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The Role of Art as a Basic Subject in the Pre- And Elementary School Curriculum

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THE ROLE OF ART AS A BASIC SUBJECT IN THE
PRE- AND ELEMENTARY SCHOOL CURRICULUM

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
Blanche McLane Cook
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CHAPTER I

INTRODUCTION

I. THE PURPOSE

Statement of the purpose. It is the purpose of this study to show why art education should be one of the basic subject areas in the pre- and elementary school curriculum.

It is a comparative study of the aims and philosophy of education and art education; of the educational psychology bearing on children's thinking, relating to the stimulation and development of critical and creative thinking.

The importance of the study. Change in the world today is very rapid. It is forcing thinking people to change their concept of living and of the world itself. The children of today in their "tomorrows" will meet problems which will call for new and original solutions. Old answers and ways of today and the past will not suffice. There will be no ready-made answers for them. They must create their own. The problem-solving approach of tomorrow will demand of them independent and creative thinking.

As early as 1948, Robert Hutchins, then, Chancellor of the University of Chicago, speaking of the rapidity of technical change, the attitude of education in this country

toward it, said what he believed education could do.

It is paradoxical that in our country, where the rapidity of technical change is dramatically presented to every citizen every day, we should have a system of education which ignores the rapidity and inevitability of such change. . . . The fallacious belief that education can in some way contribute to vocational social success has done more to disrupt American education. . . . What education can do, and perhaps all it can do, is to produce a trained mind (19:5).

Robert Gilchrist, Superintendent of Schools of University City, Missouri, speaking before the Phi Delta Kappan 27th Biennial Council, emphasized the importance of the mastery of a problem-solving approach, the need for independence in thinking.

Since Sputnik, we have had pressure to teach people more and more, faster and faster. . . . I think there is a dangerous possibility that we are shifting into a superficial kind of education where facts and skills learned in a rote, repetitive way may be too much a part of the educational program. I hope this is not the case. I hope that we are recognizing that there are different levels of outcomes. But facts and skills, related to each other in such a way that people understand concepts and generalizations, and in order that they master a problem solving approach, are more important. We must always remember that our democracy calls for each one of us to think for himself rather than that we permit someone to tell us what to believe (17: 208-9).

Then, in 1959, in Teaching for Better Schools, Kimbal Wiles writes,

Why in a world of rapid change, is the emphasis on learning to memorize, to conform, to carry out directions rather than on the development of creativity (44:185).

Why indeed? Is not creative thinking needed in the solving of those problems of the future which call for new and original solutions? Art education emphasizes the development of creative thinking.

James B. Conant, noted educator, writes in 1963 of the present situation of the arts and other areas in the school program today.

The American public and professional educator, then, are still a bit uncertain as to why instruction should be provided in art, music, foreign languages and physical education. This uncertainty is reflected in the amount of time allotted to these subjects in the schools and in the optional nature of the work. . . . The increased emphasis since Sputnik on science and mathematics is believed to have reduced the amount of time spent by the average or better than average student on art and music (9:180-1).

Ralph Beelke, of Purdue University, does not believe that art education is threatened by emphasis on the "three R's." He does believe, however, that the increased cultural and educational interest in the arts will turn the "spotlight of inquiry" on the art programs nationally. Because of the general reassessment in education, there is "new" mathematics, "new" science; he believes art education will be called upon to prove that it is as "solid" as the traditional "solids" to a place in the school program (7:15).

Art education's answer and proof must be,
. . . understandable to people who are not
educators and who do not have an intuitive
understanding of the art process. In the main,

people who make curriculum decisions which say art is or is not an important part of the school programs are non-art people. This need not worry us, but we should be conscious of the fact that when we define content or knowledge we do not define it only for ourselves (7:16).

It is not necessary that "new" precede art education. However, its values, and its contribution to individual development do need definition to non-art people that they, too, may have a clear understanding. Also, they should understand that any areas of knowledge that can contribute to individual growth should have a place in the school program, and at the levels where they can contribute most to that growth.

Every area of human knowledge has significant contributions to make to each student's intellectual growth. Thus, students should continuously study in the areas of humanities, mathematics, science, practical and creative arts, and health and physical education (41:87).

The preceding thought and quoted statements are intended to show, not only the importance of this study, but the reason for making it.

Restatement of the purpose. It is the purpose of this study to show why art education should be one of the basic subject areas in the pre- and elementary school curriculum.

Delimitations of the study. (1) It is not the purpose of this study to discuss the more recognized and accepted values of art education, namely:

- a. The aesthetic value.
- b. The cultural value.
- c. The therapeutic value.
- d. The vocational and avocational value to those "gifted" and/or interested in the arts.
- e. The value to the fields of science, technology and industry.

These are accrual values, could be called "plus" values of art education. (2) It is not the purpose of this study to discuss (a) why art is not now generally one of the basic subjects of the pre- and elementary school curriculum; why it can be too readily pushed aside as a "frill" or "fringe" subject area. (b) How it is presently taught, or how it could or should be taught. (c) Whether it should be taught by the classroom teacher, or a specialist. (d) What training in art should be required for the certification of the teacher on the pre- and elementary school level.

CHAPTER II

REVIEW OF THE LITERATURE

I. GENERAL EDUCATION

In the history of the American people, education has been regarded as an instrument for improving personal group living for the promotion of democratic ideals and an educated citizenship essential for the maintaining and advancing of democracy.

The president's Commission on Higher Education of 1947, reported:

Equal educational opportunity for all persons, to the maximum of their individual abilities and without regard to economic status, race, creed, color, sex, national origin or ancestry is the major goal of American democracy. Only an informed, thoughtful, tolerant people can maintain and develop free society (33:3).

Next to the goal of education for all, is the development of each individual. The responsibility of educators is to assist an individual to develop to the fullest extent his potentiality, to challenge him to achieve his maximum of that potential, the only limitation being an individual's capacity to avail himself of the opportunity. He must be able to think clearly and make wise decisions necessary in meeting the problems of the future.

In 1955, the report of the White House Conference on Education, written by men who feel deeply about education,

gave the goals of education:

1. Fundamental skills of communication. . .
2. Appreciation of our democratic heritage.
3. Civic rights and responsibilities and knowledge of American institutions.
4. Respect for and appreciation of human values and for the beliefs of others.
5. Ability to think and evaluate constructively and creatively.
6. Effective work habits and self discipline.
7. Social competency as a contributing member of his family and community.
8. Ethical behavior based on a sense of moral and spiritual values.
9. Intellectual curiosity and eagerness for life long learning.
10. Esthetic appreciation and self-expression in the arts.
11. Physical and mental health.
12. Wise use of time, including constructive leisure pursuits.
13. Understanding of the physical world and man's relation to it as represented through the basic knowledge of the sciences.
14. An awareness of our relationships with the world community (45:108).

Paul Woodring of Western Washington State College, Bellingham, Washington, in 1957, stressed the development of the ability to make wise decisions throughout life; that to be able to do so, he must learn to think "clearly and accurately and be able to draw conclusions from evidence" (45:12).

Goals in American education, given by the National Educational Association, in Schools for the 60's are brief but comprehensive.

(1) Development of those basic skills and sturdy independence and initiative which will enable our citizens to attack the problems that face them and press forward toward ever improving solutions.

(2) The discovery and full development of humane and constructive talents of each individual.

(3) Emphasis on social responsibility and cooperative skill necessary to the progressive improvement of social institutions (45:1-8).

In 1961, the Education Policies Commission of the National Association, gave as the central purpose of education:

The purpose which runs through and strengthens all other educational purposes--the common thread of education--is the development of the ability to think. This is the central purpose to which the school must be oriented if it is to accomplish either its traditional task or those newly accentuated by recent changes in the world. To say that it is central is not to say that it is the sole purpose or in all circumstances the most important purpose, but that it must be a pervasive concern in the work of the school.

Many agencies contribute to achieving educational objectives but this particular objective will not be generally attained unless the school focuses on it. In this context, therefore, the development of every student's rational powers must be recognized as centrally important (10:12).

Lloyd J. Trump, in making his report on the experimental study of the utilization of the staff in the secondary schools (appointed by the National Association of Secondary School Principals), places the same stress on thinking, intellectual inquiry and problem solving. The world in its rapid change faces a complex of problems which it has never experienced before. This makes urgent "unprecedented, many sided solutions," calling for the work and study of "specialists plus."

We must develop the spirit of inquiry in young people as they go through school, they should learn to react to what they read and hear and approach problems with curiosity, and the will and techniques to solve them.

Students need to learn the skills of effective discussion. Such examination and exchange lead to critical thinking and stimulates further inquiry. They are the first steps in acquiring knowledge and doing something with that knowledge (41:6).

