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**A framework linking discipline-based art education and
visualization to a social studies curriculum**

Elliott, David S., Ed.D.

The University of North Carolina at Greensboro, 1990

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A FRAMEWORK LINKING DISCIPLINE-BASED ART EDUCATION
AND VISUALIZATION TO A SOCIAL STUDIES
CURRICULUM

by

David S. Elliott

A Dissertation Submitted to
the Faculty of the Graduate
School at the University of
North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the
Degree Doctor of Education

Greensboro

1990

Approved by

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APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at The University of North Carolina at Greensboro.

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March 27, 1990
Date of Acceptance by Committee

March 27, 1990
Date of Final Oral Examination

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Elliott, David S., Ed. D. A Framework Linking Discipline-Based Art Education and Visualization to a Social Studies Curriculum. (1990) Directed by Dr. Roberta W. Rice. 69pp.

The purpose of this study was to correlate discipline-based art education with visualization and to propose a framework by which this correlation might be used to integrate the art curriculum with the social studies curriculum.

The procedure was to research the critical concepts drawn from discipline-based art education and the operative concepts drawn from visualization. The concepts were integrated with the art education curriculum and the social studies curriculum.

Components of the curriculum framework integrating art and social studies are:

First, identification of the theories which are basic to the framework; associative recall, visualization, mental imagery, and discipline-based art education.

Second, identification of the concepts from the art curriculum and the social studies curriculum which are appropriate to both curricula.

Third, development of a statement using one or more of the theories and concepts to help teachers organize the subject matter.

Finally, choosing content samples from the art and social studies curriculum to provide for application of the framework.

ACKNOWLEDGMENTS

I would like to thank the members of my committee for their continuous guidance: Dr. Lois Edinger (chair), Dr. Roberta W. Rice (adviser), Dr. Joan Gregory and Dr. David Purpel. The unique combination of these professors in social studies, curriculum and art gave this study the creativity and individuality.

My family has been a tremendous support system, especially my wife, Loretta, and son Brian, who understood the time that was necessary to complete this study.

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Chapter I

The Problem and Its Setting

Background

Much of the current literature on art education focuses upon a trend called Discipline-Based Art Education [hereafter referred to as DBAE]. DBAE is primarily concerned with the four disciplines which should be taught through art experiences. These disciplines are art history, the production of art, aesthetics, and art criticism. A recent trend in curriculum development is integrating these disciplines within a school setting. Research today in various techniques of instruction exhibits to teachers many ways to help students retain important information. Educators are always seeking innovative ways of teaching the values of our culture. The expectations of retention and of experiences set forth by individual instructors display a need for a more creative learning environment.

The author examined the resources from supplementary readings of art education, [such as Eisner and Greer], supporters of disciplined-based art education, and authors of the use of visualization, (Kosslyn and Gardner); in addition the personal developmental stages of visualization

implied by Lowenfeld and Richards are examined in the development of this study.

The background comes from sixteen years of personal experiences of teaching art and sports, and working with other teachers' curricula, particularly social studies.

I have been interested in the correlation of art and social studies in order to promote the art program as well as develop interests in other subjects.

Purpose

The purpose of this study was to correlate DBAE with visualization and to propose a framework by which this correlation might be used to integrate the art curriculum with the social studies curriculum.

The following questions gave direction to this study: What are the critical concepts to be drawn from DBAE and what are the operative concepts drawn from visualization? How can these concepts be correlated for use in a curriculum? How can these concepts from art education be used to integrate the art education curriculum with the social studies curriculum?

Methodology

The study consists of the following processes: review of the literature from which critical concepts and ideas were drawn from DBAE and operative concepts from visualization, correlation of DBAE with visualization concepts, development of a plan using the concepts from the first two steps, and formulation of an outline for integrating of art education and social studies.

Definition of Terms

The terms used throughout this study may have multiple meanings; therefore, it is necessary to establish definitions to be used for this particular study.

Discipline-Based Art Education-

The theory of implementing art into all curricula is what, Elliot Eisner was talking about when he said, "Students can draw a horse in art, act out a horse in drama, write about a horse in English, study dimensions of a horse in math, etc" (Eisner Lecture). The assumption that he was speaking of multiple learning levels and various learning situations in different subjects, leads to the implementation possibilities in other curricula. Art teachers should emphasize:

aesthetics, art criticism, art history, and art production.

Symbol-

A fragmented mental image consisting of lines that may form vague shapes. An image that stands for a complex idea or concept denoted as transmissions from the brain by words, pictures, diagrams, numbers, and many other forms.

Visualization-

The ability to project mental images, and/or symbols, in one's mind, often associated with cognitive experiences and recall. Everyone visualizes to some degree whether it be through linear symbolic means, or by the use of numbers, or with pictures in the mind.

Imagery-

Similar to visualization except more specific details occur in the mental pictures in the mind. The act of retaining a mental picture in the mind.

Cognition-

What one learns and remembers from experience of past happenings and how this experience affects one's motives in decision making situations.

Manipulative skills-

Mainly concerned with artistic motor skills such as maneuvering a pencil, the handling of clay, managing techniques with a brush, etc.

Hands-on experience-

The actual performance of a subject through visual art mediums displaying cognitive, and manipulative motor skills used in art production.

Summary

The use of mental imagery in any situation will develop a more interesting environment for any level of understanding. Educators have much to gain by teaching through the process of creating a mental scene or mood. This type of inner instruction allows students to absorb information on an individual basis, hence, increasing understanding, interest, and retention of facts as well as developing an enthusiastic atmosphere for learning.

Through researching various techniques and methods of teaching visualization, this author will correlate DBAE, with the use of visualization and then develop a social studies curriculum into a feasible framework.

In the next three chapters the study is organized in the following manner: Chapter Two contains a review of the literature appropriate to the study. In Chapter Three the

methodology and the development of a framework is discussed. Chapter Four consists of the summary of the preceding chapters, recommendations, and the epilogue.

Chapter II

Review of the Literature

Introduction

The review of the literature in this chapter is concerned with the following areas: discipline-based art education, visualization, and the correlation of DBAE and visualization. The literature consists of readings supporting discipline-based art education and its place in public education. Included also are examples of the use of mental imagery or visualization in the classroom and in daily life experiences. Discipline-based art education is a term more currently associated with visual art, but the concepts of DBAE are applicable to all of the arts and other curricula areas.

Discipline Based Art Education

Eisner, Greer and Levano-Kerr emphasize that discipline-based art education should consist of four disciplines: aesthetics, art criticism, art history, and art production.

Dr. Elliot W. Eisners' January, 1988, lecture in Pinehurst, N.C., inspired this author's research in discipline-based art education. The following synopsis is a series of notes taken from his lecture and the Getty report based on his book entitled The Role of Discipline Based Art Education in America's Schools.

People make judgments constantly concerning value, quantity, and quality of everyday decisions. Through the arts, as in other disciplines, children learn to rely on their ability of making good judgments. Art education enhances this ability of judgment by teaching students more than one way to arrive at a conclusion. Conclusions can be derived by encouraging production of art, and appreciation of art works, while understanding cultures, and how to make judgments aesthetically of their surroundings.

