composite act-consequence sequence."

The first three kinds of phenomena, (a),(b) & (c) were considered primarily as conceptual equipment basic to the more emphasized fourth phenomenon of act-consequence sequence which was used to explain learning or educational activities centered in the student. All were well covered by the activities of the Institute.

"3. Recognize and discriminate accurately between (a) a behavior (the actual act or event,) (b) a concept (a mental record of something,) (c) an item of verbal information, (d) a topical or other reference to phenomena or knowledge (a title or name, topic, term of reference) whether it is written out in full or merely named or alluded to."

The various presentations and accompanying practice sessions provided opportunity for discrimination of examples from the memory of the participants. In some instances this was a private individual practice activity; in others it became a group decision; while in others it was an evaluation by the group of written material presented by an individual from the group.

"4. Identify high-priority behaviors and concepts in human life for art education programs."

In at least one session at the latter portion of the Institute reference was made to those behaviors and concepts which have many uses and provide "high-mileage" toward accomplishment of art education objectives. These were designated as those behaviors which had many applications to widely divergent behaviors, for example "mixing" and "solvent", and those which seem to be more important than others. In a number of instances distinction was made between the single behavioral act or unit and the situation in which it was put into a pattern of sequence which would make up curriculum. This behavior was a culminating behavior in the institute time table.

"5. Write a behavioral statement in a form which matches each of these behaviors: (a) a human decision-controlled act, (b) an empirical event or process in nature, (c) a composite act-consequence sequence."

Opportunity was given in the practicums to deal generally with the linguistic and nonlinguistic human decision controlled act (point(a)above) i.e. "a human decision-controlled act and to consider the steps which constitute point a. in behavior #6 (next,) i.e. "a conceptual statement." The learner was left to his own resources in entering the tasks connected with this area. As a result a rather general feeling was promoted and entry time was prolonged. A worksheet with the points, or types, of behaviors and concepts spaced so examples could have been filled in would have helped the participants focus.

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Reference to these behaviors and concepts in the worksheets provided by
Dr. Ecker would have directed attention toward the development of art edu-
cation objectives using behavioral psychological concepts.

"6. Write a conceptual statement for these specific instances of a
concept: (a) a set of steps that constitute a process or act, (b) a per-
sonal feeling or want, (c) an object, condition, or other state of being,
(d) a set of relationships."

"7. Identify the concepts and instrumental competencies required to
perform a stated behavior."

This behavior was well covered and reinforced in regard to the
teacher's role but not for the learner.

"8. Identify the form and content of test items to match a discrimi-
nation behavior."

Allusion was made to the relationship between content and method.
This objective was not reached, except indirectly, because of time.

Thus the participants developed concepts about the major objectives
of the Institute, to be able to:

"1. Identify both behavioral and conceptual objectives for art edu-
cation.

2. Write behavioral and conceptual objectives for art education in a
form which leads directly to unit construction and to instructional pro-
cesses and materials.

3. Identify and produce the component parts of a unit to make a be-
havioral or conceptual objective operational for both instruction and
evaluation.

While the participants seemed to express confidence that they had
entry to the psychological techniques being presented, they felt that con-
siderable sorting and reinforcement would be necessary on their own time
in order for them to adopt the techniques as modes of their personal be-
havior and in order for them to relate them to their value systems in re-
gard to art education. A number spoke of plans to study their notes
closely upon their return home.

There has been a direct attempt to provide art educators who probably
will be responsible for research and development in the field with means
to develop objectives in keeping with the demands of the frontiers of
knowledge toward "active and productive research" and toward basic "in-
structional decision making criteria" for "curriculum requirements."
The terms in quotation marks come directly from the Institute proposal
and represent in my view an accurate account of the experience of the
Institute itself.