The National Educational Project on Instruction in their report Schools for the 60's, gives in a recommendation priorities for the school, the teaching of "ways of creative and disciplined thinking, including methods of inquiry and application of knowledge. . . competence in self-instruction and independent learning. . ." (29:32).

This report takes up the problem of "drop-outs," and gives the role of the school as one of challenge in the development of programs that will keep these young people in school. It places the greatest responsibility on the elementary school. If a child finds his first school years satisfying and challenging to his desire to learn, he will not be numbered among these drop-outs (29:35).

From this same report, under Decision Area VII, relative to a balanced program several quotations will be given which seem pertinent to this study:

The major goal is the development of individuals who can fulfill their responsibilities to society and find personal satisfaction in creative and constructive activity--people who think clearly, feel deeply and act wisely. For this

there is a need for a program that provides balance: balance of content; balance between academic and applied subjects; balance among knowledge, values, skills. . . (29:46).

The recent emphasis on science and mathematics has helped to correct an imbalance that existed in the instructional program in the 1950's. But has a new imbalance been created, with the humanities and the social sciences being neglected, and at a time when their contributions are much needed? Science and mathematics are powerful servants of mankind, but they may not be its saviors (29:48).

Furthermore, in our preoccupation with survival we can not lose sight of the prime question: 'Survival for what?' Why survive if the resources that spell self-realization, health, and personal satisfaction are not to be explored? Why survive if the knowledge and skills that are needed for interested and intelligent participation in the world's economic, social, and political problems are not to be learned at a highly usable level? (29:49).

So much has been learned in so many areas of knowledge that it is no longer possible for students to learn even summaries of existing knowledge. . . . Coverage is no longer difficult, it is impossible. The problem of what to learn and how to learn it requires a different approach today. We need to find ways to move from memorization of facts to discovery of facts, ways to help young students think as physicists think, as historians think, as artists think (29:50).

One of the recommendations of the National Committee as a possible solution to present "curricular ills"

. . . is not a collection of twenty or more subjects from kindergarten through high school. The answer is more likely to resemble a core of common learnings from the elementary school, perhaps not too sharply differentiated by subject-field, and an increasing opportunity for electing branches of this core for specialization toward the upper years of high school (29:88).

The child is creative. His creativity may be "cultivated or curbed." That stimulation and development of this creativity is "essential" is the belief of Kimball Wiles, College of Education, University of Florida.

Fostering Creativity is Essential

In a world where change is certain and the transition is rapid, new answers must be sought. New information about the physical world changes our conception of it. New issues and new problems arise. Conformity to convention, custom or hereditary commitments cause confusion and contradiction. . . . If schools are to aid society face the challenge of the day-by-day crisis, creativity must be stressed in the classroom (44:183).

Creativity is the method of progress. Conformity and the learning of present ways of doing things are only ways of maintaining the status quo. . . . with the present rapidity change, it is easy to recognize that society is emerging and its values and ways of living must continually be re-evaluated (44:184).

Why, in a world of rapid change, is the emphasis on learning to memorize, to conform, to carry out directions rather than on the development of creativity. . . . A child is creative. He is constantly seeking better answers to problems that confront him. From infancy he tries to find ways of getting the help he wants. . . . He explores, he puts things together, he tears them apart. He babbles, talks, and connects word and ideas. . . . He learns by trying out his ideas.

He brings this method of solving problems of learning to school with him. If he were free to operate in a normal manner he would continue to be creative. . . . Creativity is something that all children have potentially. It may be cultivated or curbed (44:185).

Harold H. Anderson, Research Professor of Psychology, Michigan State University, in a bulletin on Creativity and Education, examines two systems of education. One he calls

the "open" and the other the "closed system (3).

He defines the first as "a stimulating system of relationships which accepts uniqueness in perception and in thinking." He believes the "open system offers the greatest opportunity for learning in the preschool years. It is here that the most rapid learning takes place and the greatest manifestation of creative thinking takes place. The "open" system permits originality, experimentation, initiative, and invention. It is the environment in which creativity can develop.

The "closed" system is more or less the opposite of the "open" system. It is concerned with the acquiring of knowledge, memorization of facts and finding answers already known to someone else. The student learns what those of the past have discovered and agreed upon: what someone thinks is right or wrong; to follow directions. It is the kind of learning common to some areas more than others, but is found in all subject-matter areas.

The infant starts life in a relatively open system of interacting and of freedom of interplay with his environment. As he develops in ability to communicate and to extend his mobility, the environment of persons begin to close in on him. The child encounters a complicated system of environmental demands, tabus, socializing and acculturating processes. These early requirements for conformity are climaxed by a school curriculum which is mostly closed system of learning and from which there is no escape. The environments of most children do not stimulate nor even permit the continuing process of development.

It is not surprising that in early childhood creativity is universal and that among adults it is almost nonexistent (3).

When Julius Adams was installed as the eleventh president of the Massachusetts Institute of Technology, a leading college of science and engineering in the world, he said:

We must strive to develop more effectively the creative, imaginative, constructive powers of the students (1:66).

Albert Einstein, noted scientist, in his book, Out of My Later Years, writes:

The development of general ability for independent thinking and judgment should always be placed foremost, not the acquisition of special knowledge. If a person mastered the fundamentals of this subject and has learned to think and work independently, he will surely find his way and besides will better be able to adapt himself to progress than the person whose training principally consists in acquiring of detailed knowledge (11:36).

The N.E.A. Reporter of July 16, 1965, reporting on the 103rd meeting of the National Educational Association has as one of its headlines, Bruner Calls for Overhaul of Elementary Education, Including Teacher Training.

Jerome S. Bruner, graduate school, Harvard University, is reported as saying:

We should give a much higher priority to the earlier years--the elementary and pre-school years, for it is a likely case that well begun is better than half done (8).

Another speaker, Dr. Leland B. Jacobs of Teacher's College, Columbia University, gave one of the follow-up

speeches and is reported to have discussed:

What Can the Arts and Humanities Contribute to the Liberal Education of All Children and Youth?

The contribution of the arts and humanities is important today, because ours is, above all else, a time marked by the quest for human dignity--human dignity for developing nations, for the economically deprived, for groups with inequities to be wiped out, for all individuals.

It is the role of the teacher of the arts and humanities to teach with practices that square with the intent and nature of the content. The teacher needs to stimulate thought, build on divergence in thinking, and develop critics and creators rather than regurgitators and imitators (8).

Summary and conclusions. The two major aims which are emphasized, and are continuing goals in general education are: (1) equal educational opportunity for all persons, and (2) the development of each person, to the maximum of his individual capacity and ability.

The theme that is found to predominate and strengthen these aims is the development of an individual with the ability to think, to think clearly, to meet problems with curiosity and the will and the techniques to solve them.

It would seem from the recent speeches of Bruner, Jacobs, and the current writings of Anderson and Kimbal Wiles, together with the recommendation of the National Educational Project on Instruction, that American education

has come again to the cross-roads with decisions to make.

These decisions will not affect the major goals, but will, the methods used, in moving toward them.

There is herein indicated (1) that the pre- and elementary school is the place of beginning for change. (2) A suggestion for a "core of common learnings" at this level, "with increasing opportunity for electing branches from this core for specialization" toward the upper levels of education (29:88). (3) More emphasis on the stimulation and development of creative thinking. This would mean that those subjects, the arts and humanities should have a definite place in the "core of common learnings."

II. ART EDUCATION

Art has been a vital force through the ages. Its use in everyday life in the past has shown the world how great has been its function. Much of the knowledge of the life of peoples in the past comes to us through their arts and crafts.

Our philosophers from the past to the present, Plato to Dewey, have been concerned with art in education. Many of the basic ideas of aesthetics in education today were considered basic by them.

On the American scene, from 1838, when Henry Barnard promoted drawing as a common school subject, to the present, there is great contrast in the philosophy and aims of art education.

Horace Mann, in 1848, expressed the idea to the Massachusetts Board of Education that drawing should be taught in the schools; that the value of teaching it would be the achievement of greater literacy and ability to express ideas (13:64).

The Massachusetts legislature made it mandatory in 1870 that drawing be taught in the schools of towns over 10,000. About the same time the first state supported school for the training of teachers of industrial drawing came into being. The goal then became the training of artists for industry.

By the end of the century, the National Education appointed a committee on drawing. The report could be said to be prophetic of the present aims of art education:

1. To develop an appreciation of the beautiful.
2. To develop the creative impulse.
3. To offer a consistent development of the faculty of sight.
4. To acquire ability to represent.
5. To prepare pupils for manual industry is purely incidental.
6. The development of professional artists is in no sense the aim of art education in the public schools (13:65-6).