Producing works of art helps to develop motor skills and to develop problem solving techniques. Through appreciation students learn of other artists and are influenced visually by other cultures. An effective program in art requires sequential courses that becomes more difficult and more involved as the student develops. Learning to control and manipulate art mediums successfully comes from continuity and experience in all areas of art. Once control of a medium is mastered, one becomes less conscious of the fundamentals and more concerned with expression through the medium. Eisner asserts, "Before

mastery the medium is merely a material. A medium should mediate one's ideas, feelings and images" (Eisner Lecture). In this statement Eisner is indicating that different mediums should be used as vehicles for individuals' expressions. Eisner reminds us that "complex skills require time to develop and only through continuity will this become enhanced" (Eisner Lecture).

Involving all subjects with teaching art and meeting the course state guideline requirements can be accomplished if there is consistency and interaction among teachers, administrators, and students. It is advantageous to allow the students to express their knowledge of subject matter through their own individual areas of expertise and levels. Eisner's example is that a teacher can ask a student to tell about a galloping horse in words (writing in English or history), in a picture (drawing in art), and in movement (in dance). Problems in evaluation of this type of curriculum are a major concern to parents and administrators. "Teachers can make assessments from the apparent dedication of interest by students arriving early and staying late in order to obtain more knowledge from certain subjects. The way students talk and/or interact with their body language is a good way of making judgments concerning grading" (Eisner Lecture). Teachers can recognize a student's feelings and knowledge of a subject through conversation;

therefore, expounding on subjects through dialogue may assist teachers in their grading.

We must realize as educators that our goal is to develop an educated person. In trying to accomplish this phenomenal feat, we have to retain the child's interest and respond to his/her natural human development. Perceiving an individual's innate ability and cognitive learning experiences requires more sensitivity and patience from the teacher in order to produce someone who incorporates his own feelings and the feelings of others with knowledge.

Eisner states that art education enhances student's judgment abilities. Evaluation can come from observation of the classroom activities and the interaction toward other students (Eisner Lecture). Including art in other curricula will allow individual student success through different media.

W. Dwaine Greer supports implementing art education into the curriculum if it is effective. The implementation of art education into the curriculum requires producing "educated adults who are knowledgeable about art and its production" (212). The knowledge that Greer refers to is that of the four disciplines that should be included in the training of art educators. The definition which Dwaine Greer offers is similar to Elliot Eisner's concept of DBAE. Greer states that:

The focus of discipline-based art instruction is an art within general education and within the context of

aesthetic education. Four parent disciplines--aesthetics, studio art, art history and art criticism--are taught by means of a formal, continuous, sequential, written curriculum across grade levels in the same way as other academic subjects. (212)

Training teachers to carry out the four disciplines in DBAE is imperative to the success of unifying the program as introduced by the instructor. If these disciplines are applied in the correct sequence to the curriculum, the students will undoubtedly reap benefits from the extensive exposure. Greer's idea of teaching perspective through another culture is a prime example of an equitable learning experience for students. He comments that:

The way perspective has been used in the past and the way it functions in the art of other cultures, the art of Japan for example, constitutes another subset of concepts. Knowledge of both is required for a sophisticated understanding of the use of the three dimensional illusion. The development of the ability to understand, create, and explain this illusion and its emergence in art identifies the kind of sequences that form a part of a discipline-based curriculum. (215)

The integration of other curricula helps introduce a broad knowledge in areas of enrichment through experiencing facts of concepts, customs, and events about different cultures. Greer is in agreement, stating that "science education encompasses those several disciplines that systemize our knowledge about facts in the physical world, so the arts, when taught as interconnected disciplines, can bring about a coherent understanding of the diverse expressive forms that delineate imagination" (218). Greer reiterates the importance of the four disciplines of DBAE

being a necessary concept toward inclusion of art in other curricula.

Due to the national push for more quality in education, the J. Paul Getty Trust has provided funds to study the improvement of the art curriculum. This study of discipline-based art education by Greer, Eisner and others revolves around a current reconstruction of the art curriculum.

Jessie Lovano-Kerr strengthens the argument for sequencing art programs and including the vital disciplines of studio art, art history, art criticism, and aesthetics. These should be emphasized to all art teachers. Each of these areas needs to be integrated into art programs and fused with the teacher's skills. Lovano-Kerr states that "there must be a better balance between the disciplines of studio art, art history, art criticism, and aesthetics which may improve instruction in the schools somewhat, but will not accomplish the major goals of discipline-based art education" (221). The need for sequencing and constructing a proper curriculum for the disciplines of art is essential. Communication among art historians, studio artists, or art educators is the basis of a successful art program.

Allowing the creativity and individual expression associated with art and introducing it into various curricula can be a very stimulating experience. Teachers and students can begin to interact and grow from each

others' strengths. Retention of facts and data will be much easier for some students due to associative recall of hands-on activities requiring more attention span. These types of projects will also encourage and enhance visualization of mental images.

Visualization and Mental Imagery

The introduction of hands-on activities to associate important facts in different curricula can be intensified by encouraging the use of mental images and learning and practicing visualization techniques. Imagery usage is also very important to the artist and the art teacher. Without the ability to visualize, the work of the amateur and professional artist is hindered.

Mental visualization and imagery is common in almost everyone's daily experiences, but few people are aware of or concerned with the impact of these envisioned objects in their thinking. Art experience from childhood through adulthood will enhance visualized images along with his perceived clarity and dimensional qualities.

Current research in mental imagery and visualization helps support the idea that retention and recall are intensified during this innate process. The work of Kosslyn, Weaver, Cotrell, Grabow, Miccinati, Cramer, and

Larry and Nancy Smith offers insights in the research on visualization.

Stephen M. Kosslyn states that mental imagery has its similarities to loading a computer. The amount and quality of information input produces a much more vivid image in the mind. Kosslyn also states that "almost from the beginning of scientific interest in mental imagery, it has been identified with perception. Having a visual image, for example, was likened to 'seeing' an object in the absence of the appropriate visual input" (24).

The misconception of images being pictures is clarified by Kosslyn when he explains that "images people experience appear to share many of the properties of pictures, although there is no obvious reason why they should. After all images are not actual pictures, which have real shapes, locations and so on" (24). However, people's images do not have to be extremely vivid in order to convince the mind of their validity. The key to mental imagery is information for recall purposes. "If images function at all like pictures or models, they must depict information" (Kosslyn 25).

Kosslyn states that the brain's visualization function is vital because:

Images depict information, occur in a mental medium that acts like a screen, and can be manipulated much like the objects they represent. As you can imagine, some of these properties make imagery very useful in mastering both physical tasks and in reasoning. Why? Because one's use of imagery involves substituting it

for actual practice in performing some activity. Recall that objects in images can act as substitutes for actual objects, being rotated or bent, much as objects themselves can be. Recall further that images can stand in for perceptual stimulation, producing effects like those evoked when subjects actually view a stimulus. As it turns out, imagining yourself doing something can also substitute to some extent, for the actual activity. (27)

The information received in the brain has a definite effect on the information remembered; thus, such information enhances the cognitive learning process in the human mind.

