Development of a Studio Art Curriculum for the Concentration Section of the Advanced Placement Drawing Portfolio

Bonnie R. Lovell

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DEVELOPMENT OF A STUDIO ART CURRICULUM FOR THE
CONCENTRATION SECTION
OF THE ADVANCED PLACEMENT DRAWING PORTFOLIO
by
BONNIE R. LOVELL
Under the Direction of Dr. Paula Eubanks

ABSTRACT
This thesis presents an Advanced Placement curriculum for the concentration section of the Drawing Portfolio. It is intended as a teaching tool to encourage and develop creative strategies related to idea generation and refinement based on creative problem solving, which is essential to the development of an effective concentration. One of the most difficult problems faced by Advanced Placement Studio Art students is idea generation for the artwork related to a central topic for the concentration section of their portfolios. This curriculum introduces lessons based on artist research, brainstorming, synectics, and SCAMPER techniques designed to foster creative idea generation for artwork development. It also gives students a tool with which to analyze the ideas generated based on specific criteria necessary to the concentration. This curriculum specifically encourages the creative process in students and provides teachers with a foundation with which to begin a unique and highly personal journey by the individual student.

INDEX WORDS: Creativity, Creative process, Creative problem solving, Idea generation, Advanced Placement Studio Art, Concentration section, Art education
DEVELOPMENT OF A STUDIO ART CURRICULUM FOR THE
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OF THE ADVANCED PLACEMENT DRAWING PORTFOLIO

by

BONNIE R. LOVELL

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of
Master of Art Education
in the College of Arts and Sciences
Georgia State University

2006
DEVELOPMENT OF A STUDIO ART CURRICULUM FOR THE
CONCENTRATION SECTION
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BONNIE R. LOVELL

Committee Chair: Dr. Paula Eubanks
Committee: Dr. Melody Milbrandt
Teresa Bramlette Reeves

Electronic Version Approved:

Office of Graduate Studies
College of Arts and Sciences
Georgia State University
December 2006
Acknowledgements

I would like to express my gratitude to my thesis committee for their time, support, and guidance in the development of this thesis. In particular, I would like to thank Dr. Paula Eubanks, who has provided me with encouragement and advice from my first art education course to the culmination of this graduate thesis.

I would like to thank, Jessica Booth, with whom I teach for her help and support through this journey. In addition, I would like to acknowledge all my students who inspired this exploration.

Finally, I would like to thank my husband, Richard Lovell, and my mother, Elaine Rasbury, for their tireless support and encouragement.
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Chapter 1

Introduction

The creative process as related to artistic production has been a source of interest and study for centuries, yet these questions are still asked; How does an artist get ideas? How does an artist begin to develop them into a work of art? Where do artists derive the motivation to begin and continue the creation of art? These are questions that are important to artistic development within secondary school art students. They are also questions embedded in the creative process and directly related to problem finding and problem solving (Getzels & Csikszentmihalyi, 1976; Mace, 1997).

Secondary school art students at some high schools have the opportunity to study advanced visual art training through an Advanced Placement Studio course. It is an elective course and only recommended for dedicated and well qualified students. Advanced Placement Studio art is an intense fast paced course intended for students serious in their desire to develop their skills and conceptual thinking as advanced visual art students. Many of the students have a desire to study art at the college level and wish to develop a more advanced portfolio for college admission. The courses are developed around three portfolios, Drawing, 2-Dimensional Design and 3-Dimensional. They offer students a way to research, develop, and extend their knowledge of visual arts through practical application. These courses recognize and promote advanced cognitive skills such as abstract reasoning, higher-level thinking, advanced concepts, and a rapid learning rate. The portfolios are divided into sections based on specific requirements. Each
contains a breadth and concentration section, with the Drawing and 2-Dimensional Design portfolios also requiring a quality section. The quality section contains five actual pieces of artwork with dimensions no larger than eighteen by twenty-four inches that represent examples of a student’s highest-level artwork. The quality of the student’s work is evident in the concept, composition, and technical skill. The breadth section contains twelve slides of twelve different pieces of artwork that demonstrate a student’s ability to handle a variety of concepts, subject matter, and media, in essence a broadness of experience. These are typically represented by teacher directed assignments. The concentration section contains twelve slides of artwork, some of which may be details of other pieces included within the section, demonstrating a focus in one particular area. This focus may be expressed in terms of a theme, topic, or particular method of working. Media is constrained only by the specific portfolio requirements. The concentration section represents a body of related works based on an individual's interest in a particular idea expressed visually. It focuses on a process of investigation, growth, and discovery; it requires an artistic creative process.

