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AN INVESTIGATIVE STUDY OF SELECTED ART EDUCATION  
THEORIES: A MODEL FOR A MIDDLE SCHOOL  
ART EDUCATION PROGRAM

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A THESIS  
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
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## INTRODUCTION

This researcher and teacher of nine years had become increasingly aware of the continual decline of the art program in her school system concurrent with the reorganization of junior high (grades 7, 8, and 9) to middle school (grades 7 and 8). Prior to 1976, the junior high school at which this writer taught was staffed with three art teachers. Through this program, art was offered as a one quarter elective in grades seven and eight and one term to ninth grade students.

During the 1976 school year, both the ninth grade students and ninth grade art teacher were relocated to a senior high level. Concomitant with this transfer, this new middle school offered two quarters of art to the seventh grade only. A continual program reduction occurred during the 1977 school year as the department was under the direction of one art teacher and offered only one quarter of seventh grade art.

Each middle school in this school system operated as a separate unit and differed because the principal in each building was responsible for that institution's curriculum. Although this school district had a creative arts program coordinator, she had no authority over the organization within each school. The coordinator was able to offer specific recommendations but the building administrator was not obligated to accept these suggestions.

This writer saw a great opportunity for art education in the new middle school. It fitted the needs and interest of the transescent, psychologically, socially, and intellectually.

When we are educated in art, not only are we educated in life, but, more importantly, we are educated in enhancing the quality of life. Our insight becomes keener, our sensitivity deeper, and our creativity greater. As we witness both man's basest instincts and his purest motives, we grow toward a greater understanding of our own virtues and faults.

In another sense, art has always depicted and preserved for mankind the moods, the values, and the stories of the times...The lessons of history are taught in vivid and memorable terms through the products of artistic endeavor.

Education in the most perfect sense of the word implies total development of man's mind, body, and spirit. The absence of education in art leaves less than a total development and less than a total man.<sup>1</sup>

The middle school student developed his values before entering the middle school. As the transescent approached the challenges and dilemmas of adolescence, the continued concentration of his values was essential. The middle school child's beliefs, attitudes, and values may have been conditioned by every learning experience but the opportunities in the teaching of art were especially prepared to guide the direction of positive permanent values.

Through this course of study the researcher anticipated that the educators at the middle school level would see the

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<sup>1</sup>Senator Dick Stone, "The Value of Art Education," Art Education, vol. 28, no. 6 (March 1975): 11.

education value of extending art instruction to the seventh and eighth grade student.



## ACKNOWLEDGMENT

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## CHAPTER I

### STATEMENT OF THE PROBLEM

The researcher proposed in this study to: (a) identify selected art education theories to be incorporated into a foundational base for a middle school art education curriculum and to (b) develop an art education model based on selected standards identified in the rubrics of certain national and regional accreditation agencies.

#### Purpose of the Study

The twofold purpose of this investigative study was to: (a) determine those art education theories which best reflect competency objectives that can be fused into a foundational structure for a middle school art education curriculum and (b) develop a functional art education resource model based on selected goals described in the rubrics of certain national and regional accreditation agencies.

#### Justification for the Study

There is a lack of definite existent material for a foundational base for a middle school art education curriculum. The need for the proposed study was to determine the extent and types of values inherent in a foundational base directly to the seventh and eighth grade art student. There is also a need for documenting material which will be used to develop

an art education resource model.

### Delimitations

The researcher proposed to limit the study to the following areas:

1. The course of study investigated only the selected art education theories to be incorporated into a foundational base for the middle school curriculum.

2. The course of study limited the investigation to the development of a foundational base utilizing selected art education theories, models, and certain standards identified in the rubrics of particular national and regional accreditation agencies.

3. The researcher wrote and developed an art education model through which a middle school would be able to base an art curriculum for grades seven and eight.

4. The art education resource model was based on selected goals described in certain national and regional accreditation agencies.

### Definition of Terms

Various terms are used throughout this study. The intended meanings are described below.

1. aesthetic experience: "...an individual is having an aesthetic experience if he gives attention to any object of field primarily for the purpose of absorbing whatever

meaning exists in the appearance of the object of field."

(Art, Artists, and Art Education , p. 360)

2. behavioral objective: "...the description of a learning objective identifying an observable activity by the student as evidence of having achieved the object."  
(Relating Art and Humanities to the Classroom, p. 94).
3. cognitive: "anything that is know or perceived."  
(Webster's New World Dictionary, 1964, p. 145).
4. concept: "a constant mental pattern that is not controlled by the individual sensory experience of the moment."  
(Art, Artists, and Art Education, p. 206).
5. conceptual images: "the development of mental or representational images" (Art, Artists, and Art Education, p. 218).
6. conceptualism: "a philosophical position which holds that general concepts exist in the mind rather than in nature"  
(Encyclopedia Brittanica, vol. 4, p. 501).
7. Directive-state theory: "stresses the importance of behavioral characteristics in determing perception" (Art, Artists, and Art Education, p. 208).
8. Euclidian relationships: "individual who sees straight lines, angles, circles, and other geometric figures as well as proportions," (Art, Artists, and Art Education, p. 208).
9. Hypothesis theory: "a sympathetic combination of the

unconscious cognitive processes which formulates hypothesis and by experience either confirms or rejects percepts." (Art, Artists, and Art Education, p. 212).

10. intellectual maturity: "conceived by Goodenough and Harris as the level of concept formation that the child has attained" (Educating Artistic Vision, 1972, p. 86).
11. intellectual realism: "the stage of pictorial space development where the child draws what he knows, not what he sees" (The Teaching of Young Children, 1971, p. 44).
12. Intellectualistic theory: "child draws what he knows..." (Preparation for Art, 1961, p. 153).
13. Law of Differentiation: "the perceived object is rendered in the simplest way until the perceptual image indicates differences in size, shape, and direction that require a more complex symbol." (Art, Artists, and Art Education, p. 202).
14. medium: "The material used to communicate." (Preparation for Art, 1961, p. 318).
15. perception: "...sensory acquisition of knowledge." (Collier's Encyclopedia, vol. 18, p. 575).
16. Perception-delineation theory: "...term used to identify the process in which a child or an adult (I) is prepared to perceive his visual world, (II) is affected by his

psychological environment, (III) organizes the information he receives, and (IV) creates or borrows symbols to communicate his responses." (Preparation for Art, 1961, p. 38).

17. perceptual awareness: "...letting data in so that the information can be processed and stored for use."  
(Developing Artistic and Perceptual Awareness, p. 17).
18. perceptual set: "...readiness to perceive." (Art, Artists, and Art Education, p. 211).
19. physiognomic qualities: "...expressive characteristics appearing in all visual forms." (Educating Artistic Vision, 1972, p. 72).
20. projective spatial relationships: "to see things in perspective" (Art, Artists, and Art Education, p. 208).
21. readiness: "The sum of all the factors of growth, learning, and capacity that contribute to an individual's ability to perform a given task." (Preparation for Art, 1961, p. 318).
22. representational concepts: "...concepts of the form that a perceived object must take if it is to be represented by the characteristics of another medium." (Art, Artists, and Art Education, p. 201).
23. Sensoritonic theory: "perception is not exclusively determined by the external factor of environment or by

the sensory modes" (Art, Artists, and Art Education, p. 210).

24. sensorimotor stage: "...demonstrates practical intelligence, affective emotions, and fixation." (Relating Art, and Humanities to the Classroom, p. 8).
25. sensory mode: "...name given to the particular perceptual process in terms of the specific sense receptor, such as the auditory modes, olfactory modes, tactual modes, and gustatory modes." (Relating Art and Humanities to the Classroom, p. 81).
26. sensory perception: "...receiving information and giving meaning to stimuli through all of our sensory modes." (Relating Art and Humanities to the Classroom, p. 81).
27. set: "...sensorimotor state of readiness for action." (Art, Artists, and Art Education, p. 211).
28. simple cell assembly: "...when a fixation activates a certain number of nerve cells a simple percept is formed in the cortex." (Art, Artists, and Art Education, p. 205).
29. synthesis: "ability to put divergent parts together to make a meaningful whole" (Relating Art and Humanities to the Classroom, p. 113).
30. tactile: "...sense of touch." (Developing Artistic and Perceptual Awareness, p. 17).



31. theory: "that branch of art of science consisting in a knowledge of its principles and its methods rather its practice." (Webster's New World Dictionary, 1964, p. 769).
32. topological: "...individual can see the proximity, separation, and surface order of objects and can see things enclosed by other things." (Art, Artists, and Art Education, p. 208).
33. visual realism: "...stage of development when a child draws what he knows and what he sees; he now knows or understands the relationships of objects to their spatial coordination" (The Teaching of Young Children, 1971, p. 45).

## CHAPTER II

### MAJOR HISTORICAL DEVELOPMENTS IN ART EDUCATION

Art education in the American school curriculum involves two major modes of artistic learning, perceptual awareness and conceptional awareness. Perceptual awareness is the sensory synthesis of a concrete object through its color, texture, shape, line, and art patterns. In the intellualistic theory or conceptual awareness, "the child draws what he knows rather than what he sees."<sup>1</sup> In order to better understand the topic at hand in the role of learning, it is necessary to review the growth of major historical developments in art education.

Early American education was essentially classical in curriculum. Art was not formally offered until the nineteenth century, although Benjamin Franklin advocated art instruction in the public schools as early as 1749. There were no national organizations of art teachers, no state statutes enforcing art training and what art was taught was founded on theories derived from European academies or on the personal views of those who chose to teach it.

Art made its debut at the public schools of industrial

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<sup>1</sup>Rudolf Arnheim, Toward a Psychology of Art, (Berkeley, Calif.: University of California Press, 1966), p. 29

centers and those who taught it, such as William Minifie of Baltimore and William Bently Fowle of Boston, considered drawing, the primary instruction of art, a science.

For Minifie, an architect hired to teach drawing in the Baltimore Boys High School during 1848-1849, art was essential because it was not only ornamental but functional to industry. Promoting art as a means of discovering aesthetic taste in manufactured products, he pointed out that if the United States was to compete as an industrial nation, she needed craftsmen who would improve the quality of their crafts so that they were attractive to the Europeans as well as to Americans. Minifie based his art teaching on the drawing of mechanical or geometric principles through exercises that were organized in sequence. To provide these exercises, in 1849 he published a textbook on geometrical drawing that was used as a resource for many years.

In 1812 William Bently Fowle, headmaster of a Boston public school and publisher of the Common School Journal, first attempted to include art in the curriculum by introducing it as a required study. He restricted his art teaching methods to outline drawing, primarily geometric, by the copy method.

Art education was offered in the Boston English High School in 1827 where it remained an elective until 1836. Rembrant Peale, one of Philadelphia's leading artists, was

appointed in 1842 to supervise drawing in the public schools. The art work which was encouraged by Peale, was a form of graphics, the art of delineation or a system of school exercises for the training of the hand and the eye to work together. The goals for art training in the public schools promoted by Franklin, Fowle, Minifie, Peale, and others saw art as a tool for improving the skills of craftsmen and the qualities of their products.