Richard L. Weaver and Howard Cotrell compiled information on imaging techniques in their combined research effort. Use of imaging in teaching techniques reveals many personal traits and ways of thinking. Most teachers use visual aids such as illustrations, films, or other picture sources, but few actually use exploration of images of an individual's mental visualization.

A most unique characteristic of teaching through using visualization methods is that each teacher will implement his own cognitive techniques, therefore, engaging students individually. Emphasis is placed on images that are "concrete, vivid and well defined" (Weaver and Cotrell 269). The validity of the imagery process becomes evident when students are encouraged to discuss their inner visions. The following are examples of imaging: A student in the Weaver/Cotrell study, Angela K. Stapleton, explains her example of imagery:

..."My eyes are closed, I'm standing very tall and relaxed. It's raining, slight and misty, soft falling on my face. Little tiny kisses of minute raindrops

touch my face, neck, eyelids. The air is warm and it's very quiet. All that's there is myself and the love affair the rain and I have. Each separate drop places its last touch of existence upon my face. The heavens have cried their tears upon me, and the sky and I are both cleansed and free" (Weaver and Cotrell 269).

Weaver and Cotrell relate imaging to creating a more confident self concept that aids in development of "effective interpersonal relationship" (270).

Images can neither be hurried by the teacher nor the individual and can be used in all curricula such as sociology, mathematics, history, English, and art. The entire process requires only "encouragement and dissection" (Weaver and Cotrell 270).

Students respond positively to imaging because of its individual rewards. Another student involved in the Weaver/Cotrell experiment, Brenda Krischan, comments that: "It gives more of a whole idea because it gets a concept across much better than just an explanation" (270). The events become personally realistic, therefore promoting relevance and interest.

"The most difficult initial hurdle is helping students understand that elements of imaging are just as real as current events in their environment" (Weaver and Cotrell 270). With teacher encouragement and practice, visualization allows students to feel comfortable using the visual form of learning. "It has the potential to bring more life and energy into your classroom" (Weaver and Cotrell 271). The use of visualization and the

encouragement of its use by the instructor are key ingredients to the success in many curricula.

Beverly Grabow suggests that the daydreaming or fantasizing children engage in during a normal school day can be reinforced with positive visual imagery. "Visual imagery can also be used with new concepts. Example: the word diameter. 'Draw a circle with a line cutting it in half.' Ask a child to close his eyes, and draw a circle on his imaginary chalkboard and draw a diameter through it. 'Say the word as you draw it across your circle.' Then ask the child to explain what a diameter is" (Grabow 617).

Discovery of oneself can also be introduced to students by quiet inner searches instigated by the instructor. The emergence of emotions, inhibitions, and motivations is prompted by sharing individual findings with a partner. "The use of visual imagery, visualization, and guided and unguided fantasy has potential as a teaching tool for the teacher or counselor working with learning disabled children" (Grabow 618). The inability to develop motor skills does not affect the visualization process; however, visualization does enhance the manipulative skills and recall by increasing awareness of detail.

Jeannette Miccinati supports imagery similar to Kosslyn, Weaver, Cotrell, and Grabow by recognizing that visual imagery is an asset in retention and recall of what is heard or seen. Visually, imagery is spontaneous for most

people; however, it can be developed into a natural response. Some people have the ability to picture their readings in their mind while others need to be instructed step by step because of their lack of visual imagery.

Students who can picture parts of directions or stories in their mind have more information to draw from compared to other students. "Students will have more success in the process of searching and constructing an image if paragraphs are based on their own background of experiences; familiar themes, settings, characters, and concepts" (Miccinati 142).

Imagery improves retention of what is heard and read. "As images accumulate, details are organized, information is interrelated and associations are drawn" (Miccinati 144). Retention and recall combined with a more intensified visual image helps create a personal knowledge of a subject.

According to Phebe Cramer the use of mental imagery may result in intensified accomplishments for both younger and older children. "In the past few years, it has been clearly demonstrated that the use of visual imagery can serve as a successful strategy to increase learning performance" (Cramer 164). Children can be classified as high imagers (imaging with above average amount of detail) and low imagers (imaging with less than average detail) which may explain why some do better than others in associative recall situations.

One of Cramer's purposes in this study was to show information regarding induced imagery recall. "It is expected that subjects who report actually using imagery, regardless of instructions, will show superior paired-associate learning, compared with subjects who do not report using images" (Cramer 165). Another purpose of this study was to determine whether imagery instructions are effective in inducing imagery use. Cramer reports:

The results indicate that only statistically significant instructional effects on learning occurred with fifth graders given interactive imagery instructions. As predicted, in this age group, interactive imagery instructions facilitated both single item and paired associate learning. (169)

The findings concerning recall in "the first experiment show that performance on the paired-associate task was related to the reported use of interactive imagery. In both first and fifth grades, subjects who reported using interactive imagery had significantly higher recall scores than subjects not reporting imagery" (Cramer 169). The significance of Cramer's study is:

In summary, interactive imagery instructions were shown to facilitate both paired associate recall and single item recognition learning for fifth-grade subjects. For paired associate learning, this appears to reflect the fact that most fifth graders, when instructed to use images, in fact do so. (169)

First graders reported higher recall information but did not always report using imagery.

The other experiments recorded in this study also support the use of imagery recall. However the reports indicated a lower support of evidence in first graders. "For first graders, although imagery instructions had no effect on the overall results of paired associate or single item learning, those subjects who reported using interactive imagery in the paired associate paradigm were superior to their age mates who reported no imagery" (Cramer 172).

It is evident that Cramer's findings support that imagery is associated with recall, especially with the fifth graders that were tested. Instructors who encourage students to image are increasing learning skills on an individual basis.

Larry and Nancy Smith discovered that as children grow they inherently become products of their environmental circumstances. Throughout one's life many exterior influences help determine the individuality of a person. Exposure to art mediums help perpetuate the visual knowledge of students. "The use of paper, crayons, paint, clay-- anything that gives the student an opportunity to 'do' something that shows how he relates to what he has seen or perceived, allows for direct, 'hands-on' involvement by the student" (Smith and Smith 332).

Allowing students to become familiar with different areas of art encourages constructive judgment of others art

work and "other concrete things around him" (Smith and Smith 332). Smith and Smith report that:

Since art reflects a culture, an exploration of art in other countries and other times as well as in our own cultural heritage should be put into the art curriculum, thus adding still another dimension to the environment of the student. Art is linked to other subjects in school in many ways. History, anthropology, language, science and art, separately and together, involve the student and guests of man in his environment. Art mirrors man in his environment.
(332)

Therefore, the implementation of art into other curricula should be a natural and innovative process.

Helping students to learn to use one's senses is a goal in educating students. The development of the senses coupled with positive reinforcement helps the individual develop self actuality and realization. "Being knowledgeable about oneself and the environment gives forth a self-confidence that enables the individual to express himself or herself" (Smith and Smith 335).