This broad contrast in the philosophy and aims of art education from 1838 to the present can be shown in the goals of one school founded in 1844. The Philadelphia School of Design for Women, now the Moore College of Art, Philadelphia, Pennsylvania, had as its goal the training of women who could understand applied design to supply the need of American industry. Today, the purpose as stated in the current catalogue:

. . . is best realized by affording the individual opportunities of a related and professional art education, thereby developing useful and intelligent members of society. Specialized technical knowledge and the broad understanding gained through the general studies can no longer be separated. When liberally educated in the professional arts, the technically competent student emerges, not as a tradesman, but rather as an individual with an inquiring mind, possessing keen insight, ability to reason, and the power and skill to act with intelligent judgment (28:18).

The first concern of curriculum planners is the philosophy, and then the object and aims of the program.

De Francesco, with a lifetime of endeavor in art education, in a comprehensive study of it, gives according to the major beliefs of today, the philosophy of art education:

. . . art education must be considered as the birthright of all children and not the few; then it is feasible to lay a foundation for a program designed to evoke from all an art expression which is not only suitable to the individual but reflects his social setting. Such a view, obviously, must give primary importance to the development of expression, insights, concepts, appreciations, and outlooks in all

pupils. So conceived, art education will not strive for esoteric ends, but for the optimum growth of each child to the extent of his abilities (13:564).

The individual must be the major concern in both the educational process and in the social setting.

In a review of several State Art Guides this same concern is expressed in their philosophy and their objects and aims. Those given in Art Education in the Oregon Elementary Schools can be given in summation of this review.

Philosophy

Education of the child rather than tangible product is the most important result of art experiences. Since primary concern is with the growth of the child, his creative expression should be considered in relation to his total development. Each child is unique in the degree of his development of emotional stability, mental ability, and attitudes. . . opportunity and appropriate material for continued growth of expression, consistent with each child's own capacity and interests are essential. . . . Through art experiences the child uses and integrates his motor, emotional and mental abilities. . . these help him to achieve self-realization, retain his individuality and increase his initiative (4:9).

Objects and Aims of Art Education

Art experiences in the elementary school should help the child to:

Develop creative self-expression and self-confidence in his art expression.

Express and communicate feelings, ideas, and concepts through various art media.

Develop imagination, originality, and inventiveness, to the best of his ability, in art activities.

Develop the abilities to think critically and to solve problems.

Develop an adjusted, well-integrated personality.

Establish a habit of working cooperatively with other children.

Appreciate and respect the creative expression of others.

Relate his work in art to everyday living experiences.

Realize increasing pleasure and satisfaction in both creative and appreciative experiences.

Find an emotional release through art experiences.

Increase his sensitivity towards beauty in the environment.

Use tools and materials with respect for their function, and in a way consistent with his abilities and needs (4:11).

Edwin Ziegfield, Head, Department of Fine and Industrial Arts, Teachers College, Columbia University, discusses four trends in art education which, he "believes are emerging in response to some of the depersonalizing characteristics of American culture and which must be pursued to maintain the humanizing qualities of education" (46:6).

He finds the arts in education being subjected to heavy pressure, and the gains made in the past fifty years are being endangered by curriculums that place heavy emphasis on the academic fields.

In an age characterized by a need for greatly diversified talents and skills, we are imposing, especially on our talented students--our future leaders--an inflexible program of requirements disproportionately weighted in favor of the academic disciplines and the sciences. There is no suggestion here that these areas are not vitally important. The point is that if we bow only to pressures from limited subject areas we are laying the ground work for an impoverished culture without vitality or valid meaning (46:7).

He feels that art educators have created this situation, and if unhappy with the "present state of things," and if they "deplore the imbalances in our present educational system," they can make "some or many, or all the changes" they believe to be needed.

The four emerging trends place important emphasis on art in education.

(1) An increasing recognition of the importance of creativity in life and education; (2) An emphasis on activities which promote individuality, establish uniqueness, and develop autonomy--that is, independence and freedom; (3) an emphasis on the humanizing and sensory rather than the formal values of art; and (4) An emphasis on depth of experience (46:8).

Creativity has long been recognized as an essential of the art fields. What is new in the emerging trend is for a greater understanding of educators, of the need and obligation to develop its potential in all students; the importance of this potential, being not only an end, but a means of learning (46:8-9).

The arts have always placed a premium on uniqueness and individuality. It is an essential quality of the arts. This trend will grow in importance and urgency as the opportunities for individual development and expression in our culture decreases.

The dehumanizing effect of technology and the machine makes it necessary and demanding that educators and education

give more attention and effort to those areas that place the "person as central; that humanize man." Experiences and activities that are of this nature and which are inherent in the feelings and the senses are "heart and soul of art experiences" (46:12).

He criticizes two practices in teaching of art: (1) the stress placed on the product, because it is a material approach, which is valid, but too often has "degenerated" into a series of manipulative exercises, resulting in little differences in the work of "fourth-graders and tenth-graders." (2) The stress on the process, because many teachers have made it their only, rather than their major concern. It is the complete process, from involvement to concern with the result, and the feeling of accomplishment which the final results bring forth, that is necessary to give depth to the experience (46:13).

Summary and conclusions. Art has two major aims: (1) Art education must be considered for all children, not the gifted few. All children are not artists, but all are individuals and potentially creative; (2) art education strives for the mental growth of each child to the maximum of his individual capacity and ability.

The process in art education is concerned with the continuance of the child's already rapidly developing

mental growth, which includes the creative impulse, which in integration with all his learning experiences contributes to his whole growth.

Art education, because of the heavy pressure of curriculums that place greater emphasis on academic fields, giving it little or no place in the education of the youth of today, is unable to do what it can and should be doing toward the stimulation of thought, both critical and creative.

III. IMPLICATIONS

General education and art education. These seem self-evident. General education and art education have, technically, the same major goals: (1) equal opportunity for all children, and (2) emphasis is placed upon the development the individual child, challenging him toward the achievement of the maximum of his ability.

They both stress the development of the ability to think clearly, critically, and creatively, with art education tending to place more emphasis on the latter, the development of creative thinking.

There is agreement that one of the most fundamental aims in a democratic society, is helping children to think for themselves. Independent thinking is sustained in an atmosphere which encourages exploration, experimentation, and discovery. The arts in a school program, well conceived

as to child development and conducted with this aim would provide such an atmosphere to stimulate creative thinking. Through such experience an individual is developed and inclined to approach the responsibilities of life with intelligence and imagination.

And so it would seem that general education needs the contributions of art education, and that art education needs a very definite place among the basic subject areas in general education, in order that progress can be made toward their mutual goals, the education of all youth, with emphasis on the development of, not a conformist or non-conformist, but an individualist, who:

. . . conforms as he sees it, whenever doing so adds to the coherent strength of society and does not conform when doing so weakens that coherent strength. He allows himself the right to choose his own action, keeping in mind the effect of his behavior on the over-all workability and success of the society in which he lives. The active and vital individual must have a creative imagination in order to resynthesize society's chaotic pressures to conform and find the principle by which he will direct his life and behavior (35:5).

CHAPTER III

CONTRIBUTION OF ART TO THE DEVELOPMENT OF THE INDIVIDUAL

Art education has as one of its most important tasks the development of the potentialities of the individual, and his personal expression. Art places the individual supreme, rather than the knowledge relevant to the field. It depends upon the individual for the final answers, the final solutions, and only he can provide these.

A listing could be given here of the value to the individual and contribution to his personal development through the activities and experiences inherent in art education.

However, what better and more interesting way is there to learn what these contributions are than through the statements of eminent writers and educators in art and art education?

Ernest Ziegfield, of Teachers College, Columbia University, takes note of the depth of the art experience; the broadening of horizons, and the deepening of spiritual resources through the aesthetic experience.

Art is a vehicle for aesthetic experiences; art is essentially creative because it is based on personal factors; art activity refines emotional and intuitive perception; art activity

involves not only intelligence but imagination and capacity for experimentation. It is benefits such as these that lift an individual's life from a base existence to that of an enlightened man. Man is changed by aesthetic experiences, his horizons are broadened, his spiritual resources are deepened. Man through art becomes highly sensitive and perceptive, may produce works of art for the enjoyment of others (46:239).

Charles Gaitskell has written several books on art education at the pre- and elementary level, and has taught and supervised the teaching of others on these levels for over twenty-five years.

He lists in this statement that which we may expect in the way of development from art experiences.

Children may gain insight into the nature of creative, artistic acts;

may acquire artistic skills in relation to activities involving their emotions and their intellect;

may learn some of the possibilities and responsibilities which accompany freedom of thought and action in relation to artistic pursuits;

may gain insight into their environment by expressive acts based upon their experiences;

may develop their taste by broad artistic experiences with many materials and techniques;

may by artistic endeavors develop greater insight into nature of the democratic idea (14:34).