Horace Mann, another leader in the teaching of drawing, began his service in 1838 as Secretary of Education for the Commonwealth of Massachusetts and also began the first editorship of the Common School Journal. His duties as Secretary required that he secure information on the most successful methods of building the studies of a school curriculum. He was permitted to travel, at his own expense, to observe the European schools and report those that were most promising in conducting education for the young. In his famous "Seventh Annual Report", Mann reported what he observed in the school of Europe.

...I passed from countries where almost every pupil in every school could draw with ease, and most of them with no inconsiderable degree of beauty and expression, to those where less attention was paid to the subject, and, at last, to schools where drawing was not practiced at all; and after many trials, I came to the conclusion that, with no other guide than a mere inspection of the copy books of the pupils, I could tell

whether drawing were taught in the school or not...<sup>2</sup>

Art education in Prussia was one area Mann took special note of during this tour. He was particularly interested in Peter Schmidt's drawing system. Students who followed Schmidt's drawing lessons learned to have more accuracy in drawing and proportion. In 1844 and 1845, Horace Mann published Schmidt's drawing lessons in Volumes 6 and 7 of the Common School Journal with extensive instructions to be followed by the student and the teacher.

The vocational importance of drawing instruction was stressed even further as industrialization began to prosper in the United States in the 1850's and 1860's. Better writing skills and increased visual quality of manufactured goods provided the practical justification for art education as a required subject in the curriculum.

In 1864 drawing became a required subject in the Boston Public School. Even though the art training methods remained basically the same, special materials and trained art teachers were provided at the primary and secondary levels of the public schools. By 1874 a United States Bureau of Education Bulletin declared:

In addition to the increased competition arising from steam-carriage, new and cheaper methods of manufacture and increased produc-

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<sup>2</sup>Frederick M. Logan, Growth of Art in American Education (New York: Harper, 1955), p. 52.

tiveness, another element of value has rapidly pervaded all manufacturers, an element in which the U.S. has been and is woefully deficient--the art element. The element of beauty is found to have a pecuniary as well as aesthetic value. The training of the hand of the eye which is given by drawing is found to be of the greatest advantage to the worker in many occupations and is rapidly becoming indispensable. This training is of value to all children and offers to girls as well as boys opportunity for useful and remunerative occupations, for drawing in the public schools is not to be taught as a mere 'accomplishment.' The end sought not to train the hand and eye that he be better fitted to become a breadwinner.<sup>3</sup>

When the nation's economy began to surge, art education took a prominent place in industry. Under pressure from leading industrialists, Massachusetts passed the first law requiring that in cities of 10,000 or more, drawing was to be taught to boys over fifteen years of age.

To find leadership for this state program, the Massachusetts Legislature invited Walter Smith, an art master in the South Kensington Art School in England, to direct art education for the public system of Massachusetts.

Walter Smith viewed art training as the purpose of developing proper visual and motor skills. He provided a systematic approach to the teaching of industrial drawing by using a prescribed step-by-step series of graduated copy exercises. The beginning exercises were directed at the development of very basic skills. As the student pro-

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<sup>3</sup>Elliot W. Eisner, Educating Artistic Vision, (New York: MacMillan Publishing Co., Inc., 1972), p. 34.

gressed the skills became more complex so that at the end of the instruction he was able to draw in perspective from nature.

Another prominent figure to influence art education was Arthur Wesley Dow. Like Smith, Dow's concepts of art teaching centered on the nature of art. Through thirteen editions of Composition, Dow based his instruction on the mastery of the principles of design. The first edition provided instruction on the proficiency of the elements of line and notan (positive-negative space). The series of exercises found in Composition were just as formally constructed as those in Walter Smith's drawing system. The 1913 edition gave more depth in outlining his Elements and Principles of Composition. He classified the elements as was first stated: line, notan, and color. The principles were defined as: opposition, transition, subordination, repetition, and symmetry.

Although the booklet, The Theory and Practice of Teaching of Art, published by Dow in 1908, repeats in modification, some of the Elements and Principles of Composition, there are some indications of a change in his views about applying the system to children. Dow observed that in younger children picture making of a direct and naive sort might have taken precedence, by some years over the intellectual

exercises.<sup>4</sup>

Both the social and intellectual developments that affect education seldom follow a single course. While the teaching of drawing was being used for industrial purposes, a new theory of the nature of man was being developed. As there was a greater effort to shift learning to children's interests and abilities, some art educators and theorists began to question the validity of the systematic methods advocated by Smith and Dow.

G. Stanley Hall, who in 1878 received the first doctorate in psychology from Harvard University, established the first child study center at John Hopkins University. He formulated the theory that by studying the drawings of children one could trace the development of man. More importantly, he advanced the idea that the education of the child was dependent upon expression as well as impression. With this theory, Hall believed the responsibility of the teacher was not to force the child into a predetermined mold of adult thought but rather to promote his natural development.<sup>5</sup> Hall's conception of the child's development was to shift from the subject matter and to broaden the curriculum to meet the needs of the child.

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<sup>4</sup>Arthur D. Efland, The Arts, Human Development, and Education, ed., Elliot W. Eisner (Berkeley: McCutchan Publishing Corp., 1976), p. 68.

<sup>5</sup>Elliot W. Eisner, Educating Artistic Vision (New York: MacMillan Publishing Co., Inc., 1972), p. 45.



As art education progressed in the American public schools in the twentieth century, two distinct theories of artistic learning emerged. Some art theorists promoted the idea of art instruction as an intellectual concept, while others saw art education as a sensory experience. Although both of these theories involved different philosophies, some educators saw a correlation between the idea.

### CHAPTER III

#### THE PERCEPTUAL DEVELOPMENT THEORY

In the field of modern psychology, perceptual development has received so much consideration because it affects all types of behavior, including creativity. Because so much study has been devoted to this subject, many theories have developed which strive to interpret preception.

One of the most valuable viewpoints in the concept of visual perception was derived by the Gestalt psychologists and advanced by Rudolf Arnheim. Arnheim proposes that children draw what they see, not what they know. As the child matures, so does his perceptual abilities grow to become differentiated or more highly detailed. Perception grows from the general structural features to the specifics through a process of perceptual differentiation, the ability to perceive, compare, and contrast characteristics. Arnheim describes drawings made by adults holding a pencil between the toes rather than in their hands to demonstrate that adults' perception is different than the child's. By asking adults to use untrained muscles, he took away the variable of difference in motor coordination between children and adults.<sup>6</sup> Therefore, the simple drawings of a child do not

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<sup>6</sup>June McFee, *Preparation for Art* (San Francisco: Wadsworth Publishing Co., Inc., 1961), p. 155.

indicate limited motor skills, but instead, reflect his perceptual abilities to see less than an adult. He draws as he does because he draws what he perceives. In his book, Art and Visual Perception, Arnheim called attention to what he regarded as a fallacy in the intellectualistic theory. It was Arnheim's contention that some mental activity other than perception was responsible for the modifications in children's art representations between what they were presumed to see and what they reproduced. To Arnheim, it was evident that children limited themselves to representing an "overall" quality of an object, such as the straightness of human legs, the roundness of a human head, and the general symmetry of a human body. These representations are facts of generalized knowledge. Researchers condensed this idea in widely accepted statement "the child draws what he knows rather than what he sees."<sup>9</sup> This substitution of intellectualization for sensory perception followed the precedent of Helmholtz's psychological theory popularized in the 1860's. According to Helmholtz the "constancy" phenomena in perception is an unconscious act of judgment based on a correct idea of the actual qualities of an object from frequent experiences with the object. Helmholtz's assertion implied that individuals form a "correct idea" of size, shape, color

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<sup>9</sup>Rudolf Arnheim, Art and Visual Perception: A Psychology of the Creative Eye (Berkeley: University of California Press, 1966), p. 159.

from familiarity and since the actual properties are of interest for practical purposes, one comes to replace their perceptions by what they intellectualize to be true. Scores of educational investigators have likewise described children's drawings as representations of abstract concepts. Arnheim disagreed with this theory with his contention that a main characteristic of the early stages of mental development was the dependency of the cognitive process of sensory experiences. A deeper awareness of the psychology of perception lead Arnheim to note that children and people of primitive cultures drew generalities and undistorted shapes with accurate precision because they did, in fact, draw what they saw. But, unquestionably children see more than they draw. At an early age, they can easily tell one person or object from another. Likewise, young children notice even small changes in familiar object. In spite of these recognition skills, the pictures they draw are still quite undifferentiated. Arnheim found understanding of these phenomena in the process of representation. Analysis of the perceptual process, lead Arnheim to observe that the act of perceiving consists of grasping integral features of a structure. Seeing the roundness of a head was not a perceptual thing, but a child's use of the circle to suggest the round quality of human head was a genuine invention of a visual generality into a tangible achievement.

Similarly, color is not perceived of in a uniform and accurate sense. The color a child artist might give to trees neither exactly matches the trees observed in nature, but is an overall impression he received from all the trees he has observed. Hence, the child invents instead of imitates.<sup>8</sup>

Arnheim points out that if the child's perceptual abilities develop as the child matures, then so his drawings can be based on those percepts or mental impressions. The child's perception will move from the whole and gradually his drawings will become more complex. Thus, the Gestalt theory that children draw what they see is supported by the facts of artistic developemnt. (See Figure 3-1).

Through careful observation of graphic work at any stage of growth, Arnheim recognizes that although a child's perceptual ability develops, it does not necessarily indicate that he is drawing everything he sees. To this fact he explains that the medium and the child's ability to handle the medium might limit the child to drawing less complex images than he actually sees. "A shape that expresses roundness best in one medium may not do so in another."<sup>9</sup> Thus, when a child attempts to draw the mechanics of a clock using a medium such as a brush and tempera paints, his drawing will

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<sup>8</sup>Ibid., p. 161.

<sup>9</sup>Ibid., p. 158.

be more generalized because the medium will restrict him in making the more involved details.

Arnheim writes that in order for a child to transform the object perceived onto a two-dimensional surface, he must create "representational concepts" or two-dimensional structural equivalents. At this points, Arnheim's theory is considered somewhat inconsistent as he discards the idea that children draw what they know; while he disputes the theory that artists make use of representational concepts.

According to the intellectualistic theory, when drawing the human head, children rely on their knowledge of the words "a head is round" and draw the round shape rather than the head. However, Arnheim feels that children are capable of representing the three-dimensional roundness of a human head by making a two-dimensional circle, but he carefully points out that the beginning circles do not represent roundness.

The Gestaltists explain that the child perceptually prefers the round shape because of the simplicity of the visual pattern. As the child's visual control begins to rule the motor impulse, he recognizes that the circle, with its simple variations, has a quality of "thingness" and the repetition of these shapes represents "something."

As the child realizes that he can use his round shapes to represent different objects, he follows a process that Arnheim terms the law of differentiation. During this pro-

cedure the object perceived is executed in a simplified manner until the perceptual impression indicates differences in form, proportion and direction that necessitate a more complicated shape. The child will continue to draw the human figure using circular shapes and lines which are perpendicular to one another until he becomes perceptually aware of the bending and twisting of arms and legs in motion. When this awareness occurs, the child will begin a contour drawing of arms and legs in diverging directions which will give a feeling of wholeness.<sup>10</sup>

Even though Rudolf Arnheim attempts to explain the development of children's art through the relationship between drawing and perception, he does not provide systematic descriptions of evidence to support his statements.