They appeared to be two major recurrent problems or concerns as a
result of the experiencing of the processes of the Institute itself. The
first of these had to do with the pervasive atmosphere of the situation.
There was difficulty in establishing connectedness with the Institute task.
This appeared due to: a. the newness and amount of material, b. the pace
of presentation, and c. an inability to empathize with the leaders about
the function of the informational data as means toward accomplishment of
the ends of the Institute. People were, however, making decisions and
relating in terms of consequences throughout. The continuing nature of
this concern seemed to come from the general acceptance by the partici-
pants of the importance of their task and by a deeply felt desire to
really know the material presented.

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The fatigue factor was somewhat overcome in this by increasing familiarity with the material. Immediate response of leadership to participant reaction was a tremendous help in providing the kind of rapport necessary for efficient involvement.

The second major recurrent problem had to do with understanding the content presented. Understanding in this instance had to do with 1. dealing with the size of behavior as (a) a lower level of abstraction and as (b) a unit or single member; 2. dealing with functional relationships (a) between types of behavior presented, and (b) between the steps in task analysis, that is, the identification, the importance, placement or order, and dependence of the parts of the sequences demanded in the analysis of the behavioral task; and 3. dealing with aesthetic behavior as an objective in art education and its translation into the language of psychology being presented.

In my judgement, considerable progress seemed to be made toward knowledge about the concepts of size and relationships; but attainment of the behaviors attendant to application were barely begun. Recurrent attempts probably are needed by the individuals at home, in reference to kinds of problems they are handling in their work in order to develop technical competence. Choice of the instructional unit, a single item, as the basis of the Institute was an extremely important decision. It appeared to me to be central to the accomplishment of the objectives. Without this decision to focus on the unit it appears that the goals of understanding behavioral objectives would have been much more vague. It seems to be an accurate identification of a "high-mileage concept" as well as a more important one to the content of the Institute; and it expressed implicitly a relationship between content and method.

Problems with content which concern connecting art education, particularly with connecting aesthetics in art education, and behavioral objectives seemed to lie with the problem of knowledge about the concept of aesthetics itself. This necessitated art education content learning of a complex nature as well as psychology content learning; and compounded the problem of relating the two areas of content. Since behavioral objectives as defined by psychology were the stated goals of the Institute, the use of this aspect of art education content as the means of relations-making seems to be more influenced by current fashion in the field than by the analysis of the task at hand.

In view of the commitment of the Institute toward goals which deal with the frontiers of knowledge it seems appropriate to consider these activities in relation to the current status of art education in the context of contemporary scholarship. The status of the behavioral sciences and with them education generally, and art education specifically, has indicated a need to develop technical, precise language for concepts in the various fields. There is a move toward this direction, and art education must reflect this precision as it occurs by attending to frontier concepts in the behavioral sciences. Asahel Woodruff made this very clear in his summary paper on curriculum for the Conference on Development and Research in Art Education Curriculum at the Pennsylvania State University in 1965. In fact this was a central finding of that important conference. These institutes are a direct response to this need conducted by the National Art Education Association and facilitated through its regional affiliates.

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The leadership of NAEA in fostering this type of study is reinforced by the number of places in separate inquiry that this direction is being pioneered.

Following are some examples of individual responses:

a. College faculty: My college is doing this kind of thing, and I am not able to give the support I would like to the young faculty. Now I can go back and participate as I would like.

b. Supervisor: The language is not familiar to me. The words used to carry the content kept me from attending to the ideas being presented.

c. Coordinator: Use of more examples at the simple level would help; for instance, a simpler familiar art instance or situation, rather than as complex a one as that of aesthetic judgment.

d. College faculty: The period from afternoon to evening readied me to get into behavioral material. Moving out of this into art made it difficult to stick with understandings I thought I had.

e. Supervisor: These questions will need to be attended to later, in order to determine appropriate curriculum goals.

Where we may go from here:

1. Practice by the participants on their own educational tasks using the guides of behavioral objectives as presented in the Institute.

2. Use of this technique as criterion for projects developed in practice and for research. Can they be stated in behavioral units?

3. Identification of some important behaviors in art education, and analysis of them to the point of testability. This has implication for further institutes, further state activities, and further leadership on the part of NAEA in providing vehicles for action.