Viktor Lowenfeld's passing has left a great void in the ranks of art education, as well as education. At the time of his death he was head of the department of art education of Pennsylvania State University. He was the author of several books; his reputation was international. It is said that his last words dealt with the

importance of art in education.

In the following statement, he gave implication that the promotion of creativeness in art may promote creativeness in general.

Creativeness in the arts as well as in the sciences has common attributes. Educationally this seems to me of great significance for it implies that through promoting creativeness in the arts we may be able to promote creativeness in general, regardless as to whether it will be applied to the arts or to the sciences or, by implication, elsewhere as new experiments in auditory sensitivity reveal. . . .

In a well balanced educational system in which the development of the total individual is stressed, his thinking, feeling and perceiving must be equally developed in order that the potential creative abilities of each individual can unfold (25:2).

Manuel Barkan, of Ohio State University, is another outstanding proponent of art education. He is on the editorial advisory board of Studies in Art Education, a publication of the National Art Educational Association. He is both writer and educator.

The statement which follows speaks of art as an essential avenue for growth.

Art in general education is becoming less a body of subject matter composed of certain specific skills, and more a way of working and a way of seeing. It provides an essential avenue for growth. Individuals, as they work in the arts, react to stimuli in their environment by composing interpretive visual forms. This process of reaction and composition involves the play of sensitive judgment. The thrill of expanding sensitivity becomes the source of wholesome satisfaction (6:4).

Marylou Kuhn, Associate Professor in the Department of Art Education and Constructive Design, Florida State University, was one of the speakers on National Art Education Association 1965 Biennial. Her statement is from that talk. She stresses art as a sequential aid "in the maturity of the learner as he becomes more than he was before, qualitatively as well as quantitatively."

Education through art, if we are to look at its function in the social complex, does not find its center in correction, or prevention, or service to the individual man. Nor does it center primarily in the concerns of the artist as he produces the forms of mankind's development. Instead, it sequentially aids in the maturity of the learner as he becomes more than he was before, qualitatively as well as quantitatively. It stresses the occurrence of the feelings, dreams, imaginings and values within the individual person as they are realized in a progressive assimilation and coordination of sense impressions. Concerned with uniqueness, individuality, growth and the interrelationships realizable through art, art education builds toward potential transferral out of the locale of the learning situation into the total development of a personality. This development is accomplished through learning processes realized in the dynamics of art engagement; and is concerned with bringing the individual to his highest potential in his milieu (23:18).

Joseph J. Orze, who is head of the Department of Art Education, at Middle Tennessee State College, emphasizes the need of our society for "creative, expressive individuals in all walks of life."

Art education cannot afford to assume that each of its young students is a potential artist. If from a class of thirty, one child should find

his career in one of the many fields of art, this would be noteworthy. Yet, if the art program geared its teaching to this one child's potential, it would not only be a waste of public equipment and personnel, but worse, it would be a waste of creative potential and an injustice to the future clerks, doctors, mechanics, and businessmen and women who sit side by side in the classroom with this child.

Our society needs creative, expressive individuals in all walks of life. Art education is as responsible to the future insurance man as it is to the future artist. All children are not artists, nor even artistic, but all are individuals and potentially creative. In a good art program the development and expression of this individuality and potential through art processes and materials is a major goal.

There is something special in every child. Teach for it, develop it, and make its impression your strongest criterion of the effectiveness of your art program (30).

Blanche Jefferson, Chairman of the Program in Art Education, University of Pittsburgh was one of the speakers at the 1965 Biennial of the National Art Education Association.

She expressed the thought that art can become a "new pattern for education in other subjects"; that it gives depth to the meaning of education, and gives strength to each person in accordance to the depth of his involvement.

Not only is art needed to balance the stress upon skill and factual learning, but, because of the way it is taught, can become an altogether new pattern for education in other subjects. Conceptual learning, highlighted recently by Bruner focuses upon the understanding of ideas rather than upon the learning of facts thus deepening the meaning of education. Art

education includes conceptual learning but goes much further. It provides much greater depth of involvement through an interlacing complexity of tasks, decisions, and reactions. The student not only conceptualizes, but he undertakes a totality of approach to education much more demanding than any other. This comprehensive approach is also highly individualized. In every art project, the student starts with only raw materials and his own resources. Then he chooses his own subject and proceeds to organize it. As the work progresses, he continuously appraises and changes it. Along with this, he is learning to deal with and come to terms with his own failures, successes, drives, and underdeveloped skills. He feels close personal association with the completed work. He is entirely responsible for it. . . . Art education strengthens each person according to the depth of his dedication to each art activity (21:23).

Vincent J. Poplizio, New York State Supervisor of Art, cites in his list of goals of art education for the development of the child, the need of provision for "the basis of esthetically critical selection and functional consumption of design goods." This is in addition to contributions to be found in the preceding statements.

1. To recognize, develop and nourish the child's natural creative attitude and imaginative thinking.
2. To make the child aware of the validity of his individual interpretation of his environment and experience.
3. To develop and understand continuity of human society by means of the international language of art.
4. To provide the basis for aesthetically critical selection and functional consumption of design goods.
5. To instill knowledge of the properties and potentials of materials and guide the development of skills in handling these materials.

6. To build a functional vocabulary specifically related to the arts.

7. To make the child visually sensitive to the world about him (32:13-14).

Nora Zweybrueck Wiedmann has a broad background in art education in both Europe and the United States. She is an art consultant for the American Crayon Company. In her statement she takes note of the need for strong art programs; that only through these can each child's creative potential be discovered and developed. . . and later be applied to other fields of activity.

Science has uttered a national cry for more creative scientists. Presidents of large industrial corporations have spoken as fathers, begging for more art in our schools; for only through a strong art program can each child's creative potential be discovered, developed and incidentally, later be applied to all fields of activity. As executives they realize they can find technical experts easily enough, but not so easily the man with expert technical knowledge paired with developed independent thought. Albert Einstein said: 'Imagination is more important than knowledge.' This does not discredit knowledge. It merely puts first things first.

With the increasing awareness of art as basic to potential human excellence, the national feeling for the need for a strong art program has advanced considerably recently. Where there is no art teacher-specialist, the classroom teacher seems to make a tremendous effort today to fill this need. He looks at art as an attitude rather than a subject which, when given proper climate in which to develop, will allow the future adult to exploit his potential abilities to any given field far more richly and rewardingly. To be creative means to be deeply involved. To be involved means to try harder than you would if you remained unconcerned. The results of the creative attitude in any endeavor must eventually supersede those based merely on application of fact (43:5-8).

Evelyn McConnell is head of the Art Department of George Washington High School in Indianapolis.

She decries the programs that pressure the student to enroll in "college preparatory" classes with academic standing, as placing the arts in a struggle for survival.

She cautions art educators not to make changes in curriculum, technique or method, in order "to compete" or "to retain prestige" with other areas, for the reason that,

Within art education we must deal with original thinking and original ideas. Through the development of each individual's ability to create ideas, solve and evaluate problems creatively and critically, true productivity and quality teaching will result (27:18).

Maria K. Gerstman is a former high school art teacher. She is also an accomplished painter whose work is frequently shown in juried exhibitions.

Through her statement of the accomplishments of a good teacher there is implied the contribution of art education to the development of the individual.

What should be accomplished by a good teacher is usually known: abilities must be developed; potentialities must be realized; efforts must be encouraged.

Even a skillful hand still needs direction. An inventive mind, however, evaluates what the eye sees and directs the hand to do what it wants done. Thus, skill is acquired naturally and becomes an independent asset. Positive teaching of art must therefore be based on the principle of developing mental qualities through art. That these same qualities--like the power

of observation, strength of purpose, concentration and evaluation--may help the child with other studies as well, is an additional advantage. Art classes are not designed to make artists out of children. They are to give them those basic faculties which only the teaching in art can provide.

Speaking in relation to a teacher's individual and personal way of working being an influencing factor, she says:

As long as he remembers his main goal, to develop the mind rather than the hand, his own, naturally expressed personality will only contribute to this singular achievement (15:32).

Kati Groff is a fifth grade classroom teacher in one of the St. Louis schools. To this growing list of art's contributions to the development, she adds "good taste." The "pattern" for good taste must be established in childhood, and is a "progressive development."

. . . creative art, by the very nature of its being, its extreme individuality, its challenge to the emotions, its inherent quality of always presenting a problem, gives opportunity for mental growth and control. It helps develop many desirable personality traits--perseverance in conquering techniques; self-reliance, in rewarding originality; self-assurance, in solving problems. . . .; courage, in departing from the trite and ordinary.

The development of good taste is a progressive experience, the pattern of which must be established in youth. To explore, to question, to search, to apply, is to open new vistas of beauty which will have a vital effect on personal standards (18:24).

Ruth Flurry has taught kindergarten in the Atlanta, Georgia schools for twenty-two years. She has been a guest instructor of both the University of Wisconsin, and the University of California.