Another perceptual theory which agrees with the Gestalt theory was posed by Donald O. Hebb. The core contentions of Hebb's theory are based on his studies of innate neuropsychological mechanisms in perceiving unified figures on a background. According to the findings of Hebb's research, identification of figures (circles, squares, triangles, and other shapes) is a gradual process. Many separate

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<sup>10</sup>Kenneth M. Lansing, Art, Artists, and Art Education (Dubuque, Iowa: Kendall/Hunt Publishing Co., 1976), p. 203.

visual fixations of a figure activate the perceptual process. Hebb further theorizes that each individual fixation or visual exposure to a figure activates cortex responses by a small number of brain cells. This cluster or unit of stimulated brain cells responds and becomes the repositior of a "cell assembly" or a simple percept. More complex conception occurs as visual exploration moves from one point to another. Repetitious movements develop contacts between cell assembly units. The resulting combinations are a complex compound of cell assemblies drawn from varied visual episodes of encounters with a figure. At this point, according to Hebb's assertion, the individual can identify the object in a variety of situations and settings. The value of exposure to the figure from a variety of viewpoints can be realized when the individual's sensory experiences result in an accumulation of cell assembly cortex imprints that produce an identical neural response to the pattern in any setting. At this point the mental pattern may be considered a concept because it is a constant mental pattern devoid of influence by the individual's current impressions. This concept formation state involves a considerable time period since it is dependent upon the continuous and repetitive exposure to figures at the perceptual activity level. These exposures or visual encounters must necessarily develop from the rudimentary to the more com-



plicated or sophisticated experiences with a gradual increase in amount of detail to bring about the interaction of the nerve responses involved in the highly differentiated cell assemblies. Hebb's studies seem to indicate that the initial cell assembly formations occur more slowly and with more apparent difficulty than do later learning experiences. The network of cell assemblies in the adult learner result in easier and more rapid recognition of objects and, thus, lead to concept development at a more rapid speed. When these variables of perceptual constancy interlock into a functional system of visual conception, Hebb theorizes, the individual may perceive something that he does not actually see. This would imply that the network of cell assemblies developed and stored from varied experiences triggers the mental image that is more detailed than the actual scene being perceived at the moment. Hebb's conclusions indicate that the art education of children is affected by these conceptual influences, which simply stated imply children draw or use creatively what they see, or by perceptual activity determinates of cell assemblies which define the speed of learning and the nature of the concepts which result from the visual experience.<sup>11</sup>

Supplementing the cell assembly theories of Donald Hebb are the studies of M. Von Senden whose research dealt

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<sup>11</sup>Ibid., p. 206.

with space conceptualization. These studies seem to verify and to validate the assertions of Hebb that the identity of forms (spheres, cubes, pyramids, and other geometric forms) rely on gradual and varied exposures to these shapes. Senden's studies were based on data from the experiences of congenital blind adults whose vision was achieved through surgical removal or cataracts. The adult contribution to the studies was invaluable since they could describe to the researcher their initial visual perceptions and ensuing changes each visual encounter lead to in recognizing shapes. Senden stated that these formerly blind adults clearly experienced the identical perceptual phases that occur in normally sighted infants during early developmental stages. The adult initial perceptions were of figure-ground separation. At this stage, they lacked the ability to identify or classify such forms as triangles, squares, circles, and other forms. The ability to classify and recognize these forms required varying amounts of time, the shortest perception period being a month. As with young children, the newly sighted adults often experienced problems in recognizing a form if its setting was changed slightly. Change in color was another variable that seem to be a strong influence in developing percpetion of forms.<sup>12</sup>

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<sup>12</sup>Ibid., p. 205.

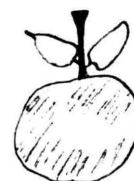
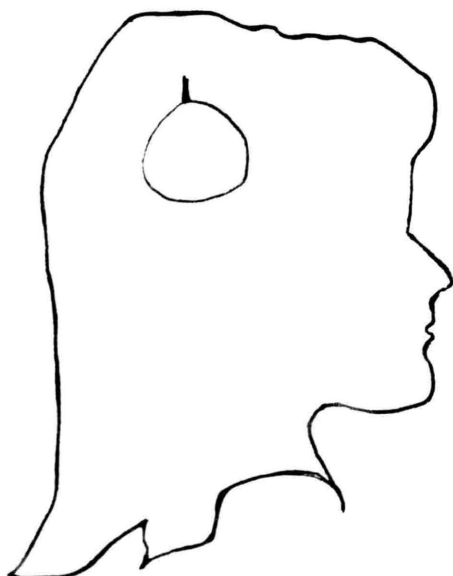


Figure 3-1

In her book, Preparation for Art, June King McFee uses this illustration to represent the perceptual theory.

These observations lead Senden to suggest that the individual learner, adult or child, needed to participate in repetitive visual perceptual activities for pattern constancy to develop. The visual exploration of an object must occur from a variety of viewpoints before the constant mental patterns develop. Hence, Senden's studies supported and confirmed the gradual learning or cell development assembly theory offered by Hebb.

The art education theory postulated by Jean Piaget is also in accord with those of Hebb and Senden as to the assertion that perception is learned. Piaget's major refinements of these periods were his studies of stages of perceptual development largely based on chronological development during the first two years of life.

These studies dealt with consideration of development of spatial relationships, coordination of vision and movements, and learning of shapes and dimensions of objects. According to Piaget's findings there are three major phases in perceptual development in children, and these three phases are experienced in early childhood, specifically during the first two years of life.

The first of these three stages occurs in infancy from birth to five months of age. At this point, the infant has no eye-hand coordination, no sense of permanence or solidity, and no awareness of constancy of shape or size. However,

this very young infant can sense proximity, separation, and serial order of objects. Likewise, the infant can see enclosure and continuity of line and surface. The infantile detection of space relationships can best be described as "topological." This initial topological orientation was observed by M. Von Senden as the first visual element experienced and noted by the newly sighted adults studied.<sup>13</sup>

Between the ages of five and twelve months, the second stage of perceptual development was observed by Piaget. During this period the infant learns to control movements by vision and masters eye-hand coordination. With the newly acquired skill of grasping objects that are seen, the young child can explore his world by fingering objects, passing items from hand to hand, or looking at an item from many angles by turning it. An awareness of the constancy of shape and size and a sense of the permanence of solid objects are derived from the exploration of objects with hand and eye. This second stage also begins the development of the ability to see geometric figures, lines and proportion as well as a rudimentary awareness of perspective. These Euclidian spatial relationships occur as a result of tactile and visual exploration.<sup>14</sup>

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<sup>13</sup>Ibid., p. 205.

<sup>14</sup>Robert J. Sanders, Relating Art and Humanities to the Classroom (Dubuque, Iowa: Wm. C. Brown Co. Publishers, 1977), p. 73.

At the third stage of Piaget's perceptual development process the young child between the ages of one and two pursues a more systematic exploration process with this sensory equipment. Even more advanced perceptual changes are initiated in the learning process as the child internalizes his newly experienced sensory impressions and coordinates these into a mental image or a concept. The perception of form and dimension are internalized into the initial realization of relationships between objects.

Although these three stages of early childhood perceptual development indicate very early awareness of spatial relationship, the children up to the age of two do not draw. Piaget's conclusion was that children do not draw what they see, but rather what they know. Thorough integration of visualization and performance does not occur until the maturity level of the child's skills and his accumulated perceptions mesh between the approximate age span of seven and nine. Piaget placed emphasis on perceptual activity. He believed that perceptual activity contributes to the development of both the percept and the concept of space. Piaget's studies offer a detailed theory on the developmental stages of perception. His conclusions indicate a vital relationship in the formation of percepts and concepts

due to the effect of perceptual activities on child art.<sup>15</sup>

The studies and findings of other researchers and theorists of art education take some radically different approaches. One such theory of perception proposed by Heinz Werner and Seymor Wapner is the sensoritonic theory. The sensoritonic theory offers the idea that perception is not exclusively determined by the external factors of environment or by the auditory and visual receptors. Werner and Wapner offer substantial evidence from their studies as to the physiognomic mode of perception. This physiognomic experience means that the learner's perceptual encounter with an object consists of a synthesis of real or factual aspects of the object and the learner's inner impulses and needs. This describes a perceptual encounter that is dynamic in nature rather than static since the individual's internal responses are acting on the objects observed at the same time the visual attributes of the object are impacting on his sensory receptors. The younger child tends to incorporate objects into himself. As he grows older, he tends to separate himself more objectively to view an object as an entity of separation from himself. Physiognomic perception theoretically offers the plausible explanation for the ex-

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<sup>15</sup>Molly Brearley, ed., The Teaching of Young Children (New York: Schocken Books, 1970), p. 44.

planation for the exaggerated or disproportionate head size on figures in children's drawings. The child internally regards the person as important, hence, the head or symbolic area of authority of the figure is of greater of size.

This is frequently noted in drawings of children depicting a classroom scene with the teacher towering over the class with a large head. Wapner and Werner's findings have also been referred to as the organismic theory of perception. The core of their findings seems to indicate that the perceptual experience of a child is composed of sensory exploration and is an equally significant impact of the child's inner motor-affective conditions.<sup>16</sup>

The impactual effect of the learner's total physiological makeup was the central study of several other educational theorists, including Jerome Bruner and Leo Postman. Their work rendered findings on the sensorimotor readiness for perception. This state of readiness for action is referred to in their studies as a perceptual set. This set or readiness involves a continuous circuit of input and feedback between the physiological muscular system and the central nervous system. External stimuli provokes a systemic energy response that arouses the nervous system and the muscular system to the threshold of perception. If

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<sup>16</sup>Kenneth M. Lansing, Art, Artists, and Art Education (Dubuque, Iowa: Kendall/Hunt Publishing Co., 1976), p. 235.



this theory is accepted, it obviously follows that faulty physiological structures will provide an infinite variety of variables in individual perceptions. These variants include what is perceived, the vividness of the perception, and the speed of the perception. Hence, heredity will also be a factor in the set theory of perception. In summary, the set theory states that structural factors, especially the sensory receptors, the central and peripherically nervous system and the muscular system, are the primary determinates of perception.

Bruner and Postman pose the idea that these structural factors are subject to behavioral factors that can influence perception. This formulation has been designated the directive-state theory. Advocates of this ideology suggest that individual needs, attitudes, and values are controlling elements in the perceptual process. Likewise, past experience has an integral influence on perception. The relationship of set theory is rather clearly indicated since it is plausible to consider values, needs, and attitudes, as behavioral sets. Research indicates each of these behavioral sets is in itself a set that determines a readiness to perceive.