New and unusual responses encourage problem solving in a variety of approaches to art and materials. "Interaction among students stimulates problem solving and is sometimes helpful in gaining insight" (Smith and Smith 337). If students begin to rely on their natural instinct to visualize, their problem-solving ability increases.

The earlier statement earlier that retention and recall is intensified by the use of visualization and mental imagery is supported by current research. Weaver and Cotrell used imaging techniques to show that information

received through this method has a definite effect on information remembered because of individual rewards. Cramer asserts that information retention through imagery induced recall. Smith and Smith's research of children becoming products of their environmental influences assists in supporting that exposure to different circumstances will allow one's senses to develop with positive reinforcement.

Correlation of DBAE and Visualization

Studies by psychologists in the early 1850's show interest of what people know and how this knowledge determined their manipulative skills and problem-solving behavior. Also included in these studies was the attempt to determine environmental influences on completion of tasks and the effects of personal knowledge obtained. The study concerning introspection of cognitive thoughts was beginning to unveil. The study of motor skills in connection with environmental situations influenced the studies of the developmental stages each individual experiences. "These actions were mapped and assigned to specific regions of the brain and these 'mental operations' form the 'mainspring' of what is usually called thought" (Gardner Art 8).

It is thought that a child during the first year or two becomes aware of the world through a manipulative process of

motor skills and knowledge of objects existing in space.

Gardner comments on the stage that follows the first year:

Next the toddler goes on to develop interiorized actions or mental operations. These are actions that can potentially be performed upon the world of objects; but owing to a newly emerging capacity, these actions need only be performed cerebrally, within the head, perhaps through imagery. So, for example, to proceed from his destination to a familiar starting point, the child does not have to try out various routes: he can simply calculate that, by reversing his steps, he will return to his origin. (Gardner Frames 19)

At age seven or eight the child begins to be able to understand and reason with objects in and out of his normal environment or arrangement.

The final stage of development is during early adolescence. The ability to reason, revise and experiment is evident. Mental and physical manipulations prove that the "youth has achieved the end-state of adult human cognition" (Gardner Frames 19).

Physical involvement with the child's environment is vital to the mental growth of visualizing one's actions. At ages seven to ten the physical and mental actions are restricted to physical objects that can be maneuvered.

Howard Gardner states that the symbols or images in the mind are a vital necessity in distinguishing mental capabilities. He defines symbol as "any entity (material or abstract) that can denote or refer to any other entity" (Frames 301). He also states that "much of human representation and communication of knowledge takes place

via symbol systems--culturally contrived systems of meaning which capture important forms of information" (66).

Some philosophers defend the position that imagery is a primary source of the thought process and that symbols may be words, pictures, diagrams, numbers as well as many other forms of transmission to and from the brain.

Stephen Kosslyn's view is: "while not boldly claiming that human beings have pictures in their heads, these researchers defend the notion of a 'quasi-pictorial' form of mental representation called 'imagery.' In his view, this form of mental representation is as important for an understanding of cognition as is the more usually propositional form" (qtd. in Gardner Minds 327).

Individuals develop their visualization skills similar to normal human development. Environmental influences create the important ingredients that determine one's ability to visualize. There are as many supporters of visualization as the non-supporters according to Howard Gardner. Much research is yet to be completed on the subject how all persons visualize their actions, therefore becoming part of the cognitive evolutionary process.

Increased cognitive experiences will help develop a child's knowledge of the surrounding environment, hence enhancing his art work and ability to exemplify inner knowledge. The reason for his simple artistic representation is not due to optical or psychological

deficiencies because "the child artist expresses what he sees to the degree that he comprehends what he sees and finds it relevant to his expressive purpose" (Mendelowitz 22), thus, supporting the theory that the amount of cognitive information is a determining factor to mental visualization.

The inability to represent the mental concept is relevant to Gardner's statement in that "during the first year or two of life, the infant comes to know the world directly, through his senses and his actions" (Gardner Art 87).

Viktor Lowenfeld and others agree that there are developmental artistic stages and corresponding ages children go through as they mature. Visualization is implied in describing the developmental stages of individuals. The young artist begins with scribbling and then moves to the use of circular or oval shapes and stick people or objects. "These first scribbles have a relationship to drawing and painting as a baby's first babbling sounds have a relationship to speech" (qtd. in Mendelowitz 16). The scribbling stage takes place from two to four years of age and displays a lack of coordination. Gradually a child begins to see detail in his objects and later develops awareness of shapes, spatial design and color. This stage of development is a very important "building block" toward detail recognition of the

individual's use of visualization. At a later point in life there is a definite desire for isolation due to the child's awareness in the differences of environmental influences among his peers. However, this period of the visualization developmental process is vital to the recognition of individuality and details.

At approximately eleven or twelve years of age the child becomes more aware of his surroundings, therefore retaining many of his visual experiences which allows the child to show more perspective in his drawings. There is an awareness of visual and color concepts causing the child to be extremely critical of his accomplishments.

The final stage of children's art development occurs between the ages of fourteen and sixteen. At this time in their experiences a visual awareness and an eagerness to learn skills is evident.

A child moves through these many stages because of his relationships with people and his environment. "The material which the mind organizes comes from the element of experience. Art work is a perfect record of experience as the mind organized it and as it was incorporated into the individual's total personality" (Rees 55). Children create images because of their need for expression. However, much can be determined through observation of their art. In their drawings many feelings, knowledge and intellectual stages of development may be observed.

One develops an awareness of color, form and space in perceptual growth. In the early stages, color identification and retention takes precedence. Spatial qualities are dependent upon the forever changing relationships and environment. In this stage one's background is very important because "before man can know what the eye sees, the mind must organize the sense impressions and link them with past experience" (Rees 54).

Aesthetic growth is a very important stage of the developmental process of visualization and also controlled by external forces. Lowenfeld states that "...aesthetics is also intimately tied up with personality" (Lowenfeld Creative 40). During this time an appreciation and a mental record of individual differences influence mental visualization.

M.C. Richards' book Centering attempts to expose one's inner-self which is discovered through cognitive development and outwardly expressed through Richard's "centering" technique. Richards gives many analogies between educating young and old individuals through visualization and discovering the inner self. Richards states that in teaching certain subjects, such as art and poetry, it should be a necessity.

The idea of teaching children other subjects and about life through art and poetry can be a very effective and positive approach. With a knowledgeable instructor, the

trials of every day existence can be exhibited by using art as a vehicle to interest students in many school-related areas.

Transformation is the keyword, for Richards, which suggests that young people should be allowed to experience nature and feelings as a unit which will expand their visual experience. Learning to express an inner self is similar to getting to know a new person. Being able to enjoy everyday happenings and to have faith in one's own knowledge creates a tremendous amount of self-discipline and instills confidence in the individual. This knowledge of the inner self is a form of visualization in that one has to have a vision or goal in order to complete the transformation process.