4. Study of the implications for tying together research of the future. There is a need to establish means for minute bits to fit and to contribute to the larger field. Perhaps centers in the country need to be developed to work on aspects of the field. These could be greatly enhanced by resources and interests of specific locals, could avoid repetition and wasted effort and could provide greater resources to practitioners and researchers.

Voluntary reactions of participants

A number of responses from participants and persons involved with the training programs have been received, both through verbal exchange with members of the training staff and correspondence. The following three letters serve as testimony to the kinds of evaluation and interest offered by participants.

May 6, 1968

Dr. Charles M. Dorn
Executive Secretary
National Art Education Association
1201 Sixteenth Street, N. W.
Washington, D. C.   20036

Dear Doctor Dorn:

I was one of the participants in the
Eastern Regional Research Institute held in New
York City from March 30 to April 2, 1968. A
month after the Institute I can say that it is
having a lasting effect on my teaching. I find
that I refer frequently to the work. I am
concerned especially with developing an appreciation
of art in a very large number of students at the
secondary level and the work of the Institute is
most useful in determining specific aims and in the
measurement of their achievement.

For me personally it was a stimulating
experience. Too often I am so involved in teaching
and in professional art work that I give little
attention to the philosophical and psychological
aspects of my work. It was an occasion of personal
enrichment and has made me recall and again be
conscious of the process of learning. I do not
expect to go into computerized education in the
immediate future but believe this examination of
the educational processes is immediately beneficial.

Sincerely yours,

Sister Margaret Mary McTwiggan, R.S.M.

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PAGE 24 IS MISSING

April 29, 1968

Dr. Herbert J. Burgart, President
Southeastern Arts Association
School of Art
Richmond Professional Institute
901 Franklin Street
Richmond, Virginia 23220

Dear Dr. Burgart:

The Southeastern Art Association Research Committee heartily endorses the Research
Training Institute conducted at Atlanta, Georgia (April 15-17) as timely and highly
worthy of continued support. It was the unanimous opinion of the Research Committee
as well as other observers at the Committee's meeting that this kind of innovative
learning model cannot be over rated in terms of its significance to our field.

There is a great deal of evidence supporting the fact that the objectives of the
Institute were achieved. Many of the participants in key positions of leadership in
the Southeast have urged members of the Research Committee to convey to the profess-
ion that this type of program should not be left unattended - i.e., they urge con-
tinued interest by the National Office in perpetuating the significant interest in
evidence.

Perhaps, for one of the few occassions in our history as an association, research
based materials have been clearly articulated by an instructional team for particip-
ants who ordinarily reject such intercourse of ideas. Dr. Asahel D. Woodruff and
his instructional team made the concepts of behavioral objectives succinct to the
training objectives as well as examinable by the participants in making meaning
germane to practice.

It would be tragic, if this important enterprise would die aborning. Leadership
at the National level is strongly urged. There is a need for successive steps
which need to be grounded in nation-wide support. The National Office, the Research
Committee believes, is in the best position to coordinate the development of this
kind of enterprise.

The Research Committee reviewed several suggestions in terms of the next steps they
would recommend, but felt that the final evaluation of the project would reveal many
positive ideas and would provide an excellent basis for future projections.

Respectively submitted,
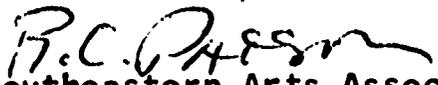
R.C. Paxson

Southeastern Arts Association Research Committee
R.C. Paxson (Chairman), Julia Schwartz, and Robert Ulmer (members)

cc.
    Dr. Charles M. Dorn, Executive Secretary N.A.E.A.
    Dr. Asahel D. Woodruff
    National Art Education Association Officers
    Southeastern Arts Association Officers
    Institute Staff Members
    Regional Presidents   25
    State Presidents

Conclusions:

What Was Learned About The Institute Process?

1. A heavy agenda can be handled without loss of interest or attention when the participants are oriented to a learning pattern, the content is reasonably well programmed, and it has obvious value in the eyes of the participants.