Later studies of the directive-state theory of perception by Bruner and Postman resulted in the formulation of a new, but related, point of view in the hypothesis

theory. Basically, the hypothesis theory proposes a sympathetic combination of the unconscious cognitive processes which formulates hypotheses, and by experience, either confirms or rejects the percepts. If the hypotheses are confirmed or positively reinforced by experience, the hypotheses enter the consciousness as percepts. Conversely, if the hypotheses fails the test of experience, the percepts do not develop, and the unconscious process of forming and experientially testing the new hypothesis will be attempted. The terms hypothesis and set are used interchangeably to refer to cognitive formulations that accrue from experience and relate to motivational and environmental situations.<sup>17</sup>

Major ideological contributions of these related theories increase the art educator's awareness of the various external and internal factors that impact the perceptual process. The set theory, the directive-state theory, and the hypothesis theory all consider a common determiner of perception in the existence of a state of readiness. This common denominator of readiness affects to a considerable degree the context of the perception, the vividness of the perception, and the speed of the perception. The set theory offers the idea that individual difference in children's perceptions are dependent on several factors including the

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<sup>17</sup>Ibid., p. 211.

neurophysiological, the behavioral, and the motivational sets, that result from personal needs, social and moral values, and positive and negative past experiences. Doubtlessly, the student of art education will find elements of truth in each of the preceding theories. These studies offer the educator the most pertinent studies available on factors that affect the art learning processes. Within these theories there is evidence that perception is learned. Hence, it can be taught through a structural, sequential, and repetitive curriculum. The studies further suggest that the individual learner's personality and physiological structure are vital factors in the perceptual process. A reasonable and workable conclusion to be drawn educators for application of these multiple theories is to be aware of the significance of the interaction between the total organism (the learner) and the environment which rendered and sustained the learning set of the individual. The child gathers basic mental materials for the cognitive, emotional, and creative processes, through perceptual experiences. Building a curriculum for art courses and classes around the basic truths encompassed in these theories required that both the school and the home have several responsibilities in providing a rich, variegated, and stimulating environment for perceptual development. The child's capacity to absorb, synthesize, and perpetuate

elements of art perception depend on the educator's awareness of the interaction of the elements set forth in the preceding significant perceptual theories.

## CHAPTER IV

### THE CONCEPTUAL DEVELOPMENT THEORY

Theories posed by the conceptual psychologists might be contained into this oversimplification: Children draw what they know rather than what they see. This statement is the basis for the conceptual postulations posed by several of the foremost observers and students of conceptual development in young children and adolescents.

Most influential among early investigations was Florence Goodenough whose contributions to the understanding of this theory are of distinct significance. Goodenough's findings were based on years of observations of children rather than on clinical experimentation. These observations seemed to indicate that perceptual images and eye-hand coordination did not wholly account for the differentiations and discrepancies in children's art. It appeared to Goodenough that the ability to analyze the fundamental nature of elements and to recognize relationships between elements and were strongly evidenced in the drawings of youthful artists. This ability to recognize and analyze became more complex with repeated visual explorations, advancement in age, and varied experiences. Goodenough's investigations indicated that conceptual

development and cognition played determinate roles in the art learning process.

Perhaps the most significant contribution of Florence Goodenough to the world of art education was her widely acclaimed Draw-a-Man Test which has been successfully used for many years as a nonverbal intelligence test. The test is administered by having the child make a drawing of a man. Scoring of the test is based on several evaluative factors including the number of features drawn, the validity of the location of the features and the accuracy of representation. Results of this test have indicated a correlation between visual symbolization and conceptual development.

Goodenough's ideas were affirmed in the research of Dale Harris in his extensive study of the relationship between children's drawings and their intellectual maturity. As a result of his exhaustive survey of conceptual development literature, Harris stated that concepts and cognition had a more profound impact on the nature of children's art than any other influential factors. Harris's conclusions of the role of conceptual development include these four basic observations and related to children's drawings"

1. The amount of content used in children's drawings is conceptually affected.

2. The complexity of the drawing is likewise determined.

3. The spatial arrangement of details in a drawing depends on conceptualization.

4. The relationship of objects within a drawing is related to the use of concepts.

Equally significant, in Harris's opinion, was the observation that concepts also impacted on the composition, design, and abstract or concrete nature of the art. Age variations determined the use of repetitive forms, shapes, and textures as well as overall unity of the child's work.

Perhaps the most convincing theories related to conceptual development are those of Jean Piaget whose observations on perceptual development have been previously discussed. According to Piaget, children have three sequential developmental stages in the perception of space. However, Piaget asserted that although concept formulation follows a triple developmental pattern it occurs after the three stage perceptual pattern. According to this theory, mental images are distinctly different from perceptual images in nature. Conceptual images or visual concepts were not directly controlled by current sensory perceptions.<sup>18</sup>

The first of Piaget's concept forming phases was designated as the sensorimotor period. As Piaget observed, this period occurred from the child's birth to approximately

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<sup>18</sup>Robert J. Sanders, Relating Art and Humanities to the Classroom (Dubuque, Iowa: Wm. C. Brown Co. Publishers, 1977), p. 73.

the age of two. This stage of child development involved adjustment of the relationship of space and topology. The rapid facilitation of motor skills acquired by the growing infant resulted in an ever increasing storehouse of perceptual experiences that contributed to the forming of visual concepts. Piaget observed that second period of conceptual development was initiated when the mental images had begun to form.

After the age of two, the child enters the period referred to be Piaget as the concrete operations phase. This stage of conceptual development is characterized by the ability to draw concrete objects and events.

Occurring between the ages of two and eleven, this period observed to have three substages: the preparatory substage (also referred to as preoperational), the intuitive thoughts substage, and the concrete operations substage.

In essence, the first substage (preoperational) included ages two through four. Children's representational are efforts during this phase consist of "scribbles." These geometric scribbles develop through observable stages of loops, swirls, and irregular circular shapes to demonstrate rudimentary approximations of triangles, squares, and other geometric forms. By the end of this phase there is evidence that the visual concept of proximity, separation, and enclosure is substantially developed. However the



mental images of order and continuity remain undeveloped.

During the second substage of intuitive thought between the ages of four and seven, the child begins to make straight lines, squares, and triangles as he displays an awareness of topological spatial relationships. Rhythmic circular movements are not interrupted to create geometric forms. Human figures are drawn more realistically as topological relationships of the body are arranged intuitively. A coordinated mental image of the world occurs between the ages of six or seven as the child enters the next substage.

This concrete operations period lasts from the age of seven to the age of eleven. Piaget referred to this period as the operational period because it is characterized by the coordination of perceptual interaction upon concrete objects. At this time the child could perceive the abstraction of parts of objects and could also cognitively coordinate the parts into an understandable whole. The perception of parts and the awareness of unity of parts must be mentally reversible for the performance of a concrete operation. For this to be achieved, it is imperative for the learner to have a stable point of reference. Full understanding of the acquired visual perceptions are dependent upon one or more reliable reference parts. This substage of the concrete operations substage occurs during the

elementary school years. Hence, an awareness of the "reversibility" ability has special importance to art educators. It is during this period that the child's drawings progress to more natural relationships as he draws what he conceives rather than what he knows.

This phase might be referred to as the stage of "conceptual realism" since topological relationships are clearly defined and consistent. Valid geometric shapes appear in drawings, however, proportion is at variance with reality and perspective is highly inconsistent, with perhaps several angles of view represented with a single drawing. Distortions of reality occur rarely at this stage of development. When they do occur, they usually indicate the maturing process which occurs between the ages of eleven and fifteen.

Piaget's analysis of the formal operations period focuses on the period when maturity makes it cognitively possible for a child to conceive concrete objects and to think about them. During the earlier stages of development there was little evidence of abstract ideas observable in the artwork of the child. With the advancement of age, the child's thought patterns begin to display a philosophical nature. This newly acquired ability to discern abstractions is obviously translated into the child's artistic creations. Abstract concepts of an emotional or cognitive ideal become incorporated in artistic interpretations at this stage.

Prevalant among the abstract concepts used by middle year children are scenes that suggest good, evil, love, hate, and strength. These abstractions are often suggested by symbolic details and sometimes are unnaturalistic in style. This departure from naturalism is in itself an evidence of abstract conceptualization.

The research and studies of Goodenough, Harris, and Piaget confirm what all art educators have observed. Specifically, children seldom if ever draw while they perceive. Consequently, these theorists conclude visual creation is based on concepts rather than upon percepts (See Figure 4-1).

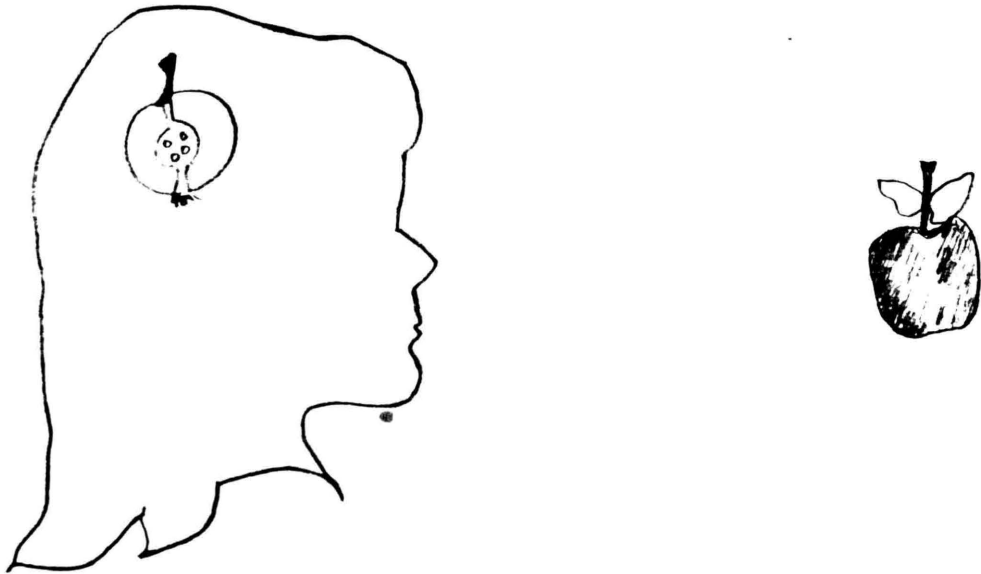


Figure 4-1

In her book, Preparation for Art, June King McFee uses this illustration to represent the conceptual theory.

## CHAPTER V

### DEFINING THE MIDDLE SCHOOL

In response to criticism leveled by college and university staffs as to the lack of adequate preparation by the public schools as early as the late 1800's, the National Education Association made recommendations for redesigning the secondary education program. The generally accepted redesign of the secondary structure was a three year span of education for the seventh, eighth, and ninth grade student called the "junior high school." Its curriculum was slightly modified to the early adolescent's needs. More recent educational refinements have innovated this educational program to the "middle school" concept which serves the needs of the seventh and eighth grade child. Supporters of the middle school concept recognize this period of early adolescence as one of special and unique needs of an emotional, physical, mental, and social nature. Proponents of this philosophy emphasize the need to modify and expand the traditional secondary curriculum with variety and flexibility to meet the unique needs of students of this maturational level. In meeting these needs such educational terminology as "intuitive," "inquiry," and "discovery" frequently are used in reference to the student

learning process. The middle school program became essentially an exploratory program in the sense that the student's learning focus was directed to varied learning experiences and away from the rigid departmentalization, competitive band programs, interscholastic athletics, and early socialization. Although the terms "junior high school" and "middle school" often are used to refer to the identical age group of early adolescents, the middle school differs radically in concept. The middle school steers away from the aforementioned classical extracurricular identification marks that made it a "mini-high school." The junior high school differed from the high school primarily in terms of the age of its student personnel.