**Statement of the Problem**

One of the most difficult problems faced by many Advanced Placement Studio Art students is idea generation for the concentration section of their portfolios. The prospect of developing twelve pieces of artwork based on a central theme or topic can be overwhelming for some students. Students typically select a topic or theme with which they have a personal interest and are able to develop imagery for the first few pieces of art, but after that they inevitably hit a mental block. Sometimes, a student is so
intimidated by the entire process that they cannot commit to a topic, or decide after the first piece or two to change direction. As a high school art teacher, I have taught Advanced Placement Drawing and 2-Dimensional Design Portfolio for four years; during that time I have searched for ways to help my students generate ideas that could sustain imagery development through the twelve pieces of art required for the concentration section. The search is primarily rooted in problem solving. The use of problem solving to create artwork is learned and can be cultivated (Sapp, 1995).

As a teacher, my primary goal is to provide the structure, means, and environment in which students are able to explore meaningful, personal, and creative visual art experiences along with skill building. This can be a difficult goal to accomplish under the pressure of time and high expectations demanded by Advanced Placement Studio courses. My observation has been that while it is a relatively easy process to teach skills related to art production to students at this level, the difficulty has been in getting students to step “out of the box” and develop better ideas and more creative approaches to their work. By examining and understanding models of the creative process, a teacher can begin to identify the different phases, and the interactions between these and their students. The goal would not be to replicate the models but to use them to aid the student in finding his or her own individual creative approaches to idea generation and problem solving (Sapp, 1995).

**Purpose of the Study**

The school system where I teach, Fulton County in the state of Georgia, does not have a curriculum for Advanced Placement Studio Art. The curriculum is determined by
individual classroom teachers based on the requirements for each portfolio as outlined by the College Board. For teachers with little experience or who are teaching Advanced Placement Studio Art for the first time, their questions may be “Where do I begin, how can I help students think for themselves, what are the best strategies for developing creative ideas within my students?” If they are fortunate to have a mentor teacher who has taught the course successfully for some years they may have all the help they need. However, many times this resource is unavailable to them. With this thesis, I have developed a curriculum of lesson plans that addresses research and creative idea generation and the need for a development of a concentration section of the portfolio. This is the section that is typically the most difficult for students to complete and for teachers to teach. It is centered around six consecutive lesson plans intended to guide students through the idea generation and imagery development phase of the concentration section of the Advanced Placement Drawing Portfolio. It could also be adapted for use with the 2-Dimensional Design and 3-Dimensional Portfolios.

The curriculum developed is based on the examination of theory related to the artistic creative process; exploring its stages of development and utilizing three abilities; synthetic, analytic, and practical (Sternberg, 1996), to stimulate creative idea generation and overcome creative blocks. These lessons form the foundation for jumpstarting the creative process through research, idea generation, idea refinement, and imagery development leading to art production of the concentration section of the portfolio. The first of the six lessons is designed to have students explore questions regarding their own aesthetics and the creative process of modern and contemporary artists. The second
lesson asks student to incorporate an aspect of the researched artist’s work into a their
own piece of art work. The next three lessons introduce creative strategies based on
brainstorming, synectics, analogical and metaphorical thinking (Gordon, 1961) and
“SCAMPER”, an acronym representing techniques for generating or revising ideas
(Eberle, 1971). The sixth and final lesson introduces the concept of a criterion matrix
(Parnes, 1961) as a method to narrow the multiple ideas generated in the previous lessons
and form a basis for the implementation of the twelve pieces of art for the concentration.
My aim with this curriculum is to provide effective guidelines and techniques for
developing creative thought as a starting point for idea generation, development, and
evaluation within the concentration section of the portfolio that may be utilized by
Advanced Placement Studio Art instructors at any level of expertise.