2. The combination of perceptual-conceptual learning, followed by tryout is effective. It appears to be most effective when:

        a. Each cycle is made up of one small behavior which can be comprehended and tried out in one instruction period of an hour or so.

        b. The behaviors are sequential and cumulative, each contributing to the next.

        c. Adequate illustrative materials are used to facilitate quick grasp of the essential concepts.

3. When time is at a premium, and the content load is heavy, the initial input of conceptual materials tends to be accompanied by some degree of initial confusion in the participants. If the content is sequentially programmed, and both reiteration and frequent illustration are used, and if the concepts are clearly involved in tryout experiences which follow soon, adequate initial clarity can be achieved and the desired behaviors can be made operative in at least rudimentary form within the institute schedule.

Recommendations:

To reach the point of research usefulness, these steps appear to come next:

1. For the present participants:

        a. Develop competence in objectives six, seven and eight

        b. Provide guidelines for planning research projects using behavioral objectives as the dependent variables.

2. For a selected cadre of key art educators who can begin to multiply the impact of this approach:

        a. Steps a and b above

        b. Provide tactics in training others and some experience in doing so

3. For other future participants:

        a. Refine the content and tactics, seeking to eliminate irrelevant content and concentrate on essential, and improve the effectiveness of the procedures

        b. Consider the advisability of establishing continuing retraining programs for key personnel, with more adequate time to bring the basic competencies up to a fully workable level.

APPENDIX A

STAFF MEMBERS FOR RESEARCH PROGRAMS:

Western:
Dr. Harlan Hoffa
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School of Education & Psychology
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Stanley Madeja (Consultant)
Arts & Humanities Program
U. S. Office of Education
Washington, D. C. 20202

NAEA Staff Representatives
Charles M. Dorn
Executive Secretary

John E. Hammond
Assistant Executive Secretary

H. James Marshall
Project Coordinator

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THE NATIONAL ART EDUCATION ASSOCIATION
1201 Sixteenth Street, N.W.
Washington, D.C.

APPLICATION FORM
NAEA 1968 PRECONFERENCE RESEARCH TRAINING PROGRAM

I. APPLICATION PROCEDURES.
  a. Participants in the 1968 Preconference need not be members of NAEA. The program is intended for those persons whose formal education has been completed and whose major training has been in art education.
  b. Applicant may choose the Preconference location he wishes to attend.
  c. Deadline for receipt of applications is February 15, 1968. Applicants will be notified of their selection by February 22, 1968. Participants will be sent hotel reservation cards upon selection.
  d. Return application to: H. James Marshall, Research Training Coordinator, National Art Education Association, 1201 Sixteenth Street, N.W., Washington, D.C. 20036.

II. APPLICATION FORM.
  1. Indicate the Preconference of your choice here: (   ) Western Regional
     (   ) Pacific Regional   (   ) Eastern Regional (   ) Southeastern Regional

General Information

  2. Name:_____
                        Last   First   Initial
  3. Mailing address:_____
     _____

  4. Sex: M F   Age:_____ Telephone No:_____

  5. Present Institutional Affiliation (e.g., UCLA):_____
     _____

Educational History

  6a. Masters School:_____ Year of Degree_____ b. Doctoral School_____ Year_____
      Major_____   Major_____

  7a. Record in the blank the approximate number of courses you have taken at either the under-graduate or graduate level in each of the following areas:

     a. Anthropology_____   f. Linguistics_____

     b. Curriculum_____   g. Mathematics (excluding math educ.)_____

     c. Educ. Administration_____   h. Psychology (Exper.,Soc.,Devel,or Learning)___

     d. Educ. Measurements or Psychometrics___ i. Sociology_____

     e. Electronic Computers_____   j. Statistics and experimental design_____

  b. Describe briefly your training and experience with computers:_____
     _____
     _____
     _____

Employment Information

8a. Describe briefly the nature of your present employment:_____
_____
_____

b. Describe briefly any changes you expect in your employment during the coming year with respect to either employer or type of activity:_____
_____
_____