She has developed her statement through "what art is not." To each negative she states what art is. What art is, is based in the individual's "response" to his environment, to other humans; the confrontation of something to which he can respond. It "is part of the process of becoming a person."

Art is not just for the talented; it is for all. Art is not just to develop and show off a special gift; it is a medium of communication and a means of relating the 'I' to people and things about us. . . .

Art is not just a skill or technique; it is a response. . . . What makes us human is our unique response to environment and particularly to other humans. Art is an expression of that response and is a part of the process of becoming a person. . . .

Art is not just a product; it is a process. This naturally follows, if you accept the idea of art as a response. Response is active, not static. It is a going-forth-to-meet and a seeking of further response.

Art is not for judging: it is for accepting and enjoying. If art is a response, a part of the process of becoming a person, who can judge its value in the 'becoming' process? If the uniqueness of each response which makes us human, to what shall we make that response conform? . . .

Art is not just therapy; it is an integral part of the development of human personality. . . . It is the developmental aspect of art's value which primarily concerns the kindergarten teacher.

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The child must live, must act, feel, and think before he can have 'something to tell' through art or any other medium of communication. He must be confronted with something before he can respond (12:23-24).

Jean Albertson, teacher and writer, tells of the developmental influence of art in the lives of great men, as revealed in their writings.

John Dewey's books show how significant art has been in his experiences. Einstein as a boy became interested in the atom through his drawings of pictorial structures. Through his continual process of drawing he was able to visualize the atomic shapes. The famous scientist and father of experimental psychology, William James, became interested in the study of people due to his early experiences in drawing anatomy and human sketches. George Washington Carver's early experiences of his love of art and flowers about him opened vistas of science to others never before experienced. . . (2:9).

Summary. The thought back of the organization of this chapter is, that the statements of art educators and writers would speak most clearly and emphatically of the great contribution of art to the development of the individual.

Art is a "response" to life, to living, a part of the process of becoming a person; it is an essential part of that development (12:23-4).

Creativity is a capacity possessed by all people. It is evidenced in the young child as soon as he starts to express himself in a personal way. Unless it is

encouraged, nourished and challenged, it may be seriously limited by the time the child reaches adulthood.

It is not surprising that in early childhood creativity is universal and that among adults it is almost nonexistent (3).

Art education develops this creative capacity. When the student undertakes a piece of work, he conceptualizes--he undertakes with a comprehensive approach more demanding than any other--with greater concentration and involvement. He starts with materials, his own resources, chooses his subject and organizes it. He appraises, changes, evaluates. He learns to meet with "triumph and disaster and treat those two imposters just the same" (Kipling's If). He has had a close association with his work, it has been his sole responsibility. He learns to meet all problems, not only art problems, with his solution, his original solutions (21:23).

Through his art activities he adds to his ever broadening background. This is his source of reference from which he draws support and assistance for the solution of the problems he meets, in any field in which he is interested, or finds himself.

Our society has need for the creative person in all walks of life. Art education is as responsible to the future professional, business, and trades man as it is to the future artist (30).

Creativeness in the arts as well as in the sciences has common attributes. . . it implies that through promoting creativeness in the arts we may be able to promote creativeness in general, regardless as to whether it will be applied to the arts. . . to the sciences or, by implication, elsewhere. . . (25:2).

CHAPTER IV

CHILDREN'S THINKING AND HOW THESE PROCESSES CAN BE DEVELOPED IN ART EDUCATION

This chapter follows naturally the preceding chapter on the contribution of art to the development to the individual. It is hoped that it will answer first, why the pre- and elementary school years are so important for the contribution that art education can make to all children, and second, the "how" and "why" art can so contribute to their development.

Alfred North Whitehead, explaining his meaning of the rhythm of education, gives as its principle the timing that different subjects and modes of study should be undertaken by pupils; that time being when they had reached the right time in their mental development (42:26).

In challenging the criterion that easier subjects precede the harder, he writes that some of the hardest must come first because "nature so dictates and they are essential to life."

The first intellectual task that confronts an infant is the acquirement of spoken language. What an appalling task, the correlation of meanings with sounds! It requires an analysis of ideas and an analysis of sounds. We all know that the infant does it, and that the miracle of his achievement is explicable. . . . the next subject in the education of the infant minds. . . . the acquirement of written language; that is to say the correlation of sounds with shapes. Great heavens! Have our educationists gone mad? They are setting babbling mites of six years old to tasks which might daunt a sage after life-long toil (42:27).

Arnold Gesell, writing of the transformation in the child's mental abilities during his first five years, says:

So multiform are these mental transformations that it is difficult to see them in proportion and perspective. Although the rate of development in infancy is extremely rapid, the process itself is no different from that which prevails in later years. In the terms of process, the infant advances psychologically by the same steps which carry him forward in childhood and youth. The infant displays essentially the same kind of drive, the same fumbling power to profit by experience, the same proclivity to abstraction and generalization, in his progress from the known to the unknown.

The more minutely his behavior is examined, the more completely does it resemble in its dynamics the operation of a mature mind. Behavior development entails continuous interweaving of patterns and components of patterns. The organism is forever doing new things, but learning 'to do them in an old way'--reincorporating at a higher level what it has already approximated on a lower one. . . . This process of reincorporation is mental growth. The method of growth of the infant anticipates and stimulates those of later years. The infant is predictive of his later self. The characteristics of mental growth in the nursery school and the kindergarten are those of infancy. . . . In mental growth nothing is; everything is becoming (16:16-17).

In enumerating the cycles of growth, Gesell writes that the middle twelve years have received most of the attentions in public school education, that they are important years, but that the demands of society and the findings of science are compelling a new view of the pre-school years. They are fundamental years coming in the

first cycle of life and therefore, he says, claim a certain priority in all social planning. Today, the demands of society are more demanding, and the findings relating to children's thinking greater (16:3).

The book on Children's Thinking by David Russell, is a compilation of research findings from widely scattered fields. It contains about a thousand references.

He attempts in it to do three things: (1) to combine child development and educational psychology, then to apply these to school work; (2) to explore into the intellectual development of childhood and adolescence--more deeply than a general book on the subject; (3) to present a possible structure from the developmental point of view for the psychology of thinking.

General paraphrasing on this book as a whole from chapter conclusions, and pertinent quotes to the purpose of this paper will be given herein.

Russell accepts H. C. Warren's (1934) definition of thinking as given in the Dictionary of Psychology, with two exceptions. It is defined as "a determined course of ideas, symbolic in character, initiated by a problem or task, and leading to a conclusion." The exception: (1) enlarging "determined" to include both personal and environmental factors; (2) the phrase "initiated by a problem or task," which is true of creative thinking and of problem solving. He desires that relative to children's thinking

that this be changed to "considered as being initiated not only by a problem or task but also environmental features which are not strictly conscious problems" (34:4-5).

The definition used here makes it clear that thinking may be distinguished from such terms as intelligence and learning. Intelligence as measured in the typical test involves thinking abilities, usually of a problem-solving variety, but intelligence is a wider term than thinking, denoting capacity for such work rather than the actual process itself. In contrast to learning, thinking is a process moving from some initiation to some conclusion or solution rather than the process of increasing skill or perfecting the execution of solutions. Thinking takes place during learning but is an intermediate phase rather than a final product. Conversely, learning may affect the efficiency of the different types of thinking (34:6).

The hypotheses used in Russell's book is given in his clear paradigm. A copy has been made and is shown on the next page.

Because children's thinking cannot be studied in its primary context; we can observe children's behavior, record their language, and check their responses on a test, but at best these are second-hand evidence. The serious student of children's thinking can only collect data as carefully as possible; then he must draw inferences about thinking from the data. He can never study thinking directly (34:20).

The symbolic nature of thinking is one of the impediments to clear accurate thinking in young children (34:28).