The most obvious advantage of the middle school concept is that it allows for curriculum innovations that are unfeasible under the traditional junior high program due to its link to meeting graduation requirements. This margin for innovation offers a leading role for art education in the middle school. Through all of the developmental phases of the emerging middle school, art education has played a prominent role. From the early interest in manual training and industrial art, to the concept of art expression as an emotional release, the middle school art curriculum has responded to the educational needs of the students of each decade. During the fifties and sixties, "creativity" be-

came an education thrust. Art was viewed as a means of non-verbal communications and visual literacy became a desirable educational goal. As educators plan for the needs of the eighties and nineties, the electric media age makes specific and urgent demands on the educational institutions. At the middle school level art courses may be best described as general in nature, as either exploratory or introductory. Art studies have also been incorporated into the curriculum by relating them to other studies such as literature, social studies or history, or home management. Some art courses are elective at the middle school level while other are more or less compulsory. In general, art teachers at this level have regarded their courses as terminal or as preparatory for the high school.

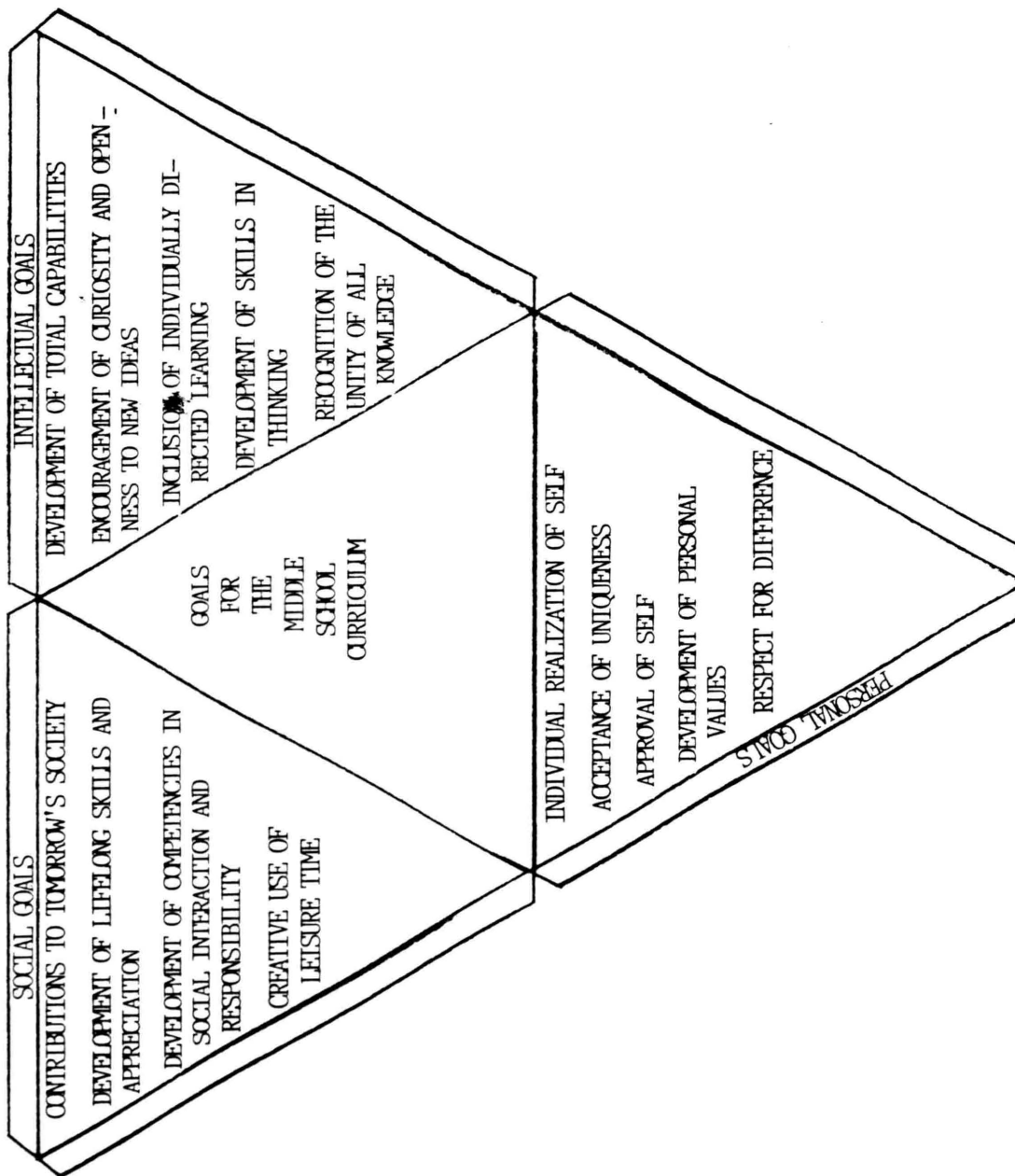


Figure 5-1



## CHAPTER VI

### NEEDS OF THE MIDDLE SCHOOL ART STUDENT

The characteristics of the middle school art student of today are a determining factor in the directions educators are taking the learners. The perceptual strategy emphasizes awareness and generally provides students with a wide spectrum of sensory experiences. Students are challenged to develop their skills in using sensory perception, to approach all new learning experiences with the various senses, and to reproduce or create an expression of their new insight through an art medium.

From the conceptual education viewpoint the art curriculum implies that art courses should deal primarily with teaching the student to recognize, describe, and analyze basic art elements. According to this approach, the student should learn to evaluate works of art in terms of these learned concepts. Modern education approaches tend to combine both strategies with a flexible approach that is reflected in an effort to provide an art program that fosters the student's ability to understand self and others, and to gain a fundamental knowledge of the media and content of art.

Characteristics of the typical middle school youth

that must be noted and planned for are varied. Any art program for the young adolescent must address these particular physical and personality traits. First, the early adolescent is constantly and rapidly changing physically. This results sometimes in awkward or clumsy movements. This factor has a bearing on the use of art materials, kinds of projects suited to a study, and the need for space and freedom of movement.

Second, the early adolescent is intellectually curious. However, the verbalization skills of a student at this level often are limited. This may lead to great emotional sensitivity. This physical awkwardness coupled with extreme emotional sensitivity can pose special curriculum planning challenges. Art products of the youth fluctuate in a parallel manner - mature work one - childlike work the next. Art provides a unique instructional area to meet the young adolescents needs, ideas, and responses.

## CHAPTER VII

### THE ROLE OF THE TEACHER

The daily implementation of the well-designed middle school art curriculum lies in the hands of the middle school art teacher. The teacher's task is primarily that of bringing the student and the planned curriculum together in such a way as to meet the student's needs in the most positive and dynamic manner possible. The most recent impact of the art teacher's role has been an emphasis upon educational accountability. This has lead art educators to develop highly structured programs. This is the case in most of the larger city school systems and the trend in smaller districts as well. Behavioral objectives are goals established in advance of the curriculum and before teaching begins. Hence, the art program is directed toward the achievement of specific ends. Goal-setting aims at making the art program more effective, accountable, and measurable. Lessons and units of study are designed with a logical sequence of progression. Teaching methods are aimed at meeting specific objectives. Evaluation of the learning process is based upon achievement of the predetermined goals.

Goal-setting has at its core the purpose of a total art program which will provide for a sequentially developed ed-

educational plan. The overall aim of behavioral objectives in art education is to assure that art experience through the grades are logically arranged for maximum skill development and concept growth. Goal-setting begins with a statement of the desired end product of the educational process. The total program leads the individual through segments of the process. The learning behavior expected at each segment is referred to as a "behavioral objective." Behavioral objectives are defined in responses to these three questions:

1. What will the learner be doing? (The task)
2. Under what conditions will he be doing it? (The conditions)
3. How will he know when he has achieved success? (The criteria of evaluation)

Supporters of the behavioral objective approach affirm that this type of program enhances the development of creativity since it directs and delineates the art learning process. One of the outcomes of the behavioral objective oriented curriculum is continuous growth. The very nature of this intensely structured program insures forward learning motion. Creativity is fostered through individual choice of student projects to accomplish a specific learning objective. Thus, the learner does exercise creativity in the choice of learning activity related to acquiring a specific skill or developing particular concept. Behavioral ob-

jectives are written to arouse and stimulate learning, not to curb or impede artistic response to the student's learning experience.

The ideal art curriculum for the modern middle school student must be responsive to the needs of the student, the demands of the community and the requirements of the school system. Recognition of these factors has been taken by this researcher in designing the following art education resource model.

The student should exhibit, to his potential, his aptitude to:

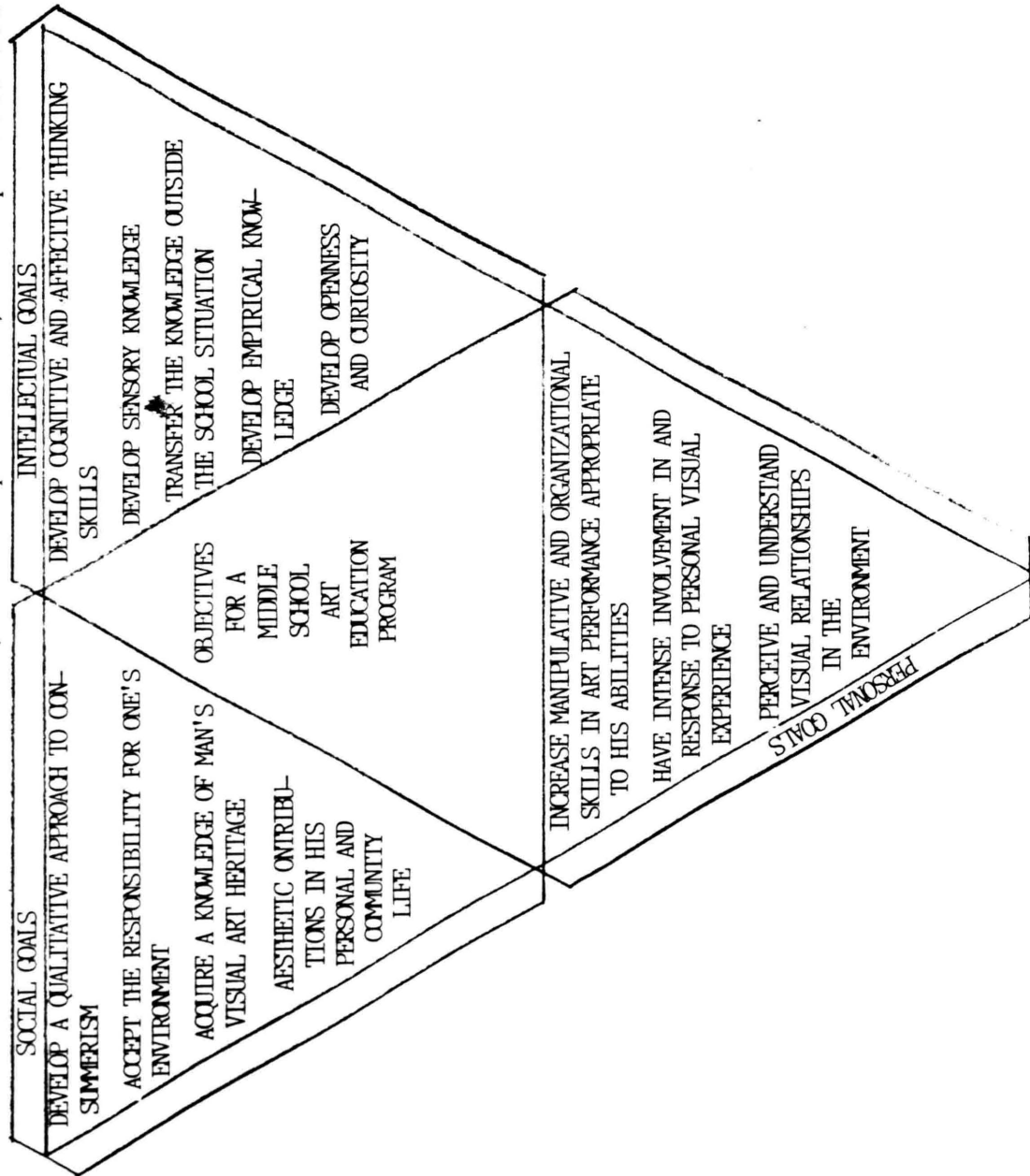


Figure 7-1 (After National Art Education Association)