9a. What percent of your time is allotted to teaching?_____
b. What percent of your time is allotted to research?_____

10. Which courses do you teach (if any), at what level?

Course	Level	Textbook

Professional and Scholarly Activities

11. What are your primary research interests (e.g., motivation, creativity, curriculum development, experimental design)?_____
_____
_____
_____

12. Approximately how many research articles which you have authored alone or jointly have been accepted in a scholarly (refereed) journal?_____

13. In total, about how many research articles, theses or technical reports (both published and unpublished) have you authored alone or jointly?_____

Reasons for Applying

14. Please give your reasons for applying to this Conference:_____
_____
_____
_____
_____
_____
_____

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The National Art Education Association

Preconference Research Training Program   Form A

Instructions

Spend from 30-40 minutes on this quiz. Attempt to make at least some response to each question, but do not linger on a question longer than approximately 2½ minutes.

1. Suppose a person goes through the following process as he interacts with his environment:
   a. Receives sensory input (perceives)
   b. Forms concepts from past perceptions
   c. Decides upon a line of action based upon these concepts
   d. Acts in an attempt to carry out a decision
   e. Perceives consequences of the action; concepts are then either reinforced or modified.

   Of what value is knowledge of this process to the art educator? (One or two sentences):

2. Are the learning conditions required to
   a. change the overt behavior of a person
   b. change a particular concept in a person
   c. retain some verbal information
   all identical? (Explain in one or two sentences):

Match the following by placing the appropriate number on the appropriate line:

3. (1) A human decision-controlled act   _____ Blooming of a flower
   (2) An empirical event or process   _____ Painting a landscape
       in nature   _____ Smog
   (3) A consequence produced by a human   _____ Mixing colors
       or empirical act   _____ Practice in drawing; smoother
   (4) A composite act-consequence   lines produced
       sequence   _____ Rain

4. (1) Behavior   _____ 1700 boys participated
   (2) Concept   _____ Mental image
   (3) Item of verbal information   _____ The date of the war as 1941
   (4) Topic   _____ Molding a piece of clay
                                                 _____ The Civil War
                                                 _____ Mediating variable

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To "learn" art is a more appropriate orientation than to "teach" art because
   a. traditional "teaching" mostly omits important verb information during
      the learning process
   b. "learning" requires the student to become a doer rather than merely a receiver
   c. "learning" emphasizes developing percepts and concepts, while traditional
      teaching emphasizes decision making and consequences

Define behavior: (One or two sentences)

Identify one behavior that would be crucial for an art education program:

Define concept (One or two sentences):

Identify one concept that would be crucial for an art education program:

What are three characteristics of an appropriate behavioral objective?
   a.

   b.

   c.

Write a behavioral objective for any one of the following:
   a. A human decision-controlled act:
   b.
   b. An empirical event or process in nature:

   c. A composite act-consequence sequence:

, Suppose the following art objective: The student will have an understanding
                                        of Expressionist art.

   (True-False) Unless "understanding" is stated as a set of observable student
                 behaviors, the selection of appropriate instruction for this
                 objective will be virtually impossible. (Explain your choice
                 in one or two sentences):

. Give three reasons why writing art objectives in the form of behavioral
  statements is especially helpful for art education:
   a.

   b.

   c.

. If you were to develop an instructional unit for a given set of behavioral
  objectives, list at least three of the steps you would go through:
   a.

   b.

   c.

13. Here are four types of concepts:
    a. Concept of an act or process
    b. Concept of a personal feeling or want
    c. Concept of an object, condition, or other state of being
    d. Concept of a relationship

    Think of one art concept representing any one of these categories and write
        it in the form of a conceptual statement:

14. Here is an art behavior: From dry ingredients, the student will be able to
                                prepare a glaze suitable as a decoration for clay objects.

    a. Identify one concept required to perform this behavior:

    b. Identify one instrumental competency required to perform this behavior:

15. Suppose you plan to formulate some instruction on the basis of your component
    task analysis of some desired behavior.
    a. What would be two components of any desired behavior?
        (1)

        (2)

    b. What two questions would you need to ask about that behavior (the answers
       to which provide your instruction)?
        (1)

        (2)

16. What are two principlestypes of human behavior?
    a. (

    b.