A brief summary of mental development of the child will give a complexity of mental development. As an infant he makes rapid progress in the control of his own activities

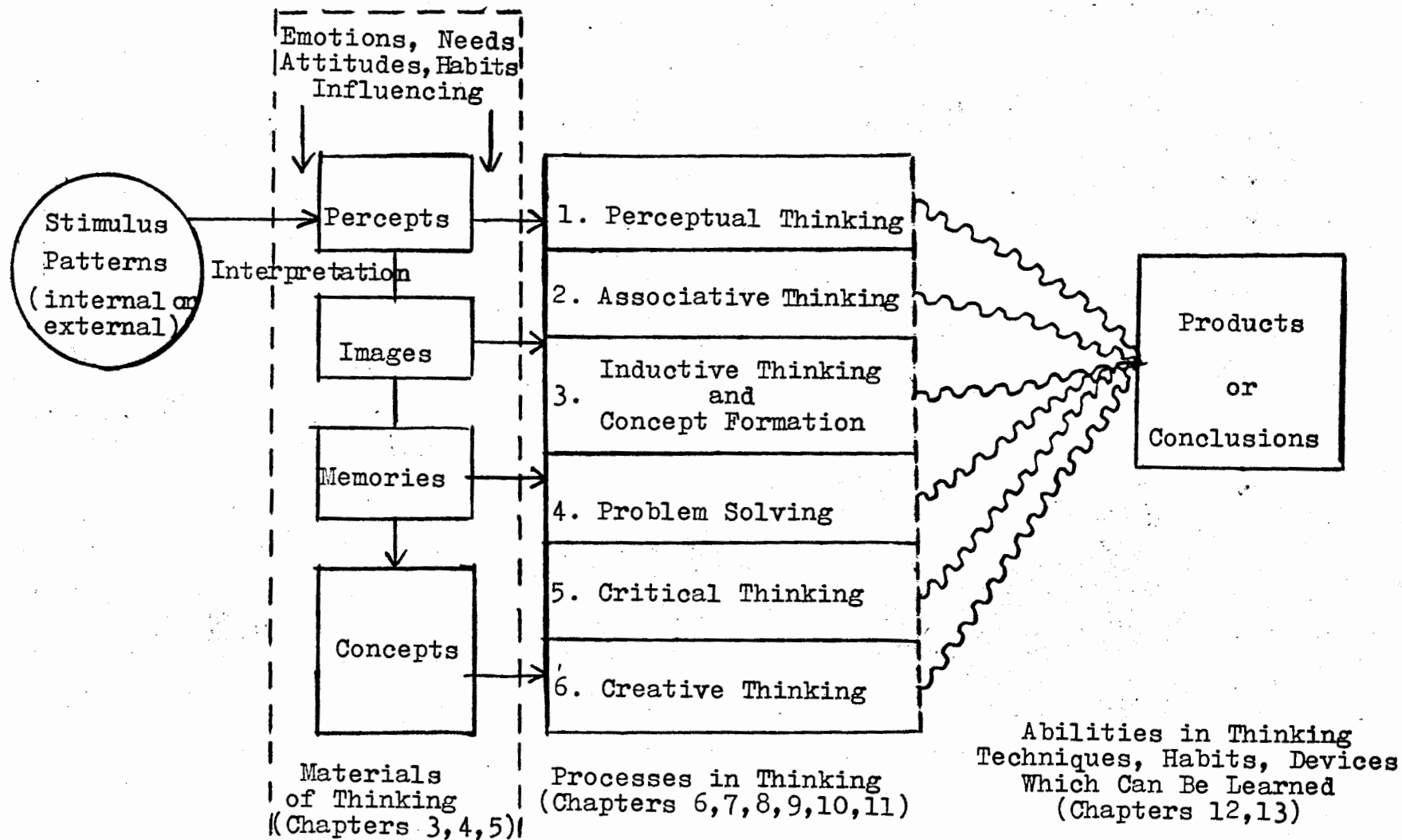


Figure 1

Schema for Thinking Used in This Book

and the features of his immediate environment. By eighteen months he can use some words himself but can understand many others.

In preschool years, up to five or six, Jersild (1946) suggested that the child 'comes into his own as a thinking creature' (34:34).

It has been estimated that the three-year-old fails to speak for only about twenty minutes of his day. He has a vocabulary of at least 900 words (Smith, 1926). In his preschool he develops his language, his perception and symbolic ability so well that he usually is ready for the task of reading about six years of age (34:34).

Children's thinking cannot be worked out in unitary terms. It must be studied as a whole. Mental development, the basis of all thinking, takes place as a part of the child's total development (34:58).

A number of factors undoubtedly influence the mental ability of the child. Two of them, heredity and environment, probably cannot be separated, but this is not so important as their combined effect. They tend to reinforce one another in most children; heredity determining the broad limits within which the child may develop his thinking abilities; the environment determining specific thinking abilities in relation to specialized environmental situations (34:58).

Contrary to the conception of many that a child's interest span is short, Russell says that if the child is

interested, he will work long and patiently, trying out various possibilities, suspending judgment until he is able to check his conclusions with additional sources of information (34:60).

Percepts are the result of sensory experiences. The child's thinking is based on his experiences; his interpretations of what is known of an object, a quality or a relationship are his percepts. "Perceptual processes compose and stimulate much human thinking (34:96). Research indicates these processes begin at birth and develop rapidly in infancy. As these abilities grow, the abilities in recognition and recall are also growing (34:98).

To develop percepts in children, opportunity should be given for exploration, manipulation, and play with objects, materials, tools, etc. Older children's development can come through the opportunity to work with color and composition in a painting, or in listening for musical instrument or theme in music (34:99).

Images and memories and percepts, as found in the thinking process, are more alike than they are different, and often occur together, affecting one another.

The child uses images, along with percepts, memories and concepts in his thinking (34:101-2).

"In his perceptions, imagery and memory, selection

and organization takes place, and therefore these are not separate materials but parts of a determined course of ideas (34:114).

Concepts are among the important materials of children's thinking. They develop out of related perceptual experiences, and as a result of the reorganization of these, in the manner found in problem solving and creative thinking.

The child's concepts reflect his understanding of his world, assisting him in classifying his experiences and in giving meaning to them. Concept development is not a problem for a normal child and he develops an enormous number of concepts in his preschool years. These may be accurate or inaccurate, but can be improved with planned instruction (34:163).

Emotions and attitudes may arouse and direct thinking. Russell considers them with precepts and concepts as materials of thought (34:198). They have a certain unique function which gives them a place and should be encouraged in the thinking process. For example, emotions may keep a child working on a problem, attempting to find a solution, after others have given up. "Attitudes also have a special function in the thinking process; they may act as directives toward specific objects or events and so become incorporated into the solution of specific problems" (34:199).

Problem solving is the process by which a child moves from problem to solution, which for him meets the demands of the problem. The problem for him must be one which he understands but for which he has no immediate solution (34:261).

The problem solving of young children must be considered as taking place in concrete, immediate situations rather than as occurring in abstract, verbal ones (34:270).

It is on this basis that tests have been made of problem solving by the preschool child. "There is ample evidence that the preschool child is capable of problem solving even before three years or before" (34:270). "Concrete, direct experiences continue to be important to the older school child's problem-solving abilities (34:273). Tests and observation would infer six to ten years of age.

In conclusion on problem solving Russell gives a few additional ideas which do not seem to contradict the general results of research.

1. There is no 'age of reason' which children must attain before they can do problem solving.

2. The problem-solving ability of children, especially preschool children, should not be compared with their verbal abilities. Manipulation of concrete objects in the environment is the typical behavior of young children. . . . Elementary schools could probably rely less on verbalization and more on other forms of problem solving.

3. The roles of trial and error and of insight in children's problem solving vary with the nature of the problem and purpose of the subject.

4. . . . young children are capable of a wide variety of activities in solving problems, activities which include general reaction to stimulus situation, some finer preceptual discriminations, recall of related situations, and some criticism of proposed solutions.

5. . . . it may be added that children are often impetuous in their problem solving, jumping from awareness of the problem to some solution without any intervening steps, influenced by their emotional reactions rather than by knowledge of logical steps in thinking.

6. There is some evidence (Maier, 1936; Biber, 1942) that children do not solve complex problems in a series of organized steps, such as those outlined by Dewey and others, but rather that they practice differentiation into a series of subordinate problems with some final integration of these subordinate solutions . . . insight may occur in different parts of the solving process.

7. Problem-solving ability increases with age in terms of both speed and accuracy (34:278).

Critical thinking is a subject usually found in educational, rather than in psychological literature. The ability is an important one for both children and adults living in a democracy, a place where there are conflicting propagandas and ideologies.

Critical thinking would seem to be one of the first requirements of a full-fledged citizen in a democracy (34:282).

The available literature on critical thinking stresses its importance at the high school and college levels. If as this book holds, most thinking abilities begin early and develop gradually, then more emphasis might be given in psychological and educational literature to early manifestations of critical thinking and to ways of encouraging it in preschool and elementary school children (34:302).

It is closely related to both problem solving and creative thinking. It seldom develops in the first steps of problem solving but often appears in the final stages. "The hypothesis or hypotheses must be tested. Is this a good idea or are there better ones?" (34:282)

Critical thinking is one part of problem solving, in that the solution of most problems requires a critical evaluation before any conclusion can be drawn (34:282).

Critical thinking is usually one of the steps of creative thinking. A creative product must be evaluated. The artist must check his work against some standard. It may be his original idea and purpose, or some standard developed in art criticism. Creative thinking in childhood does not always involve self-criticism. A child's art product, when created for others, can involve critical evaluation according to standards of "teacher and the rest of the group." This will bring about improvements in future work. "Thus critical thinking can be closely related to creative processes" (34:282-3).