Delimitations of the Study
Advanced Placement Studio Art is not a course for the general art student population or
for students lacking proficient technical skills. While these lessons may be adapted to the
Two-Dimensional Design and Three-Dimensional Portfolios, they were specifically
designed for the Drawing Portfolio. These lessons should be implemented during the
beginning of the concentration section of the portfolio, but lessons related to creative
strategies may be reviewed any time a student develops a mental or creative block.

The curriculum presented presumes a student is capable of higher-level thinking
and is not seriously compromised due to learning disabilities. It is also intended to
represent only a few of many available creative strategies but may inspire teachers to
research and develop additional or alternate strategies of their own. This thesis is a
curriculum plan and guide based on past reflections and would have benefited from more extensive testing in the classroom but scheduling issues did not permit this by the author. As such, it’s implementation and feedback from other art educators is welcome.
Chapter 2

Review of Related Literature

This review of literature focuses on the components related to the creative process within individuals and in particular how that relates to creativity within the visual arts. While some of the studies reviewed are not exclusive to the visual arts and may also apply to other disciplines; the studies by Sapp (1995) and Mace & Ward (2002) are domain specific.

Defining Creativity

As we examine what creativity is, one definition that represents a synthesis of recurring themes is that “creativity is the interplay between ability and process by which an individual or group produces an outcome or product that is both novel and useful within some social context” (Plucker, Beghetto & Dow, 2004). Ability is defined as the acquisition of skills related to a specific domain. A ten-year period of learning in a field is viewed as the typical time frame for mastery within a specific domain. Process combined with ability becomes the method by which creativity is transformed into an outcome or product. It is interesting to examine the introspective reports that some artists have left regarding their creative process. Over and over these reports cite free association, trial and error, vague hunches, analogical and metaphorical thinking, playful exploration and diverse thinking as methods that yield creative results (Simonton, 2004). These correspond with both Lowenfeld’s criteria for creative thought and Torrance’s observations on the creativity process. Creative behavior occurs in the process of becoming sensitive to or aware of problems, deficiencies, gaps in knowledge, missing
elements and disharmonies. It also occurs when artists and other creative people bring together new relationships with the available information; defining the difficulty or identifying the missing elements. Creative activities include searching for solutions, making guesses, or formulating hypotheses about the problems or deficiencies; testing, retesting them, perfecting them and finally communicating the results (Torrance, 1969). The outcome or product may take many forms. It may be a concrete product such as an artwork or it may be an invention or idea. The degree of creativity in this process will depend upon the degree of novelty and value shown in the result (Torrance, 1969).

Novelty refers to its originality and uniqueness. Both novelty and value must be viewed within the context of society and the world. The outcome or product can only be considered as new and original when compared to what already exists (Anderson & Milbrandt, 2004; Simonton, 2004).

Creative Process

While these definitions of what creativity is and is not are useful, for the purposes of this study, it is more important to examine theory related to the creative process specifically within visual artists and how that may relate to the teaching of secondary art students. In analyzing the components within the creative process of an artist, two elements are prevalent in all creative activity: problem finding and problem-solving (Getzels & Csikszentmihalyi, 1976; Mace, 1997). These elements are prevalent in all four phases of the creative process, which can be described by Wallas (1976) as: preparation, incubation, illumination and verification.
The first stage of the creative process, preparation, occurs when the artist assembles and receives new ideas and skills; there are new and constant associations that change quickly. It is during this time, that raw material is gathered and taken in (Patrick, 1937). New knowledge and skills are added to the artist’s prior knowledge base and experience. These are constantly developed and referenced as an artist makes art. They form a connection between current works of art and with past and future works (Mace & Ward, 2002).