The relevance of the stages of working on the potter's wheel compared to the levels of visual development are similar. The understanding of these developmental processes are beneficial in the molding stage of each student in relation to cognitive growth. Working with three dimensional mediums enhances mental imagery through association and manipulative motor skills. The centering process is eventually where the teacher should be trying to direct the student through his alignment of priorities and adjusting to new pressures from his peers. The visual knowledge begins to develop through ones' inner-self concepts.

The education of young children should be approached in this manner of shaping. However, the environmental influences and solidity of one's personality determines the amount of applied pressure with which to hold an individual "on center."

Richards states that if children are approached through building confidence using the centering procedure, each one can begin at his own level and be guided into different avenues and subject areas. Art is a more universal subject in that there are fewer absolutes and children are more comfortable expressing themselves visually which also creates interest and may intensify involuntary recall.

Summary

Through the emphasis of discipline-based art education in the public school curricula, many students' individual needs will be satisfied. In addition, art teachers will be more informed and more attuned to the entire curricula of the school. The implementation of art into other subjects will also increase interest and enrollment in these selected classes.

Visualization, taught in the normal classroom setting, is a tremendous asset for retention and recall purposes. Each individuals' unique learning ability can be intensified by an instructor's encouragement of the use of mental

imagery. Through practice and acknowledgement of using visualization, by the teacher, students will begin to realize the personal benefits.

With proper guidance and encouragement, the amount of learning and retention is insurmountable, therefore, intensifying the desire to become a more knowledgeable person.

Eisner, Greer and Levano-Kerr agree that the four disciplines of DBAE should be emphasized and become part of the curriculum. It has been stated that Greer and Eisner support teaching art through other subjects and other subjects through art. However, sequencing of the art programs is a key factor in the validity and usage of this theory.

Miccinati, Kosslyn, Weaver, Cotrell, and Grabow affirm that teaching through mental visualization techniques can have many benefits for students and teachers. Further, Gardner, Lowenfeld and Richards' theories show us a definite correlation to the natural visual development and the normal human influences that make us aware of our ability to visualize.

In chapter three the author's theory of the relationship of visualization to creativity, intelligence, and cognition will be reviewed. The implementation of DBAE and visualization into the curriculum and a brief framework will also be discussed.

Chapter III

The Correlation of Visualization, Imagery,
Creativity, Intelligence and Cognition
and Their Relevance in a Framework
in Relation to Social Studies

Visualization and Its Relationship to Creativity,
Intelligence and Cognition

Creativity and intelligence are very often associated with visualization. It has been this author's observation that the creative child is basically self-controlled, self-motivated and above all, exploratory in his art work. His motor skills show an above average amount of dexterity and manipulative qualities aided by an awareness of visual recall and development.

There are many widely agreed upon factors in artistic aptitude. For example, "The type of person likely to attain success in art is one who possesses several interlinked traits. Three of these, manual skills, volitional perservation (persistent in making one's own decisions) and aesthetic intelligence are probably involved with stock heredity" (Meier 4).

Aesthetic intelligence coupled with a determination to pursue and accomplish problems, allows the artist to profit from past experiences. This type of intellectual individual is superior in that the degree of thought level usually arrives at arranging and coordinating subject matter and basic elements of design sooner than a person of less intelligence. This is true because a person at a higher intellectual level can recall details and is more aware of his surroundings. "Examination of drawings which make unusually high scores on tests leads to the opinion that powers of analytic observation, coupled with a good memory for details, are potent factors in producing high scores" on art tests (Goodenough Measurement 53).

The relativity of all factors concerning artistically minded people becomes evident through the mental visualization and the creative unconscious state of mind. Seeing in picture form is common among all types of people. It is not stated that one must be artistically inclined to visualize objects mentally. "Thinking visually is not the exclusive reserve of artists" (McKim 7). Nevertheless, this author feels that a certain amount of training is necessary to enable a person to see three dimensionally. Tests are given in order to determine how one manipulates objects mentally, and these tests are scored and analyzed. Robert McKim's book titled Thinking Visually is an excellent example of these tests. In order to do well this author

feels that past experience and association with three dimensional objects is necessary. Creative, artistically-inclined people have a tendency to do well on these visual tests. The awareness of one's inner abilities in these areas is beneficial to an individual's visualization competence.

Imagination allows one to insert and create positive thoughts while visualizing specific items. "The imagination is the power to produce images, and the possibility of image-forming is, in an underlying way, a part of perception" (Warnock 140).

It is a fact that the brain cannot distinguish between an actual event and visual happening. Therefore, if one perceives an event step-by-step, it is possible for the mind to repeat a coordinated motion through motor skills. The creative process is not a conscious effort and, therefore, cannot be switched on and off through concentration.

From a theoretical standpoint, analysts are concerned with the psycho-analytic theory. This theory deals primarily with the unconscious part of the mind where experiences are stored and called upon only at certain times. This part of the brain has the responsibility of dreaming, imagining, remembering, and guessing. These unconscious ideas influence everyone, especially the child artist. This part of the child's mind has to do with perception, representation, inheritance, remembered

experience, and his present awareness or perception. As in the adult artist, athlete, and others, the hand is guided by memories and impulses. This allows responsiveness to the external world while suppressing internal forces.

Commenting on these particular stages of stored impulses, Harold Rugg states:

The stage between conscious alert awareness which Dewey wrote about for fifty years, and the deep nonconscious in which Freud was intensely absorbed has not been investigated to a large extent. James was aware of it calling it 'the fringe' the 'walking trance'. Others spotted it long ago. Golton named it 'antechamber'; Vorendonck 'fore conscious', Schnelling 'preconscious'; Freud 'subconscious' more recently Kubic 'preconscious'; and Tauber and Green 'prelogical'. This is the Taoists state of letting things happen.
(39)

The most recent approach to achieving this awareness of the "inner self" is discussed in the many books written by W. Timothy Gallwey. He demonstrates the importance of visual imagery in every task we attempt, including daily existence.

Through works of art, this author has achieved this semi-hypnotic state of awareness. During this happening, creativity does not depreciate, it is tremendously enhanced. Neither time nor amount of production seems to register during this altered mental state. Research supports that mental practice and the innate ability to organize concepts with mental pictures does improve physical participation in events.

The Relationship of Imagery, Visualization and Cognition

Functions of the mind that are closely related are imagery, visualization, and cognition. Imagery is defined as mental images: the products of imagination (forming a mental image of something not present to the senses or never before wholly perceived in reality). Cognition is defined as a process of knowing which includes awareness and judgment. Visualization is defined as seeing or forming a visual mental image or invisage.

Experiencing and explaining mental images is not a totally controlled response. Many people possess the innate ability to project mental images and some also have control of the quality of the picture through intense concentration. Some individuals may surpass this level with three dimensional visual experiences while others report little if any knowledge of imagery.

Stephen Kosslyn, a professor of psychology at Harvard, believes that images are not actual pictures which have real shapes (25). Results of tests show that if humans outline images, or display a few suggestive lines or dots or even a small patch of color, the brain will complete the picture. Another example that Kosslyn demonstrates is recognizing a familiar person's footsteps and visually identifying this person in one's mind (Kosslyn 25).