Creative thinking involves the bringing into being new ideas. The difference between problem solving, and creative thinking is that the first is more objective, is usually directed toward a goal which is external. Creative thinking is personal. It achieves something new. It tends to involve more intuition and imagination than

problem solving. However, this is difference of degree rather than of kind. "The special insights of the scientist, poet, or artist differ only in degree from the insights which all people use in solving their problems" (34:306).

Since about 1925, Kilpatrick and other writers have suggested that all learning is creative because in learning the child achieves some new insight or reorganizes his experience in a way that it is new for him. This is a matter of definition, and there can be no serious objection to this point of view if one wishes to embrace a broad concept of creativity (34:307).

If one accepts the definition that all learning is creative, then there could be danger in taking away from the importance of original discovery and from the problem of how to stimulate creative effort in home and school. Burton (1943) distinguishes between the two processes; a child often discovers new knowledge, but he does not create it. He (Burton) holds the term creative for the making of something "new, unique and original" (34:307).

Direct attacks on the problem of creative thinking are not often made; there are many related studies which give some idea of the process. "It may be described as existing on a scale of varying emotional and problem-solving factors." It can also be described as simple discovery, through simple invention to the highest creativity, as found in a master's work of art, or in the development of a science theory (34:314).

We often find childhood and creativity hand in hand. Creative thinking is important to child and adolescent life. In its early development we have one of the best hopes for the future of mankind (34:326).

A person would be narrow and foolhardy indeed to argue that creative thinking has no place in a consideration of children's thinking. Given an opportunity, children are often original and creative in their conversation, their writing, their painting, their solutions to problems. . . . One reason for a chapter on creative thinking is the importance of the process itself. It is trite, but still true, that the progress of civilization depends upon new solutions, upon the creative thinking that people can do. . . . Many scientific and other discoveries are made by persons in their twenties, and it may be that the skills or habits of creative thinking begin early both in the field of arts and in the sciences (34:305).

Russell's summary and implications relative to children's creative thinking are that the capacity for creative thinking seems to appear earliest in the fine-art fields and the language-art fields than in the scientific areas. Examples have been found in the two-year-old at play and constructive activities, and later, in language behavior, music and rhythms. The five or six-year-old begins to express original ideas in the graphic arts. Children differ widely in their creative ability, the time when this ability first appears, and in their competence in the application of creative thinking to such specific fields as in modeling, rhythms, and language (34:327).

All children differ a great deal in ability to produce creative works. Not all children can compose a song or paint a picture, but they can learn to understand and appreciate and find enjoyment in music and painting. And in this, a child's interpretation of these things, being personal and original is an example of creative thinking (34:328).

There is evidence that teaching may be planned and directed toward the development of "inquisitiveness, experimentation and creative production." These seem to depend upon a background of related experiences, an urge to express, and the availability of materials, time and a permissive atmosphere for creative work, and a teacher with experience in creative activities (34:328).

Russell concludes that the preceding and other points made in this chapter on creative thinking should be regarded as tentative best-guesses, to be verified or modified by further experiment.

Part IV of his book concerns the improvement of children's thinking.

The state of the child's development is related in many ways to the problems that he is able to solve. There is a need for concrete material for the preschool and primary-grade children.

Adamczyk (1945) stated, from the semanticist's point of view, that the schools overvalue verbal

behavior and undervalue concrete situations as a basis of problem solving. It may be that both the psychologist and the teacher rely too heavily on ready-made answers which are only superficially a part of the child's thinking. . . . The social demands on the curriculum should determine the main structure and content of the curriculum, but children's interests and problems could provide springboards for further activities which might lead into a fuller exploration of important ideas (34:366-7).

Russell, too, in concluding, voices the threat to clear thinking and suggests that these abilities be bolstered in every way. One way of developing and cherishing such thinking is through instruction in school.

Democracy has its surest foundation in objective understanding, in problem-solving behavior, and the habit of basing decision and action on rational considerations. Such understandings and powers develop slowly. They must be the conscious aim of the school and they must be taught, starting with young children. . . . We can recognize the power of emotion in human behavior, but we must not allow it to dominate the process of problem solving, critical thinking, and creative thought here described. Children need help in organizing their emotional and their related intellectual behavior. As thinking abilities are developed throughout childhood and adolescence, the chances for a thoughtful functioning citizen in a democracy are increased (34:388).

Russell, under creative thinking, points out that it appears earliest in the fine-arts field and the language-art field.

An effort made to evaluate the growth and development of children through their paintings was undertaken by Beatrice Lanz in 1945. The Easel Age Scale resulted from

this study. It uses children's paintings as a scale by which maturity and reading readiness of the child can be estimated.

The California Test Bureau believes it represents significant advance in the area of evaluating the growth and development of young children; that there is a

. . . very high degree of relationship between the Easel Age Scale and standardized intelligence tests. In fact, they are so high that it seems one can get a good indication of the child's mental maturity. . . without having to administer an intelligence test. However, the two types of instruments should be used to supplement rather than to supplant each other (24:5).

Naomi Stewart, formerly of the Educational Testing Service, New Jersey, gives an appraisal of the scale in the Fifth Mental Measurements Yearbook.

The Easel Age Scale is a valuable new tool for understanding young children and deserves to be widely accepted. With the use of this scale. . . painting produced by kindergarten and primary grade children in the course of their ordinary classroom activity can be scored in such a way as to yield reliable and valid measures of the children's mental maturity (38:464).

Kollmeyer, Head of Fine and Applied Arts Division of Central Washington State College, in 1958 based his Doctoral thesis on "The Relationship Between Children's Drawing and Reading Achievement, Personal-Social Adjustment, and Intelligence."

In the implication of the study he states:

. . . the results of this study would tend to verify the assumption that a child's drawing development during the normal first grade period and his development in reading are significantly related. . . the findings suggest that experience in art expression might be one of the factors assisting in promoting a desirable climate for growth in reading. . . (22:296).

No attempt was made in his study to evaluate or even determine elements in the drawings relevant to aesthetic qualities. However, he did not intend to imply that they were not important in the child's art expression.

. . . a child's original, personal and expressive way of recording his concepts and impression of experiences is a creative act, and herein lies one of the important values in providing art experience in the curriculum--the development of creativeness, imagination and the opportunity for the child to identify himself more closely with his daily living experiences and to react to them in a uniquely personal way (22:296).

The development of creativity--creativeness--creative thinking is one of the basic contributions that art education has maintained it could make to the child, to all children, beginning at an early age. It has been one of art education's major goals.

Many writers on creativity or creative thinking, and its stimulation, cultivation and development have attributed or implied such development to the arts, and starting in the early life of the child. The following brief statement from Anderson, Sinott, and Stoddard, respectively, are relative to this.

Creativity is in each one of us. . . . That is to say creativity was in each one of us as a small child. In children creativity is universal. Among adults it is almost nonexistent (3:vii).

Life is itself a creative process by virtue of its organizing, pattern forming, questing quality. Would it not be possible to develop in childhood this by presenting the child with activity such as found in the arts, which stimulate this questing quality, pattern forming and organization (37:278).

To get creativity in society viewed as a whole, we must make it mean more to each person. We must start early in the life of the child (39:185).

Art activities involve the same type of material--objective and concrete, that the child has been using from his environment to develop his thinking powers. Art experiences makes use of the same processes; exploring, discovering, observing conceptualizing, organizing, evaluating. Through the same approach, art education can continue to stimulate and develop the child's ability to think, both critically and creatively.

Art education teaches to visualize more clearly--because if one endeavors to draw, one realizes what one does not know and tries to supplement one's knowledge. It teaches better perception--because one learns to observe more accurately, if one has to give account of what one has seen. To produce an image that can be understood by others, one has to objectively learn to compare and evaluate. . . . To keep in mind what one has seen until it is registered, one has to learn to remember. In any kind of a composition, the importance of one part must be established; thus one learns to coordinate and to organize. . . . Concentration is

needed to shut out all disturbances while tuning in on something special; the interest appeal of art makes this possible. . . The perseverance, essential to. . . pursue a project in the face of difficulties and discouragement, may be strengthened by the urge to create (15:19).

Blanche Jefferson's statement in Chapter III of this study should be cited here in part only.

In every art project the student starts with only raw material and his own resources. He chooses his subject. . . organizes it . . . continuously appraises and changes it. . . He is learning to deal with and come to terms with his own failures, successes, drives, and underdeveloped skills. He feels close personal association with it. He is entirely responsible for it (21:23).

Fred Strickler of Teachers College, Columbia University, has written a very interesting book on An Art Approach to Education.

As one might surmise from the title, he feels that art has its right as a separate subject area--"does not need to be tied to other subjects to find a body of adequate intellectual content" (40:196).