Following preparation, or simultaneous with it, is the incubation stage. This is a period when the artist carries an idea around in his or her mind before beginning the artwork. Sometimes many ideas or problems are carried concurrently; some are left unfinished, while others are revisited (Wallas, 1976). Feelings and sometimes a partially formulated mental picture of the idea may also accompany these ideas. They also have the characteristic of reoccurring over a period of time. This phase of artwork conception is a process of identifying an idea or feeling that could be a potential artwork. The major sources from which an artist derives ideas for an artwork include: the artist’s current or ongoing art making, life experiences, and external influences (Mace & Ward, 2002). In analyzing the first two stages, we can look at the preparation stage as containing conscious work that is made more productive by its interruption during the incubation phase because it restores freshness. However, it may be more probable that the rest of incubation actually involves unconscious work, which is revealed afterwards (Wallas, 1976). During this period, the unconscious may combine ideas in new ways (Weisberg, 1993).
During the third stage, illumination, as the artist first begins the artwork, he or she is generally in an emotional state. Sometimes this is described as an instantaneous “flash” of inspiration. However, this cannot be said for all artists who may work in a more detached and objective state (Patrick, 1937). The artist selects an idea and makes a decision to continue with it. In general, artists select ideas or themes that are close to them personally or relate to their existing body of work (Mace & Ward, 2002). It is during this time that the artwork is related to a specific goal. It is a time when an artist may create sketches prior to actual production of artwork (Patrick, 1937).

The idea gained through the illumination stage must then be elaborated and revised (Patrick, 1937). In this phase, the idea is developed in a complex process of structuring, extending, and then restructuring an artwork idea. It is at this time that both the validity of the idea is tested and its exact form is developed (Wallas, 1976). This may involve a variety of decision-making, problem-solving, experimental, and new information gathering activities; taking the form of preliminary drawings to give the idea its initial structure or developed in a written or verbal format. The idea is also enriched and extended through new associations, metaphor, and analogy. Artists also report putting the concept aside until a later time when they feel they may explore it more successfully, or they may abandon the concept altogether for another idea (Mace & Ward, 2002). The fourth stage, verification, is the one in which the artwork is completed. It may also involve some sort of public appraisal.

The four phases presented above represent the creative process as first identified by Wallas (1926) and applies to the scientific and artistic creative process. However,
Mace and Ward (2002) present a model of the creative process that specifically examines the process for visual artists. There are many similarities to the Wallas model in the processes they observed, but Mace and Ward delineated the phases differently. Their four phases included: artwork conception, idea development, making the artwork, and finishing the artwork. What is particularly significant in the Mace and Ward model is the amount of creative behavior observed during the art-making phase. They observed that the “process of physically making the artwork influences the development of the concept of the work” (Mace & Ward, 2002, p. 185).

The model presented by Mace and Ward is “dynamically interactive” (p.182). During each phase, there may be overlap with either the previous or subsequent phase. It is not a concise progression of steps but a continuous progression with hesitation, stops, and restarts, searching, rethought, and starting over. It is an experimental behavior (Ecker, 1966). In interviews with artists, they describe the process as an unfolding vision (Cawelti, Rappaport & Wood, 1992); a definite sense that many things are going on at once. There may also be a change in perception (Davis, 1983) during any of these phases. A change in perception involves seeing new relationships, meanings, and perspectives within the problem, concept, or idea.

Sapp (1995) presents yet another model for artists based on creative problem-solving centered around problem-solving models created by Osborn-Parnes and Isaksen/Treffinger (1985). Sapp’s model presents five stages: associative exploration, problem parameter exploration, multiple focus exploration, primary focus exploration and refinement. In the first stage, associative exploration, the artist draws upon past
experiences for conceptual, emotional, or perceptual information. At this stage, the flow of ideas and their quantity are more important than the quality. In addition, research is gathered in connection with the exploration of ideas. This stage corresponds to the preparation phase presented by Wallas. Problem exploration, the second stage, involves delineating parameters within which the problem is explored. The parameters remain broad in order not to restrict creativity but sufficiently narrow in order to restrain overwhelming stimuli. The elements of the parameters would vary greatly depending on the artist and the artwork being considered. The third stage, multiple focus exploration, involves exploring image ideas and alternatives. There may not be a specific image at this stage but only sketches related to ideas and image possibilities. Within the primary focus exploration stage the problem parameters narrow and converge around one related group of ideas. During the last stage, refinement, the final image is completed as a work of art.

This model presents an approach that may especially helpful to art students as they struggle to develop ideas for creating their own artwork.