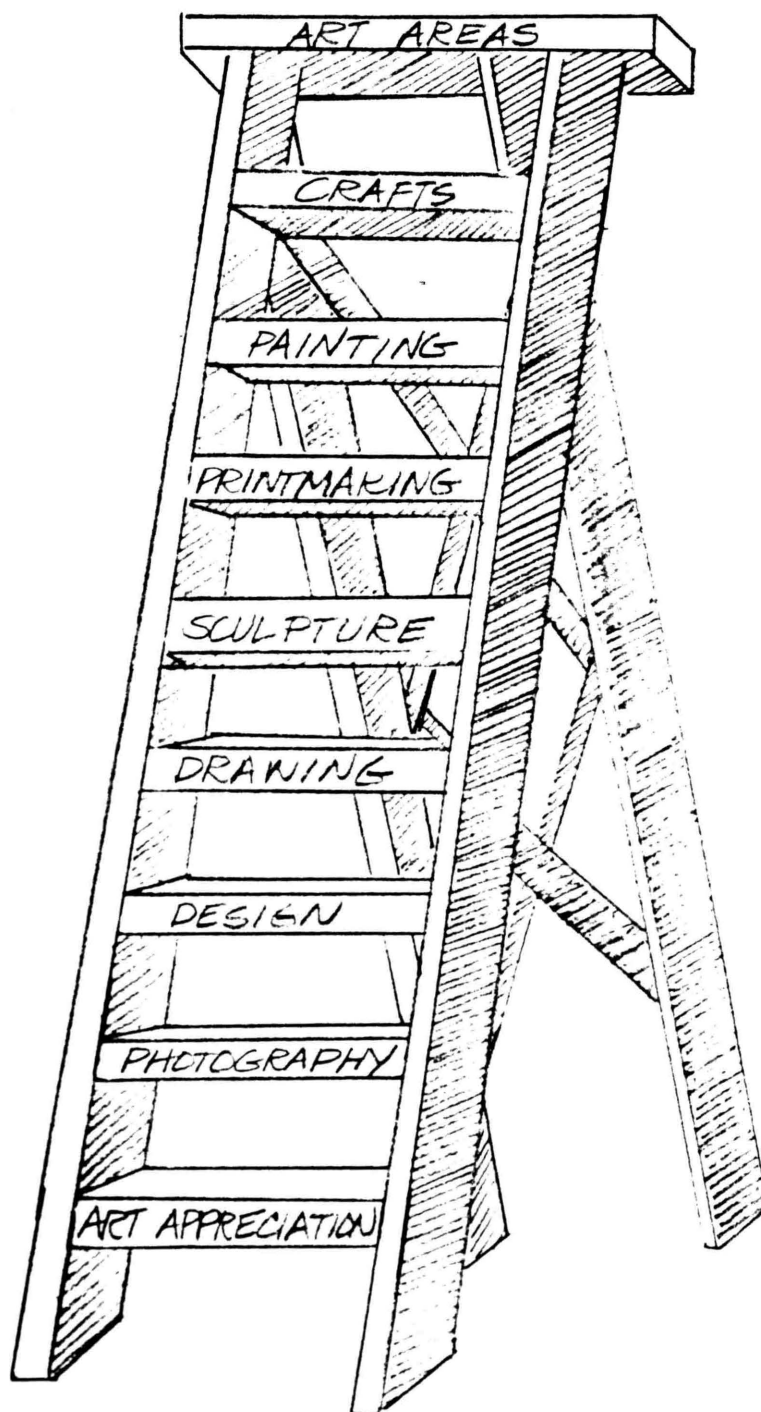


Figure 7-2

Major art areas which are recommended to be included in the middle school program. (After Robert J. Saunders)

## COURSE OUTLINE CHART

The following course outline represents the primary art areas which are recommended by the Texas Education Agency and the National Art Education Association to be entailed in the art program for Grades 7 and 8. Within each section, the art teacher selects the experiences most advantageous to the students. For each grade, the courses are different.

### GRADE 7

ART AREA	CONCEPTS-MATERIALS-TECHNIQUES
DESIGN	<p>Concept Emphasis: Making students aware of the elements and principles of design as they relate to each art activity</p> <p>Design is not taught as separate unit, but as an integral portion of all art experiences.</p>
DRAWING	<p>Concept Emphasis: Developing perceptual awareness and ability to feel and express moods</p> <p>Materials: Pastel, crayon, charcoal ink</p> <p>Techniques: Freehand drawing</p>
PAINTING	<p>Concept Emphasis: Art as a means of personal visual experience</p> <p>Materials: Tempera</p> <p>Techniques: Medium exploration</p>
PRINTMAKING	<p>Concept Emphasis: Creative areas of printmaking</p>



Materials: As open a range as possible for technique chosen

Techniques: Frottage, monoprints, styrofoam, stencil, and use of gadgets and vegetables

## SCULPTURE

Concept Emphasis: Developing a qualitative approach to craftsmanship

Materials: Wire, clay, plaster, wood, paper, papier mache, found objects

Techniques: Additive processes; giving occasions to examine diverse materials and techniques

## CRAFTS

Concept Emphasis: Becoming familiar with different craft processes and media

Materials: Those necessary for pottery, weaving, stitchery, applique, macrame, tie dye, batik, enameling

Techniques: Depends on material selected

## PHOTOGRAPHY AND FILMMAKING

Concept Emphasis: Seeing that photography and filmmaking can be an art

Materials: Determined on extent students become involved in photography and filmmaking

Techniques: Overhead transparencies, filmstrips, making prints

## ART APPRECIATION

Throughout the year art appreciation should be included in all experiences.

Field trips to museums and artists' studios, visual materials, and use

of artists as resource people will help the students to gain knowledge and appreciation of art.

## GRADE 8

## ART AREAS

## CONCEPTS-MATERIALS-TECHNIQUES

## DESIGN

Concept Emphasis: Making students aware of the elements and principles of design as they relate to every art activity

Design is not taught as a separate unit, but as an integral portion of all art experiences.

## DRAWING

Concept Emphasis: Continuing to develop perceptual awareness to students express moods and feelings; growing in ability to evaluate own drawings

Materials: Charcoal, pencil, ink crayon, paint and brush, mixed media, oil pastel

Techniques: Freehand drawing

## PAINTING

Concept Emphasis: Art as a means of personal visual experience, use of line, color, and shapes to express ideas and feelings

Materials: Tempera, ink washes, mixed media

Techniques: Medium used with experimental approach

## PRINTMAKING

Concept Emphasis: Creative areas of printmaking

Materials: As open a range as possible for techniques chosen

Techniques: Determined by selection of material and process used

## SCULPTURE

Concept Emphasis: Developing a qualitative approach to craftsmanship with emphasis on form

Materials: Wire, wood, clay, paper cardboard, plaster, plastic

Techniques: Additive and subtractive processes in a choice of materials

## CRAFTS

Concept Emphasis: Elements and principles are used more consciously

Materials: Those materials necessary for pottery, coiling, macrame, weaving, stitchery, applique, hooking, batik, tie dye, silk screen, jewelry, enameling, bookbinding

Techniques: Determined by selection of materials used

## PHOTOGRAPHY AND FILMMAKING

Concept Emphasis: Seeing that photography and filmmaking can be art; good design in composition

Materials: Determined on extent of student's involvement in photography and filmmaking

Techniques: Slides and slide presentations, making prints, 8mm films, etc.

## ENVIRONMENTAL DESIGN

Concept Emphasis: Accepting the responsibility for the visual appearance of the environment and a desire to make aesthetic contributions

Materials: Dependent upon student/teacher choice

Techniques: Activities related to space planning, city, school, home landscaping

## ART APPRECIATION

Concept Emphasis: Throughout the year art appreciation should be included in all experiences.

Field trips to museums and artists' studios, visual materials, and use of artists as resource people will help the students to gain knowledge and appreciation of art.

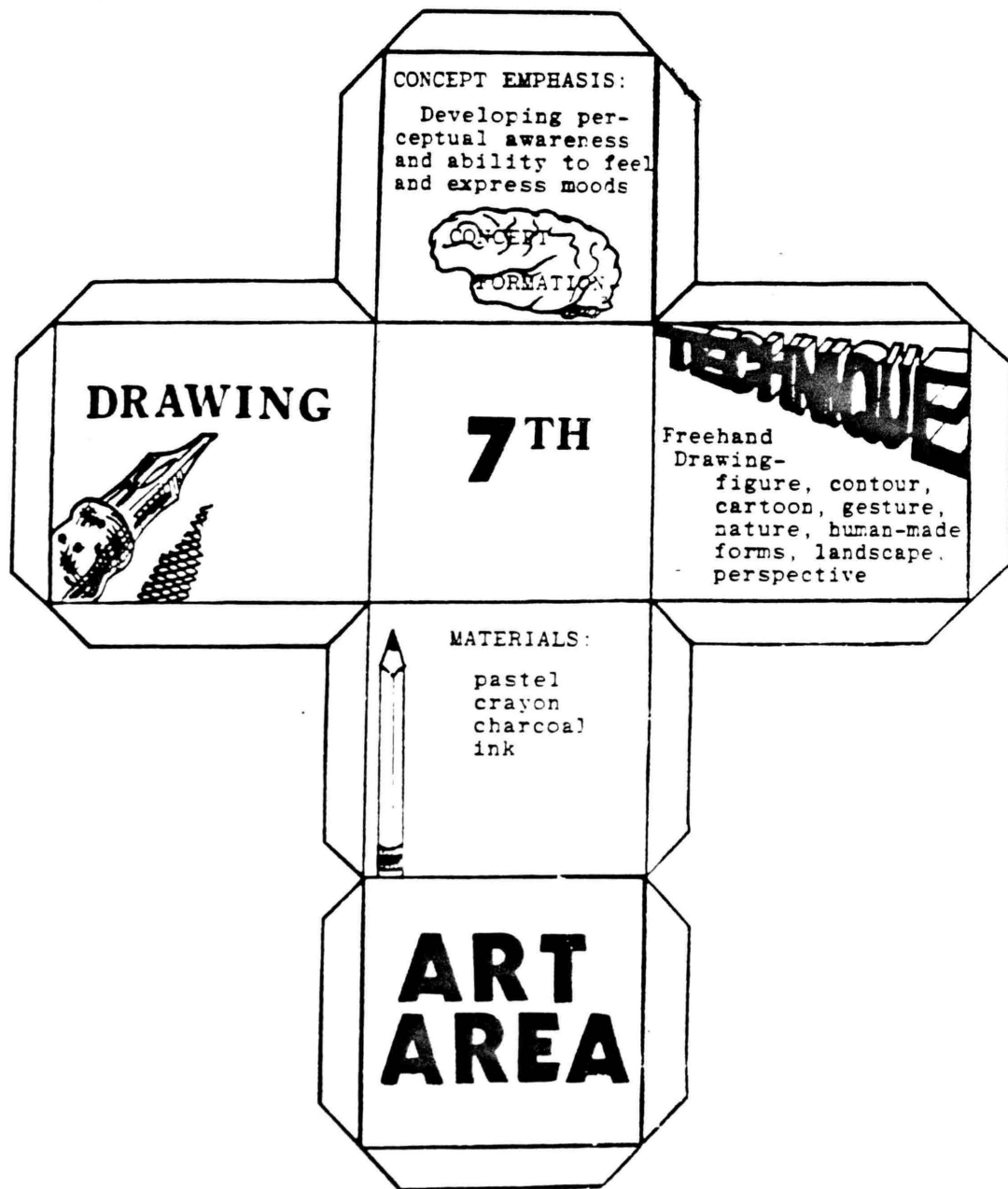


Figure 7-3

To make your cube:

1. Cut out page.
2. Cut around tabs.
3. Score corner areas.
4. Fold corners inward and glue tabs inside.
5. Press corners together and hold until set.

Art experiences allow an outlook for the cybernetic cycle to operate. To operate behaviorally, the learning situation should provide:

1. perceiving visual relationships
2. producing art works
3. knowing and understanding about art objects
4. evaluating art products

Following is an example of a specific behavioral objective involving these four aspects of art.

#### DESIGNING PLAYGROUND EQUIPMENT

OBJECTIVE: To design and build a model of an original piece of playground equipment.

CONCEPTS: In designing the playground equipment, the pupil should consider:

1. Visual appeal
2. Durability of material used
3. Safety

ACTIVITY: 1. Keeping the above guidelines in mind, design an original piece of playground equipment on paper.

2. When a satisfactory design is achieved, build a model using whatever materials best suit your project. (Paper mache, wood, wire, styrofoam)

EVALUATION: Write a paragraph stating:

1. How will the equipment be used?
2. What building material should be used to construct it and why?
3. What kind of environment would fit best?
4. Explain why it is safe.

## CHAPTER VIII

### SUMMARY AND IMPLICATIONS

For the art educator an essential awareness of the nature of the learning processes can be the determinate in terms of the scope, sequence, and content of curriculum planning. Without a thorough grounding in the methods by which children acquire motor skills and mental readiness, the curriculum planners will find it difficult, if not impossible, to implement an effective art instructional program. The contributions of both the perceptual awareness theorists and the conceptual awareness theorists and the conceptual awareness theorists suggest several considerations relevant to the middle school art curriculum planner.

Of vital significance are the observation of Goodenough, Harris, and Piaget in indicating that the nature of child art is based largely on the changes of the maturing child in forming visual images. There is an observable parallel between the stages of artistic development and the stages of conceptual development. For the art educator, this suggests that since a child's art performance is dependent on conceptual development, it logically follows that the art instructor does not improve the quality of child art with criticism of the art work the child artist produces. Rather,

the instructional focus should be on changing the learner's concepts before the art product can be changed. In order to accomplish this goal, the younger child will be introduced to single object visualization experiences, the older child to concrete objects and events, and the more mature youth to abstractions. Hence, the art educators will limit the teaching of aesthetics to the lowest levels among the very young and by a gradual process a higher level of abstraction presented to the more mature individual.

From a very practical standpoint, the work of Piaget suggests to the curriculum planner that a wide and varied program of perceptual activities be implemented at all levels. Among the many experiences art educators can provide for students are firsthand observations and sensory experiences. Drawings from the environment of the child for stimulation and use of sensory experiences to enrich visual conceptualization is one of the strongest educational motivators to communicate ideas in visual forms. Developing perceptual awareness experiences for the school art program requires the instructor to plan activities that help the child relate to his world with increased awareness.

Gestalt theory of perceptual development states that as children mature their perceptual differentiation increases. The young child perceives "wholes." As he grows older, he perceives the details within the whole. For the



curriculum planner this suggests that the basics of form, line, color, and texture, as well as spacial relationships, can be taught through doing (art process) and seeing (aesthetic judgment).

The learner's frame of reference in perceiving visual images is conditioned by the aesthetic and cultural environments to which he is exposed. Rudolf Arnheim and a number of other researchers in art education indicated that train in "visual discrimination."

In all art instruction the teacher should demonstrate the visually discriminating aspects of contour shapes, contrasts in tone and intensity of color, relationships between forms and structures, and figure and ground relationships. Clearly, for the art instructor this means lessons focus on visual showing more than on verbal instructions. Even though the sound art instructional program will stimulate the student to use all sensory experiences to expand his visual perception, the child does proceed through a definitely observable perceptual development pattern. Basically, the child starts with the "whole" (human scheme) and adds basic parts to the whole as maturation brings differentiation. Elaborations of visual images ensue with age and experiences. This personal development is applied to his art development as details appear in his drawings to correspond with the conceptual thought accumulations.

As the child's conceptual thought processes increase, the child renders more realistic reproductions of objects perceived in terms of use of space, form, and color.

For the middle school art instructor these periods of changing perceptual awareness present him with a client who has acquired an accumulation of impressions of his world which is the sum total of child rearing practices, religious beliefs, social interactions, economic conditions, peer influences, and physical heredity. These factors present to the school a youth full of awareness. At no other time in the individual's experience is perceptual awareness so highly intense and impressionable as at this early adolescent level. During the early developmental stages the child's perceptual viewpoint was relatively flexible, but during the adolescent period of development the learner has largely passed through a period of exploration of his basic environment. Students have an increasing concept of maturation and fitness as to the adult role. The youth seeks a sense of "rightness" as to acceptable perceptions of the world. This period of life usually finds the youth establishing criteria that last a lifetime. The art instructor can concern himself with developing a program that offers challenges in determining the quality, depth, and breadth of the youth's art percepts. Middle school students are ripe for sensitive analysis that leads to con-

ceptual understanding. The middle school learner is both self-confident and insecure. The paradox leaves this learner receptive to explorations of a child-like, but never "childish" nature. Childhood activities with blocks of wood are acceptable but, out of respect of the approaching adult within the youth, terminology and assigned projects require a more mature approach. Wood sculpture, junk sculpture, nonsense machines, pop art, collages, montage, and other similar art activities have student appeal. Art projects that challenge the artist's ability to view and review the visual objects and to incorporate these visual perceptions, both as a whole and as details that are part of the whole, are the core of a sound art curriculum. Actual experiences and investigations lead to the refinement of the learner's awareness. This awareness is a factor in the constant reorganization of percepts and concepts which stimulate the imaginative and creative processes.

In conclusion, for the art educator the continuing process development of perceptual awareness and the formation of conceptual awareness seems to be a circular process (see Figure 8-1). The formation of concepts allow the child to draw. Accurate artistic representation requires the formation of concepts based on mental data drawn from the perceptual experiences. Concepts are the building stones on

thought and thoughts occur from sensory stimulation and sensory reception. Each process is dependent on the other in the art learning process (see Figure 8-2). Consequently, the art education program of the middle school will best serve the learning needs of its unique clientele by combining a broadbase curriculum featuring opportunities for the adolescent to experience, to respond, and to react to his total environment. It is the task and the challenge of the art instructor to provide these learning experiences in a visual, intense task oriented program of visual and sensory experiences to which the student can respond with an integration of the perceptual and conceptual art learning processes.

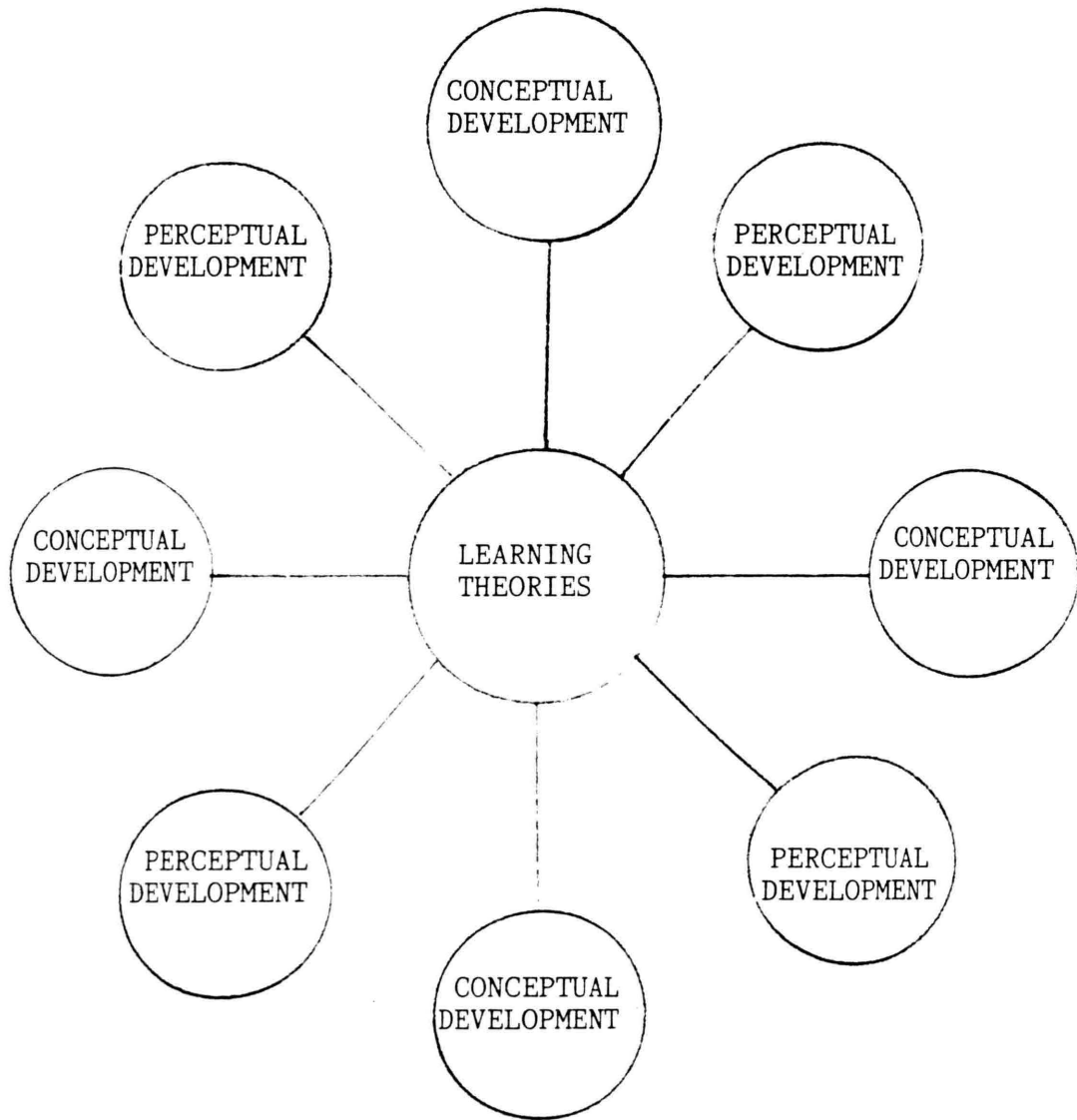


Figure 8-1

Perceptual awareness and the formation of conceptual awareness seem to be a circular process.