17. Suppose you had this objective: The student will be able to discriminate
                                     between the following design techniques:
                                     Collage, Silk screen, Graphic, Mosaic,
                                     and Sculpture.

    a. What type of test item would most directly measure the attainment of
        this behavior?

    b. What would be the content of the test item?

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The National Art Education Association

Preconference Research Training Program   Form B

Instructions

Spend from 30-40 Minutes on this quiz. Attempt to make at least some response
to each question, but do not linger on a question longer than approximately
2½ minutes.

1. How could knowledge of the following process assist the art educator? (One
      or two sentences)
      The human being
      a. perceives
      b. forms concepts on the basis of perceptions
      c. makes a decision to act based upon his concepts
      d. acts on the basis of his decision
      e. reinforces or modifies his concepts as a result of the consequences.
              of his action:

2. Suppose a teacher is interested in changing either (a) the concept in a student,
      (b) the external behavior of the student, or (c) his memory of verbal
      information. Would the learning conditions in each case be the same?
      (One or two sentences):

B. Match the following by placing the appropriate number on the appropriate line:

3. (1) A consequence produced by a human   _____ Selecting a sculpture
              or empirical act   _____ A lonely painting
   (2) A human decision-controlled act   _____ Flowing lava
   (3) An empirical event or process   _____ Ravages of war
              in nature   _____ Touching a stove and receiving
   (4) A composite act-consequence   a burn
              sequence   _____ Photosynthesis

4. (1) Item of verbal information   _____ Cubism in the 20th Centnzy
   (2) Topic   _____ Drawing a picture
   (3) Concept   _____ "Horse"
   (4) Behavior   _____ Internal meaning
                                                     _____ His name was John Glenn
                                                     _____ Dancing

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5. What is wrong with the concept "to teach" (as compared with the concept "to learn")? (One or two sentences)

6. Define behavior (One or two sentences):

   Identify one behavior that would be crucial for an art education program:

7. Define concept (One or two sentences):

   Identify one concept that would be crucial for an art education program:

8. A well-constructed behavioral objective would have at least three qualities. What are they?
   a.

   b.

   c.

9. Write a behavioral objective for any one of the following:
   a. A human decision-controlled act:

   b. An empirical event or process in nature:

   c. A composite act-consequence sequence:

10. Suppose the following art objective: The student will have an appreciation for proper balance and rhythm in both sculpture and painting forms.

    In one or two sentences, why is it impossible for a teacher to determine when she has reached this objective as it is stated:

11. Why is the transforming of art objectives into desired student behaviors an important activity in art education? (List three reasons)
    a.

    b.

    c.

12. Suppose you have stated your art objectives in the form of observable student behaviors. What are three steps you would now follow in developing your instruction for these objectives?
    a.

    b.

    c.

13. Here are four types of concepts:
    a. Concept of an act or process
    b. Concept of a personal feeling or want
    c. Concept of an object, condition, or other state of being
    d. Concept of a relationship

    Think of ene art concept representing any one of these categories and write it in the form of a conceptual statement: ·

14. Here is an art objective: Given a brush and set of primary colors, the student will be able to mix them in such a way as to produce (1) purple, (2) green, and (3) orange.

    a. Identify one concept required to perform this behavior:

    b. Identify one instrumental competency required to perform this behavior:

15. Suppose a teacher formulates her objective as observable behaviors. She then conducts a component task analysis of this behavior in order to determine her instruction. What would be
    a. What would be two components of this behavior?
        (1)
        (2)
    b. What two questions would she need to ask about this behavior (which would facilitate the selection of her instruction)?
        (1)
        (2)

16. Name the two major types of human behavior:
    a.

    b.

17. Suppose you have this objective: The student will be able to distinguish between mural, fresco, and wood cut design techniques.

    a. What type of test item would most directly measure the attainment of this objective?

    b. What would be the content of the test item?