As art educators, some may argue that one of our responsibilities is that of developing reasoned perception within our students. As defined by Siegesmund (1998):

> Reasoned perception is the application of reason to create a meaningful and developed sense of perception. We apply criteria, we *construe* knowledge.

The role of the artist and the poet is to help us see, to take note, to notice.

(p.209)

Developing the creative process within students may help achieve this objective. The creative act of making art is not without planning, preparation, discipline, and problem-
solving. The actual work of making art is often disregarded and often perceived as some innate gift or sublime outpouring. Not all artists are necessarily creative. Skill in duplicating reality may only having meant some intrinsic spatial ability. However, skilled students can learn and cultivate the use of problem solving to create artwork (Sapp, 1995).

What these models demonstrate is that creativity takes place over time; it is not actualized in a single inspirational moment. Creative work also involves many different activities within each phase that contribute to the development of the artwork. These models also indicate that each phase is dynamically interactive. Each phase is interdependent and can revert back to any earlier developmental stage. It becomes clear that the creative process of art making is not linear and has no distinct boundaries for each phase (Mace & Ward, 2002). In identifying and examining the different phases of the creative process and interactions among them, parallels can be made between the creative actions of professional, working artists and developing artists in the secondary art room. The goal in examining these models is not to replicate them in the student, but to use them to aid the student in finding his or her own individual creative approaches to idea generation and problem-solving (Sapp, 1995). A chart comparing the stages within different creative process models is illustrated in Figure 1.

**Blocks to Creativity**

As we examine creative process and development, it is important to identify potential roadblocks to the process for the student. Students encounter obstructions to creativity both within the art room and within themselves. The obstructions located
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<td><strong>Preparation</strong>&lt;br&gt;Preliminary analysis of the problem, defining, and setting up the problem</td>
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<td><strong>Finishing the Artwork and Resolution</strong>&lt;br&gt;Work is resolved and considered viable</td>
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within individuals are found in varied fears related to social and emotional risks. Examples include the fear of making mistakes, the fear of being criticized, or the fear of being unique or individual. A student may also be unable to tolerate ambiguity or have an overwhelming desire for order. Creativity is a messy process that involves much trial and error. The student may also experience perceptual blocks, which prevent the student from clearly perceiving the problem (Adams, 1974). In looking at obstructions that may occur in the art room, Amabile lists seven “creativity killers” in *Creativity in Context* (Amabile, 1996). These include surveillance, evaluation, rewards, competition, over control, restricting choices, and pressure. If we examine these closely, we understand that it is difficult for students to be creative when someone is constantly hovering or looking over their shoulder. They need space to create. Evaluation is a double-edged sword. Most art educators are required by their curriculum and school district to evaluate the student product. However, this can be a tricky process due to the highly subjective nature of art. In order not to diminish creativity, we must give constructive and informative feedback when assigning grades. Creativity must be based on intrinsic rather than extrinsic rewards. This is tied to motivation, which must come from an internal source within the student in order to sustain creative work. Competition works well when based on objective evidence, such as in sports, however in art classes, it utilizes subjective criteria and is based entirely on the preference of those judging. It is extremely important for students to understand this concept before deciding to enter competitions. Too much control and restricting choices do not allow for experimentation. Creativity comes from intrinsic enjoyment; not pressure to perform or produce. In addition to these we might
add the following; borrowing ideas from others, cliché production, demonstration without practice, showing examples instead of defining a problem, neatness, and conformity over expression, freedom without focus, making suggestions instead of asking open questions and giving answers rather than teaching problem solving (Bartel, 2004).

Creative People

Naturally, some students display more of the characteristics identified with creative personalities than others. Creative individuals are usually more self-confident, independent, willing to take risks, energetic, adventurous, playful, humorous, and have aesthetic interests. There are strategies to develop attitudes and personality traits in order to produce a more flexible and ultimately a more creative person (Davis, 1983). Applying and developing three abilities (Sternberg, 1996), synthetic, analytic, and practical, promotes the creative process. Synthetic ability involves making connections between elements that appear unrelated. Analytic ability involves critical thinking; analyzing good and bad ideas to determine the best solution. Practical ability turns ideas into accomplishments. Each is dependent on the other for the successful synthesis of creativity. All creative individuals have their own unique and personal techniques for creative development; however, there are several standard strategies that can be utilized during the creative process. These include: brainstorming, attribute listing, idea checklists, and synectics methods (Davis, 1983).