People differ in their quality of imagery. The ratings of the subjects studied are classified as high imagers or low imagers. These subjects were asked by Kosslyn to rate the vividness of images or the degree of their control over the transformations. The more vivid imagers remembered pictures better, read texts more slowly (presumably because they mentally illustrate while they read) and showed fewer eye movements when recalling pictures and also reported experiencing larger images (Kosslyn 25).

Association with three dimensional objects allows a more vivid image in the round. Robert McKim terms this ability to manipulate three dimensional objects as orthographic imagination (McKim 9). An example of this manipulative visualization is when someone is to load luggage into an automobile trunk. Many people will throw the containers into the trunk with no concern for their arrangement. The high imager with orthographic imagination can mentally arrange the baggage without having to move it physically (Kosslyn 23). It is possible that this mental rotation of objects comes from past experience of working with a multitude of media. This mental rehearsal is confirmed in Rees's statement that "before man can know what the eyes see, the mind must organize the sense impressions and link them with past experience" (Rees 54).

The mental image of a person's accomplishments can be as beneficial as the actual physical feat. Alan Richardson

describes a study in which subjects were asked to practice mentally a simple gymnastic exercise on the horizontal bar. Subjects were asked to "see and feel themselves" moving through the motions for a period of five minutes a day for six days. None of these people had any physical experience on the exercise bar. Following the days of mental practice, they were instructed to perform the exercises while allowing them to be scored. Richardson expected that if imagery was an effective means of practicing, then people with more vivid and controllable imagery would perform better than those with less acute imagery abilities. And, indeed that was the case (qtd. in Kosslyn 27).

The relationship of visualization and cognition is apparent through one's ability to re-create past happenings. These experiences can be recalled from actual body functions or mental imagery inspired by the individual's capacity.

Correlation of Visualization and Discipline-Based Art Education in the Curriculum

Few public school systems acknowledge the importance of teaching art to any age student even though it is a curriculum requirement in all North Carolina systems. There is little belief that art is as much a necessity as English, math, or history. Therefore, the combination of teaching art with these subjects may benefit all concerned.

Art should be considered basic in the education process especially in association with the cognitive development theory. Eisner elaborates on curriculum correlation:

This approach to curriculum is primarily concerned with the refinement of intellectual operations. It refers to curriculum content, focusing instead on the how rather than the what of education. Aiming to develop a sort of technology of the mind, it sees the central problem of curriculum as that of sharpening the intellectual processes and developing a set of cognitive skills that can be applied to learning virtually anything. (Eisner Lecture)

Most children learn to communicate through non-verbal means.

The world is becoming more visually oriented with the technological advances in television and computers.

Learning the techniques of manipulative and visual skills, which are required in art classes, increases motor skills. These skills increase confidence in problem solving while teaching visual and aesthetic communication with other students. Another benefit is the knowledge that "depends upon experience, either the kind of experience that emanates from the sentient beings contact with the qualities of the environment or from the experiences born of the imagination" (Eisner Ed. Imagination 37).

The encouragement of freedom to pursue the means to an end will intensify one's creativity and imagination. This combination of learned responses will flow continuously into other subjects and different areas of one's life. "If, earlier on, a youngster has found in his drawings and paintings a way of dealing with the simpler world of

childhood, it is certain that he will need them still more in the difficult world of adolescence" (Portchmouth 7). Exposure to a wide variety of media will educate the student to the positives and negatives of a particular media and improve the manipulative ability and dexterity of the hand-eye coordination. Everyone should be allowed the freedom to help enlighten students that education need not be boring and totally regimented. This type of privilege will help contribute to an appreciation of art and make the student aware that "skills in art are not something apart from his other learning and experience: they only make sense together" (Portchmouth 8).

The scope of the informal art curriculum should not be too narrow nor too varied. If the exposure to different areas is a very limited amount, there will be much dissatisfaction among students and lack of interest for the instructor. If the range is extremely wide, the overwhelming variety of areas may disenchant the student and cause the instructor to be overly occupied. "A student who has confidence in a few media will be likely to use them more expressively than if he were experimenting too widely. If he is unexpressive in a narrow range, or is just repetitive, he should be encouraged to venture beyond" (Portchmouth 85). Certain areas of concentration will benefit the student and instructor with emphasis placed on the teacher's strong areas of development. The five media

areas suggested in the North Carolina State Department of Public Instruction curriculum guidelines are drawing, painting, printmaking, sculpture, and fine crafts. Skills in these media allow for a broad exposure to many areas for students to pursue. In order to continue the DBAE concept the instructor should expose the students to the four disciplines of art which attend to the studio, aesthetics, criticism, and history of these five media.

The sequence of the art courses should be for first-year students to become exposed to the basic fundamentals of art. Line, shape, texture, value, color, and perspective are generally necessary for the beginner. An introduction of paper stock, a variety of mediums, and techniques should be the ultimate goal in a first-year course. Included in the first year of art the instructor should create an interest in the four disciplines of art; aesthetics, criticism, art history, and art production. A positive approach by the instructor toward familiarity with different art mediums and reinforcement of visualization techniques encourages involuntary cognitive development.

The second-year course in art should consist of refining techniques and advancement into more advanced applications of the five media and the learned processes of the previous year. The variety of projects in this course will help develop motor skills and build confidence for those who would like to pursue the third year of art.

During this second year the job market opportunities should be made acquainted to the student. A more concentrated effort should be made to emphasize the four disciplines of art education.

The third and fourth years in art must allow the now serious artist to submerge himself/herself in specific areas of media concentration. The student should be given the opportunity to experiment with techniques while working toward professional, exhibitable quality works of art.

The correlation of art and other curricula in the public schools is a vital necessity. Combining art with another subject not only enhances a student's awareness but also allows adaptation to other areas and subjects. Such experiences may permit the unsuccessful student to understand the relationships of important facts to the sometimes other components of the curriculum. A properly sequenced art program can assist in the development of students through Cramer's associative recall theory and improved motor skills. The interest of students will be increased by hands-on experiences allowing student energy and concentration to become visually expressed.

Correlation of Art and a Social Studies
Curriculum Using Visualization and DBAE

Using visualization and art mediums to teach other subjects can be an enjoyable and creative experience for all concerned. It allows teachers to be more imaginative when verbalizing facts. Also this method of conveying material promotes individualism and encouragement. Rush states:

Discipline-based art education teaches children to understand a language of visual imagery that is common to many styles of adult art made in a variety of media. Learning to read artistic images, like learning to read stories, expands even young children's expressive options when they explore art materials, which (with appropriate instruction) is analogous to learning to write. (206)

The mental process of transforming students' thoughts in certain times or a sequence of events allow for a greater degree of attention and retention. In the report by Weaver and Cotrell they state that:

The unit on imagery simply provides a base. Since it is a highly personal process, we are able to relate it throughout the rest of the term. For example, we can say- with some degree of effectiveness- 'Visualize the following situation along with me...', or 'Picture you and your favorite relationship partner doing this...', or 'Construct an image for us right now.... Students not only find the basis for doing this real and powerful, but they are able to construct for themselves images that make the information of the classroom vital and important. (269)

A person can remember better if they live an event. Art projects can help in association of events by visually creating a happening thus aiding in retention and recall. It has been documented by Gallwey and others that the brain

cannot distinguish from an actual happening of an event or a performed motion from a mental creation of the process.