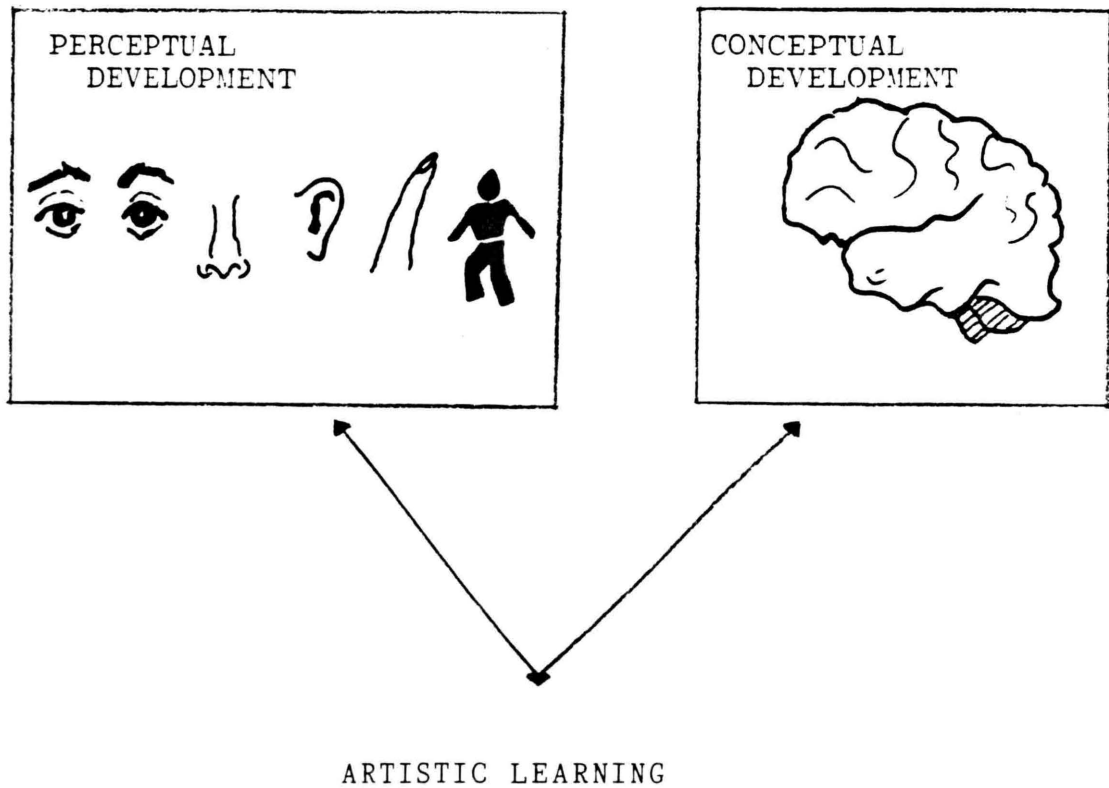


Figure 8-2

Perceptual development and conceptual development are dependent on one another in the art learning process.

## APPENDICES

## APPENDIX A

### FOUNDATIONAL BASE

OBJECTIVE: Selected art education theories will be incorporated into a foundational base for a middle school art education curriculum and developed into an art model based on certain standards identified in the rubrics of certain national and regional accreditation agencies.

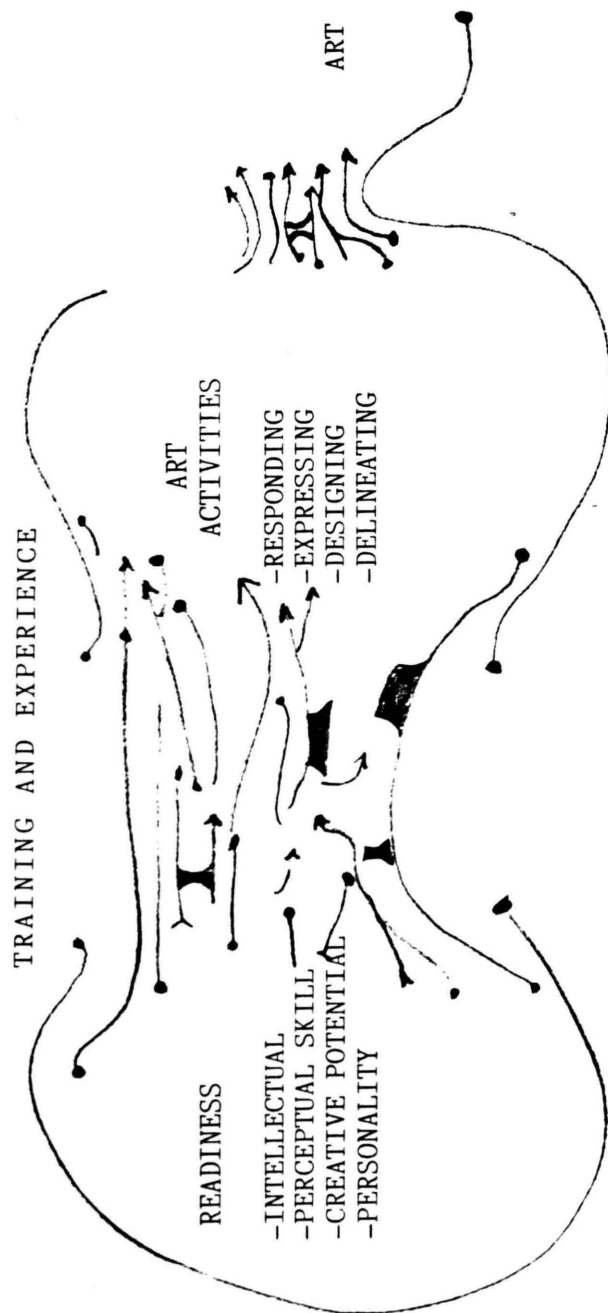
National  
Education  
Association

National  
Art Education  
Association

Texas  
Education  
Agency

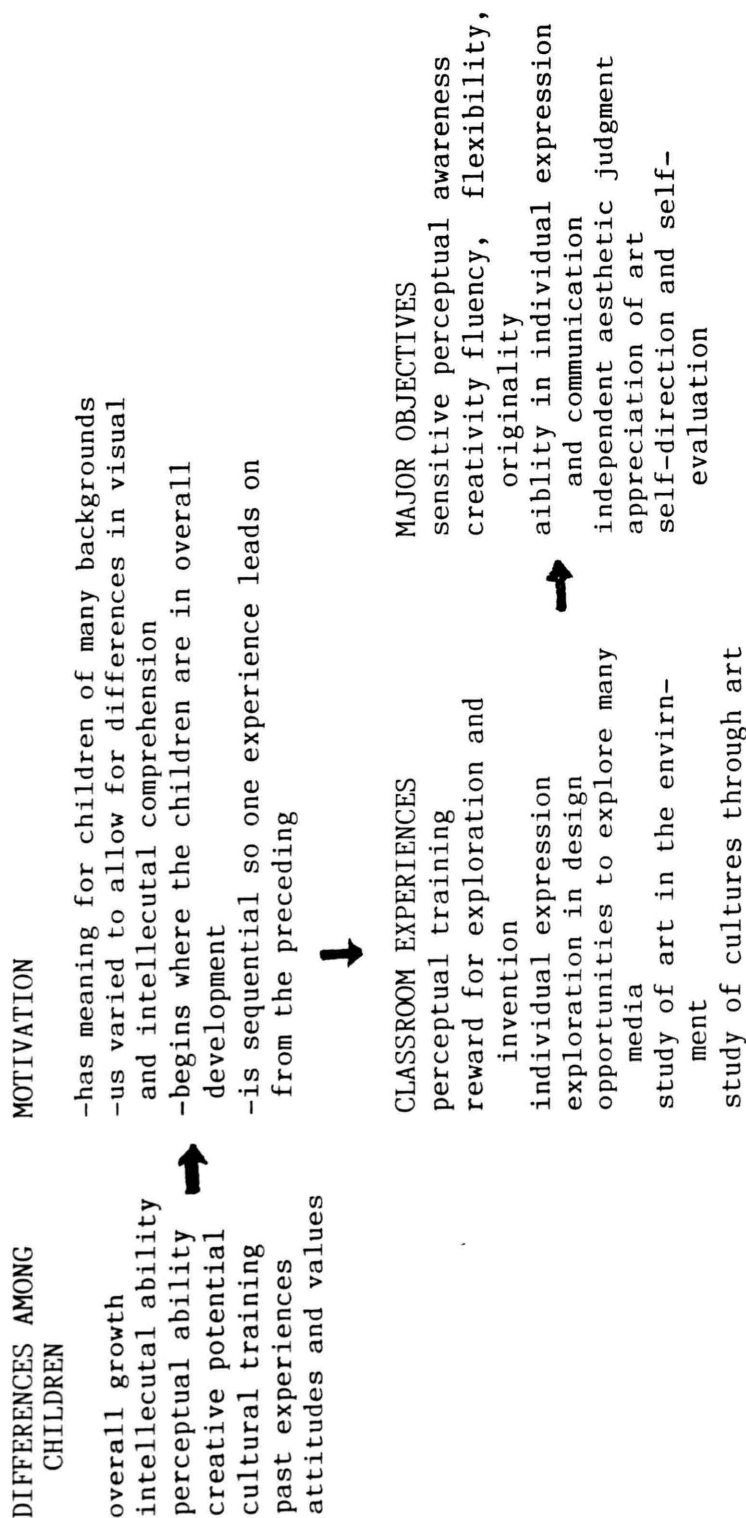


# APPENDIX B

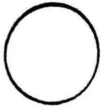


(After June King McFee)

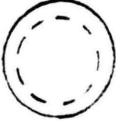
# A SUMMARY OF DIFFERENCES, EXPERIENCES, AND OBJECTIVES



APPENDIX C  
(After June King McFee)



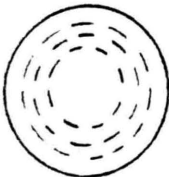
A child is:  
What I am.



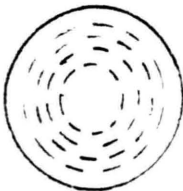
A child is:  
What I used to be.



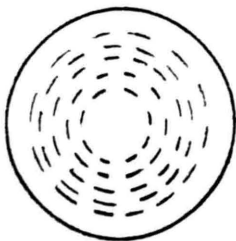
A child is:  
What I want to have.



A child is:  
What I have.



A child is:  
What my child has.



A child is:  
What I used to have.

#### APPENDIX D

Learning as Perceptual Differentiation  
(After June King McFee)

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