Strategies for Creative Activity

Brainstorming involves deferring judgment. Ideas are created as a long list of possibilities. Evaluation postponed to a later time. Ground rules for brainstorming
sessions include: no criticism is allowed; the wilder the idea the better; more is better; combine and improve earlier ideas. Evaluation of the brainstorming list follows the session. Ideas are narrowed down based on criteria-based needs. Brainstorming is a general thinking strategy that emphasizes a creative attitude as well as creative atmosphere.

Attribute listing is a more specific technique for producing new ideas than brainstorming. With this technique, attributes of a subject are listed and then modified in ways that might improve the attributes. A variation of this technique involves attribute transfer in which attributes of one subject or situation are transferred to a different one. This involves metaphorical thinking.

Idea checklists are designed specifically for creative problem solving and imaginative thought. Examples of these include Alex Osborn’s 73 idea-spurring questions and Robert Eberle’s SCAMPER games. Both involve checklists that ask the individual to think about the subject or problem in a new way. This might involve substituting, combining, adapting, modifying, magnifying, minifying, rearranging, reversing, and eliminating.

Synectics methods, as developed by J.J. Gordon, combine unrelated elements through analogical thinking. This involves two approaches: making the strange familiar, and making the familiar strange (Barron, 1969). This might involve direct analogy in which the individual is asked to think of how the problem might be solved in nature, personal analogy where the individual becomes something else, or fantasy analogy that
involves far-fetched or ideal solutions that develop into creative but more practical and applicable ideas.

**Recommendations for Developing a Creative Environment**

Art educators can provide a powerful influence for developing the creative process and thinking in their students. The creative tone of the art room is set by the teacher. This is accomplished by modeling creative behavior, developing creatively energized learning, and by using reinforcement techniques that promote creative behavior. In order to encourage the creative process and creative solutions in students, art educators should present projects that are structured but allow varied outcomes. Projects without choices and with expected outcomes do not allow risk-taking by students. Unstructured lessons allow students to revert to previous art experiences that were either enjoyable or successful. In either case, the creative process is not learned. Limitations can be important in motivating creative solutions because requirements narrow the space in which to operate and make it easier for students to focus on the problem to be addressed (Bartel, 2004). Constraints can serve as barriers that lead to breakthroughs. A constraint can limit the search among responses that are ordinary and promote or direct the search for responses that are more novel and unique (Stokes, 2006). Teachers should encourage students to not start with a process or technique but with an idea. In lessons in which the major emphasis is following procedures and learning techniques, teachers should allow art students more opportunities to find creative solutions. Teachers need to attempt to build structures on which students can base their individual perceptions. The goal of the lesson is to present an art idea and help students learn to make different relationships by
thinking analytically about art (Szekely, 1988). Rather than presenting students with a problem or solution, art educators should allow students the opportunity to discover their own problems and solutions. They should encourage students to produce a unique product rather than reproducing one (Cropley, 1967). Conversations that develop within the art room might become project themes such as power and powerlessness, self-esteem, transformation, friendship, good and evil, loss and loneliness. For students who are just starting to make art, it is best to present lessons where right and wrong outcomes are limited; such as blind contour drawings and collages. Students need time to think and plan their artwork. This is part of the art process. In presenting projects allow time for students to digest the material by having them think about their ideas, visualize the art they might do, record notes, and draw sketches, brainstorm, and experiment with materials.

The secondary art room should feel relaxed and open. Students should feel accepted for who they are. The classroom should be a non-judgmental environment in which to explore ideas, dreams, and fantasies, and discuss topics that are important in student’s lives. This type of responsive art room makes students less apprehensive when sharing ideas and personal expression (Torrance, 1970). Students benefit from allowing time for contemplation. It is rare that a creative solution comes in an instant. More often, students need time to understand the problem and brainstorm ideas. By allowing this time to think before beginning a project, either in class or at home, students develop the discipline necessary for creative thought (Sternberg, 1996). Students should feel comfortable with sensible risk-taking and teachers should allow for mistakes. Many times
students learn and grow more from analyzing their mistakes than from their successes. If art educators wish to develop creativity, they must also be tolerant of ambiguity; the unresolved work in progress. Art work should be facilitated through mutual problem solving, stimulation, and support (Boris-Krimsky, 1999).