Therefore, imagine combining the two ideas of Eisner's DBAE and visualization in a classroom environment. Such as the following scenario:

An English instructor could ask students to visualize a literary scene described with few adjectives and then compare it with a scene replete with adjectives and therefore easier to image. After providing students with a formula in algebra, a math teacher could ask students to image the application: 'Now, here is a situation where this formula could be applied. Pretend you are....' (Weaver and Cotrell 270)

This type of visual experience can then be enriched through practical application to an art medium. [For example the construction of an animal from an imagined situation.] The careful calculations of size will help students retain mathematical formulas through associative recall. Another example of this type of instruction can be in history where "instructors can ask students to pretend they are a part of an historical event. After a concrete, vivid present action of the event is related to them, instructors can ask students for reactions, feelings or decisions: 'What would you have done in this situation?'" (Weaver and Cotrell 269). The following demonstrates several ideas for uses of visualization and DBAE in the history and social studies curriculum.

Social studies and art in the public schools can be advantageous in bridging the interest gap. Through a correlation of art and social studies, a meaningful and

enlightening experience is inevitable. Most all students enjoy some form of art expression if they are given positive reinforcement and made to feel good about their accomplishments. Correlating art into other subjects is a relatively easy process. However it may be necessary for the art instructor and the other instructor to collaborate concerning techniques and supplies. It is believed that all teachers concerned will benefit from this interaction with their peers.

In grades nine through twelve the social studies program of North Carolina includes courses in government, economics, world studies, United States history, and elective courses from social sciences and history.

When attempting to combine these curricula, a brief explanation of the elements of design such as, line, shape, form, value, and color, will help students with the basic fundamentals of art. Examples of past and present artists' works can be explored, in selected media, along with the artists' backgrounds. The elements of art should be pointed out and properly critiqued in the historical masterpieces to provide students with an awareness of good art which is in conjunction with Eisner's DBAE theory.

The framework which follows demonstrates how social studies and art can be correlated in the public school curriculum. Included in this framework are concepts which

may be used in both curricula with examples of DBAE and visualization.

Curriculum Framework for Integrating Art and Social Studies

Listed below are major components of a curriculum framework:

First, identification of the theories which are basic to the framework; associative recall, visualization, mental imagery, and discipline-based art education.

Second, identification of the concepts from the art curriculum and the social studies curriculum which are appropriate to both curricula.

Third, development of a statement using one or more of the theories and concepts to help teachers organize the subject matter.

Finally, choosing content samples from the art and social studies curriculum to provide for application of the framework.

Examples of the Framework Using Art and Social Studies

CONCEPTS: Visualization, associative recall

ORGANIZING IDEA: The encouragement and use of visualization will help in retention of facts in social studies and enhance creative ability in art.

CONTENT SAMPLE: Reading maps and globes and the study of Italy using mental imagery: For example, while studying Italy, the teacher can incorporate Leonardo da Vinci's use of graphs and enlarging drawings in conjunction with his inventions. Further, while it is impractical to take a trip to this specific location, the instructor should set the proper mood by displaying photographs and/or music of Italy. At this point, emphasis of one of the ninth grade social studies competencies of learning maps and globes may be taught. The teacher should use Kosslyn's mental imagery techniques thus encouraging students to visualize visiting Italy. An exercise of this nature will enhance the students' knowledge of da Vinci and Italy through Mincinnati's associative recall theory and development of their own artistic creations.

A simple project is to use photographs of Italy and some of da Vinci's works to create a collage. Next, select a desirable three-inch by four-inch section and draw one inch squares in both directions covering the collage. This

graph of the collage should be enlarged into a pencil drawing or painting on a twelve-inch by sixteen-inch piece of paper. Here again, visualization of the finished product and Kosslyn's mental practice theory should be stressed in conjunction with the historical importance of the country and artist.

CONCEPTS: Chinese culture and art forms, printmaking

ORGANIZING IDEA: The visualization process can be used in imagining a different way of life and exemplifying another heritage through art.

CONTENT SAMPLE: Cultural differences: A certain amount of visualization relating to the Weaver/Cotrell theory is necessary for a student to imagine a pair of drapes or a set of sheets with his or her own original design coordinating with the decor at home. An emphasis on textiles is appropriate for studying world history, geography and world culture in this exercise. Students can be instructed in the woodcut techniques which imitate the Chinese artisans. However, styrofoam meat trays are an inexpensive material with which to teach etching and printing. First etch in the styrofoam with a pencil or other sharp objects (remembering that the print will be reversed). Ink the print with water-based ink or tempera paint and print the image on paper or cloth. Another technique in graphic design is the vegetable or found object prints. Cut a potato, for example, in half. Next, etch or carve a desired design and then ink and print as before. This method is perfect for displaying repetitive shapes on large areas such as drapes or wall hangings.

CONCEPTS: Cultural differences and belief system, art forms

ORGANIZING IDEA: The use of mental imagery can be substituted for actual practice in performing certain activities. Images may depict cultural information and cultural differences which can be manipulated much like the objects they represent.

CONTENT SAMPLE: Africa can be discussed more creatively if the styles of ceremonial masks are researched. This pertains to Eisner's theory of DBAE being included in other curricula. Encourage the students to visualize the traditional tribal dances combined with music or background sounds of Africa. Some visual aids will help intensify the mood. Papier-mache masks can be easily made and appropriate colors should be applied. In order to begin this exercise it will be necessary to blow up balloons and cover them with wall paper paste soaked newspaper strips. When the entire balloon is covered approximately 1/2 of an inch thick of papier-mache, allow them to dry. When completely dry, cut the balloon in half and begin shaping the eyes and noses etc. by building up these areas with papier-mache. Color may be applied with any type of paint. This could lead to discussions and reports of different cultures and habitats. Learning to make paints from berries, plants, and dirt is another approach to African studies. Ceremonial dances with

the completed masks or examples of painted faces also incorporates Eisner's ideas.

CONCEPTS: Mexican influence in United States culture, three dimensional medium, pottery

ORGANIZING IDEA: While studying the techniques of pottery making, students can become knowledgeable of the influences of Mexico on United States culture.

CONTENT SAMPLE: The study of the art forms of Mexico may immediately cause one to visualize the beautiful wall hangings and pottery. The historical emphasis of important developments associated with Mexican-United States relations is a good introduction to Mexico's cultural influence. The use of the different shapes of pots can be discussed as well as the meanings of the inscriptions and designs on the exterior of the ceramic creations. A lecture of the history and other important facts should be interjected along with the proper techniques in clay and pottery making. Coiling, slab, draped clay and wheel thrown pottery should be emphasized to show the progression influences of the production of pottery in both countries. M.C. Richard's theory of reaching one's inner self through the visualization of the finished product will assist the students in focusing themselves throughout the entire project. The completion process of drying, firing and glazing also needs to be explained. This process may include the development of outdoor wood burning kilns to

indoor gas and electric kilns thus showing industrial influences among the countries.