The problem of art education concerns itself with the total welfare of individuals as they develop physically, emotionally, and intellectually by means of participating in art experiences. . . Intellectual powers must be exercised upon problems which invite, involve, and investigate thought to the end that they may become more dependable controls of action. For the individual the problem is one of discovering and promoting his own personal effectiveness (40:212).

Continuing the thought, the individual must depend upon himself insofar as possible. He must begin to work

out his own destiny if his schooling is ever to go beyond training and to attain the dignity of education (40:126).

And from Manuel Barkan's book, A Foundation for Art Education, art offers unusual possibilities for development creatively. It cannot be separated from creative perception and insight, which Barkan calls the "cornerstone of a sound educational program" (6:v).

The elements of the creative experience include "functions of seeing, perceiving, reacting, organizing and acting" (6:55).

And everything that one creates, as well as all that one learns, is incorporated into the person; it is a person's frame of reference. It enlarges with "every readaptation to our purposes" (6:81).

In the reading of Children's Thinking, the writer mentally reviewed the incident which created the desire to do this study. From children, busy with modeling, drawing, and constructing in art activities, there were usually actions, movements and comments which one might assume were the external indications of the thinking processes at work and what they were. In this particular incident, first the parents, then the doctor, and last the school principal had urged the acceptance of the child into the art class which consisted of much older children and adults, and was of three hours duration, one day a week.

This child was asthmatic, with the speech defect of stammering. He had shown no interest in school during the first ten weeks.

The child's response was amazing. He concentrated deeply, working until he had accomplished that with which he was seemingly satisfied. He talked continuously to himself. He never stammered. From this self-conversation, thinking could be inferred from the first perceptive stimulus in the experiencing of material to the created product. This included the thinking he brought to the solution of the problems arising--his creative thinking and critical analysis before presenting it to his teacher for evaluation. It must be remembered that the foregoing thinking processes can only be implied from observed data.

Additional observed data by parents, teachers and doctor were: He did not stammer; his asthmatic attacks decreased; there was a marked increase in interest in most subject areas in school; and at the end of the school year he was almost at class level.

Summary. The first five years of a child are years of rapid physical and mental growth.

In his school years, the fine-art field and the language-art field are the first that can continue this development of mental growth in the child.

The same techniques of exploring, discovering and experimenting used by the child in learning about and from his world, are inherent in art activities and experiences. Also, the same type objective and concrete material found in his environment are used by these activities.

There is implied in the findings in Children's Thinking, and in the statements of art educators that art activities and experiences demand full use of all of the mental processes, from perception to solution, whether it be a product or a conclusion, and can contribute greatly to the continued development of these thinking processes, with emphasis on the area of creative thinking.

At the same time, these activities and experiences can add much to, and broaden the child's background of reference, the treasury from which new ideas, and original solutions come into being.

CHAPTER V

SUMMARY AND CONCLUSIONS

Restatement of the problem. This study has been an attempt to show why art education should be a basic subject area in the pre- and elementary school curriculum.

Summary of the procedure. Research has been made in education and art education from the literature of their respective areas; in educational psychology relative to the thinking processes of children. The study includes the quoted statements of authorities in these areas. Interpretation has been made with respect to their significance to art experience at the pre- and elementary level of education.

Findings. In the research for this study it has been found that education and art education have almost or technically the same two major goals: (1) equal opportunity for all children, and (2) emphasis is placed upon the development of the individual child, challenging him toward the achievement of the maximum of his ability.

They both stress the development of an individual capable of clear and independent thinking.

Art education places more emphasis on creative thinking. From the implications of the research into the psychology of children's thinking and the statements of

art educators relevant to the contribution of art education in this area, art education can develop all areas of thinking. The fine-art field and the language-art field are the first before all others that can continue creative thinking in the already rapidly developing mental growth of the child (34:327).

Gradually, too, there is developing an awareness of the fact that education must be able to prepare the individual for facing up to problems and for dealing with conditions which are not presently known. This could be the beginning of change in purpose from the accumulation of knowledge to the development of ability to cope with the unknown. This is essentially putting emphasis on creative thinking.

It is a dynamic and resourceful contribution to the total educational program. . . . The lack of critical thinking and creative self-expression among average school children of today is a condition which must be remedied at once (31:26).

National Education Association, in Schools for the 60's, gave as an answer to curricular ills, not more subjects, but a group of subjects resembling a core of common learning, for the kindergarten through high school, with increasing opportunity to elect from these for specialization in the upper levels of high school (29:88).

During the 1965 Convention of the National Educational Association, criticism was leveled at, and changes called for in the pre- and elementary schools, to give

"a much higher priority to the earlier years." The importance of the contribution of the arts and the humanities to education was emphasized in the speech of Leland B. Jacob (8).

Conclusions and implications. The intent of this study has been to show how important the contribution of the arts can be in education to the development of the individual--of the child--in continuing the stimulation and development of mental and emotional growth at a time when this growth is most rapid.

Art education is one of the first of two subject areas that can so continue the growth of creative thinking in the early years of the child's school life (34:27). It can help to develop all children to the extent of their capacity, to be flexible in their thinking, quick to adjust to new conditions, and able to solve imaginatively and creatively, the ever increasing problems that science and technology are posing for him today and will continue to pose for him to solve in the future.

Education in re-evaluating the pre- and elementary school is suggesting changes in the curriculum for this level (8).

In view of the suggestion for such change by the National Educational Association and noted in the findings of this study, art education should be one of the subjects

in the "core of common learnings" (29:88). It is also a subject area from which election can be made by those gifted in art, and whose ability is in demand by science, technology and industry today.

In this age of rapid change, is it a time to quibble? Would it seem that any subject area which bids fair to such development of the children of today, the citizens of tomorrow, should be overlooked in education?

Every area of human knowledge has significant contributions to make to each student's intellectual growth. Thus, students should continuously study in the areas of humanities, mathematics, science, practical and creative arts, and health and physical education (41:87).

It seems that general education needs the contribution of art education, and that art education needs a very definite place among the basic subject areas in general education, in order that progress can be made toward their mutual goals--the education of all youth, with emphasis on the development of the individual child.

If the thesis presented here is valid that art experiences and activities develop the child's mental abilities for independent thinking, both critical and creative, is one of the subject areas which is first to continue this development before any other, in the early school years, it would then seem imperative that art be one of the basic subject areas in the pre- and elementary school curriculum.

CHAPTER VI

RECOMMENDATIONS AND IMPLICATIONS

Recommendations and implications for study and research: Alexander Masley, writing for the College Art Journal on Fine Art and Art Education made a statement which seems apropos of the first recommendation:

Too many members of our society have too limited knowledge about what art is and how it affects their everyday life. The number of non-art conscious individuals in the country is appalling and the responsibility for such a condition must be placed at the doorsteps of both art education from pre-school through college and the fine arts programs as well (26:287).

There should be research into how to make a strong effort, a continuing effort, in placing before the layman, the non-art conscious person, through mass news media, the importance of art education and its contribution to the individual and to his society. He forms the pressure group behind our educators and administrators. He cannot be reached through the media of educational journals, bulletins, or books written for, by, and read by, art educators and artists.

As long as the mass of news media holds before him the advance of science, technology and industry without acquainting him with the contribution made by art to these, and what it can contribute to him and his posterity, he

will continue to insist that emphasis in education be placed on science and technology, and those subjects he recognizes to be relevant.

Implications for future study. There were three listed within the delimitations which were not within the scope of this present study and which may be given here.

If art should become one of the basic subjects in the pre- and elementary school curriculum, there will be a need for research into the kind of an art program which can best nourish and develop the mental abilities of all youth, with special emphasis upon creative thinking.

Research will also be needed to determine by whom it can best be taught. Will it be the classroom teacher or an art specialist? And if the classroom teacher is the answer to that question, what shall be the requirements of certification for the pre- and elementary classroom teacher who has art as a basic subject area? This is of concern not only to the teacher, but the school administrator. Would it necessitate that they both be required to present credits in basic art for certification?

This has implications for research by colleges training teachers for the elementary school. Should they not present for these teachers a balance of training in all required basic subjects?

This is important in view of the training in the art

area for the classroom teacher today. Harold Schultz in a report for the Commission on Art Education says that the background of the classroom teacher is usually very limited (36:107). Many teachers excuse their negligence in making art activities meaningful because of this inadequacy. And James B. Conant writes:

Very few teachers at the elementary level are trained to teach art. . . The American public and professional educators. . . are still a bit uncertain as to why instruction should be provided in art. . . . This uncertainty is reflected in the amount of time allotted to these subjects in the school and the varying practices as to the optional nature of the work (9:180).

He is, however, one educator who, recognizing the need and importance of art, has given general requirements for the elementary classroom teacher, which included art with the basic subjects (9:159).

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