**Innate or Learned Behavior**

Is creativity something you are just born with or can it be developed? Some individuals inherently display more of the characteristics that represent a creative person than others, but research reveals that there are techniques that can be utilized to promote and increase creative thinking. For art educators, it is also important to develop a more creative consciousness and awareness within their students. If students better understand the importance and impact creativity has on their personal development, success, happiness, and self-actualization, as well as the betterment of society (Davis, 1983) then creative lessons and strategies will have better results and more meaning. However, developing creativity in students involves more than emphasizing or teaching creative skills or the transmission of knowledge related to creativity, it involves emphasis on the finding of ideas or solutions to new problems by reevaluating what is known, extending thinking into ‘illogical’ or divergent arenas and the envisioning of formerly unknown relationships among different domains of experience (Cropley, 1967). Our society demands creative individuals to solve our problems. Business and industry are increasingly looking for original thinkers. It is our responsibility, as art educators, to develop the qualities in students that facilitate creative approaches to problem solving. While we know very few of our students will become creative artists, we can be assured,
that through developing and teaching the creative process, that they will develop creative
thinking and problem solving behavior.
Chapter 3

Methodology

The goal of this thesis is to develop a curriculum that addresses the creative and idea generative needs of the concentration section of the Advance Placement Studio Art Portfolio. The intention of this curriculum is to present lesson plans that offer teachers and students effective guidelines and strategies for the selection and implementation of a concentration topic. This parallels the experience of visual artists as they develop themes or ideas related to a body of work. This curriculum consists of six lesson plans that focus on creativity strategies including brainstorming, analogical and metaphorical thinking, attribute listing, and idea checklists. It also incorporates art history and research related to modern and contemporary artists. Because of my schedule, I was unable to implement these lessons within my own classroom except on a limited and individual basis. I have instead, as participant, researcher, and observer, chronicled my observations and reflections gathered from teaching groups of students over the past four and a half years.

Reflections on Teaching Advanced Placement Studio Art

The high school where I teach is located approximately thirty miles north of downtown Atlanta. The makeup of the school and community is considered middle to upper middle class and predominantly white. However, there is a strong Asian population within the school, approximately twenty-seven percent to date and growing, as are the Hispanic and African-American populations. The school has grown from approximately 1200 students the first year to over 2500 during our fifth year. Scholastic Aptitude Test
scores rank within the top in the state. Parental and administrative expectations regarding Advanced Placement scores are equally high.

The Advanced Placement Studio Art program has grown within our school from a single student the first year to twenty-eight students by the fifth year. It has also grown from offering a single to all three portfolios: Drawing, Two-Dimensional Design, and Three-Dimensional Design. Advanced placement Studio Art is an elective course that generally contains juniors and seniors who have previous art experience in areas related to drawing, painting, photography, graphic design, or sculpture. The students may have an interest in developing an art portfolio for admittance to college or university. However, others simply want a more intense artistic experience.

I began teaching the course as other art teachers in the county traditionally do, focusing on the breadth section the first semester and the concentration section the second semester. In doing this, students develop skills related to a variety of media while developing artwork that is primarily teacher directed in subject matter. It also allows students time to develop ideas for topics related to the development of the concentration section. The only idea generating technique I was offering my students was brainstorming. This idea generating technique proved to be an effective tool for producing many ideas for the concentration topic but limited in helping students elaborate on the topic. Idea elaboration is the area with which I observed students experiencing the most difficulty. It seemed relatively easy, through brainstorming, for most students to develop multiple topic choices that were of personal interest to them. However, to develop extensions from this topic that would lead to the production of at least twelve
pieces of artwork proved more difficult. I viewed this problem as resulting from a lack of divergent thought which is one of the key components of creativity. This perceived need led me to develop lessons that incorporate creative strategies related to problem solving as an aid to idea generation and specifically idea elaboration. While my research revealed multiple creative problem solving strategies, I believed an approach that combined individual research, brainstorming, synectics, and an idea checklist known as SCAMPER, along with a method for evaluation would provide the most accessible and easy to implement approach for a variety of learning styles.