CONCEPTS: Change, scientific and technological advancements; traditional designs

ORGANIZING IDEA: Changes in manufacturing clothes has manipulated traditional colors and designs produced and worn in other countries.

CONTENT SAMPLE: Batiks, tie dying and rug hooking are a very interesting way to introduce India and the country's heritage and to teach the concepts of change. Batiks can be inexpensively created by using bed sheets, an all purpose dye and paraffin wax. By heating the wax and drawing on the sheet with the melted wax, a design can be made. Next dip the sheet into the dye and allow the sheet to dry thoroughly. When dry, the wax may be removed by ironing the batik using newspaper or paper bags to absorb the melted wax (the newspaper should be placed between the iron and the batik). Other areas can be blocked out with wax and different colors applied in the same manner. It is advisable to begin with the lightest colors and proceed to the darkest color desired.

The tie-dying process may begin with a white T-shirt tied with rubber bands or string in different areas of the shirt. The shirt should be dipped into an all purpose dye and allowed to dry. After drying the ties can be removed.

Rug hooking techniques can be created by drawing a pattern on burlap. Using a rug hooking needle, rug yarn is pushed through and looped in accordance to the desired design and colors.

Encouraging students to wear their creations around the school, such as T-shirts and skirts, will also help build interest by giving students opportunities to share their new knowledge with classmates.

In the curriculum samples presented students were taken from flat two dimensional works to a relief form of three dimensional masks and to the completion of a three dimensional project. The integration of social studies and art is very feasible because cultures have always sought to express themselves through art. Many students are under the impression that social studies is memorizing and repeating facts and dates, therefore, possibly creating a feeling of apathy toward the importance of the subject matter. Information is always available in a book and the necessity of memorization may not be important. An imaginative teacher can emphasize the use of visualization and incorporate the four disciplines of art successfully. This procedure of instruction will help intensify the learning ability of students because they have an individual, ulterior motive in obtaining the specified knowledge. This unique environment of art incorporated with other subjects requires minimal expense and creates maximum rewards. Creativity and intelligence are enhanced through the use of mental visualization according to Cramer's associative recall theory of remembering details. Cognitive experiences have a definite relationship to the quality of images perceived in the mind and to the amount of recalled information. The integration of art into other curricula can be a simple and rewarding experience for both teachers and students.

Chapter IV

Summary, Conclusions, and Recommendations

Summary

The analysis of discipline-based art education theory with the possibility of combining visualization with Eisner's DBAE theory and Kosslyn's cognitive experiences theory and implementing these into different areas of the curriculum was the focus of this study. The originality of the finished art project of each student and how he solves problems can be an exciting endeavor for all concerned.

These theories allow the student to understand that there is value in his personal experiences and knowledge. Thus, the student may be more likely to participate in class projects or discussions if he or she can see success in other outlets of his or her expression. The innovative teacher can find many new ways to introduce important material, therefore enhancing recall, retention, and interest.

Combining theories and assuring the student that learning through these means is a valid and acceptable manner with which to retain and exhibit information, will encourage student participation in other curricula.

Conclusions

Art is a discipline and should become of equal concern to all educators. The four areas mentioned--aesthetics, criticism, history, and production--are basically a part of all other curricula; therefore, art should not be considered less important. Using the different mediums and projects as a vehicle for student success will prove beneficial to students and teachers.

Communication using mental visualization is the underlying point of interest throughout this entire dissertation. Finding a means to communicate with students can be a simple process if the instructor is innovative and receptive to extraordinarily interesting classroom format.

This author thinks that this type of teaching-learning experience will not only invigorate creativity but will rejuvenate the desire to acquire relative information in various subjects. Teacher interest encourages student interest and both are a vital necessity to quality education.

The tremendous interest generated by Elliot Eisner, Dwaine Greer, Howard Gardner, M. C. Richards, and Timothy Gallwey contributed to this author's understanding and development of this research study. It was the process of searching for related material and supporting comments that

gave this theory significance. It has enriched this author's feelings that most students can be responsive to subjects through placing them in situations, thus allowing their expression in different mediums to become the final analysis that we educators must make about students.

Recommendations

There is a need for a more correlated learning process in educating our young people. The cognitive experiences learned through each discipline are valid resources that need to be used more and investigated by our instructors.

Introducing a form of DBAE and visualization to the subject matter will encourage many students positively. By combining these two theories of DBAE and visualization a more knowledgeable student will understand his own culture thus creating interest in other cultures. This theory gives each person a different way of looking at the learning process.

The study should encourage further research through application in the daily classroom situation. This author has experimented with all of these techniques and uses them daily in his teaching assignments affirming that more student participation is generated. The validity will be enhanced through others taking these theories and applying them consistently.

The instructor can begin teaching through Eisner's technique of DBAE and visualization and helping the students understand the proper use of each. This allows the students to become aware that this is a permissible process (as in Cramer's theory) in which to recall subject matter. The next step is to use available resources (such as an art teacher and a social studies teacher) and implement an art project periodically into the social studies curriculum by emphasizing aesthetics, criticism, history, and production from art to extend and enliven the learning experiences for students.

Further research must be conducted to validate the benefits of this more fluid type of curriculum. This format allows the majority of students success by encouraging each individual to explore other areas.

Epilogue

Through a personal inner search, this author has become more aware of priorities in the general education of our students. Educating, using art as a vehicle enhanced with visualization, is effective. The initial thought is not memorizing the correct response, but allowing the discovery of oneself through various means; such as, gaining knowledge of others and experiencing how many peoples lives intersect. Effective thinking and problem solving are

lifelong educational assets and goals. Consideration and valuing of each other's worth is a tremendous achievement a teacher can persuade students to practice. In one's life it is important to realize that it is not how many right or wrong answers one remembers, but how one proceeds to reaching the conclusion.

Establishing a good rapport with faculty members and the student body is essential for the success of this plan. Faculty personnel must believe this idea offers benefits, excitement, and cognitive rewards. The art instructor can promote the methodology through workshops and one-on-one conversations. The next step will be to help students understand the validity of such projects and how to use this untapped resource. By leading students into this type of experience gradually, they will begin to use consciously the techniques of visualizing more regularly. As manipulative skills are mastered, the visual experiences may begin to correspond with greater accuracy to eye-hand coordination to produce works which match to a greater degree the maker's inner vision. The cognitive skills of individuals vary. Originality and quality to the learning process of students as evidenced in the work may vary. Once a student learns to recall past happenings, he becomes more comfortable with his mental imagery, thus enhancing his thinking ability. Anticipation of detail begins to unfold an uncanny recollection of reality. As skills develop, so does

learning and retention, and the creative sequence of transformation from mind to hand is displayed.

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