By starting the first lesson with research centered on a specific artist, students can begin to understand the creative process within a particular creative person. Presenting their findings to the class, students must analyze their research based on the questions that are required by the assignment. In turn, the class is afforded multiple perspectives to artistic creative thought and artwork development. This leads students to the next lesson, which involves art production. Students are asked to identify an aspect within an artist’s work and incorporate the idea behind it into a work of their own. The idea is not to copy the artist’s work, but to take something that is new to them and put their personal voice into it. During this period of art production, students would begin the third lesson by brainstorming. The previous research on artists and their development of ideas as related to a body of work provides a direct correlation to the student’s approach to the concentration topic. One hundred brainstorming ideas is what I consider a minimum for a student to draw from. My observation has been that to require a list of fewer does not force the student to step out of his or her safety area far enough. The next two lessons are
applied to the concentration topic developed through brainstorming. These lessons provide the area of most divergent thought through the application of synectics and the SCAMPER technique. Synectics is based on metaphorical and analogical thought processes. SCAMPER requires the student to ask him or her self a checklist of questions based on a series of action verbs designed to stimulate imaginative and creative responses. In applying these two techniques, students seem to find one or the other more helpful to them individually based on their particular topic. One of the primary criteria for all of the creative problem-solving strategies is delayed criticism. It is hoped that the student has resisted making any judgments up to this time. Lesson six provides the student with an approach to evaluate the many varied responses generated. This lesson is extremely important because it allows the student respond in a convergent manner without becoming overwhelmed by the options.

It is important to allow students to develop enough ideas early on in the process in order to determine the viability of their selected topic. In doing this, a student is not locked into these selected ideas for artwork, but it does create a concrete starting point and also a repository to review at any time an idea does not seem to be working out as expected.
Chapter Four

Instructional Lessons

Lesson One

Conceptual Thinking: How, What, Where, and Why Do Artists Create Artwork

Grade Level: Advanced Placement Studio Art, Drawing Portfolio, Grades 10-12

Designer: Bonnie Lovell

Overview/Concept: Students will research and examine the work of a modern or contemporary artist selected by the student from a list provided by the teacher. In doing this, they may begin to understand the who, what, where, how, and why of an artist’s creative process as preparation for developing the concentration portion of their portfolio.

Bloom’s Taxonomy: Students will gain knowledge through research on the selected artist and do analysis when they examine the artist’s creative development and process.

QCC Standards:

- Researches, analyzes, and writes about diverse drawings and artists through Internet museums, exhibits, reviews and critiques, periodicals, texts, local museums, and galleries. \( QCC \ D.20 \)

- Explains the influences of historical and social factors on the development of selected drawings. \( QCC \ D.22 \)

- Develops and applies appropriate criteria for making aesthetic judgments about a wide range of objective, abstract, and nonobjective drawings. \( QCC \ D.17 \)

- Analyzes the effect of subject matter, technique, and medium on the expressive quality of drawings. \( QCC \ D.12 \)
Specific Objectives:

- Students will identify concentration themes or topics within the examples of student portfolios presented.
- Students will select a modern or contemporary artist to complete research based on the artist’s approach, technique, and development of artwork.
- Students will identify and analyze specific concepts and aspects within the artist’s work and answer questions related to the artist’s influences, idea generation, themes, techniques, and reasons for making art.
- Students will present to the class and turn in a report or PowerPoint presentation in which the previous ideas and concepts are addressed along with visual examples to support their findings.

Sample: PowerPoint presentation on Robert Motherwell

Resources:

Visual images:

Robert Motherwell

*The Mexican Sketchbook*, page 1, 1941

*The Little Spanish Prison*, 1941-44

*Pancho Villa, Dead and Alive*, 1941

*Ink Sketch*, 1948

*At Five in the Afternoon*, 1949

*Elegy to the Spanish Republic No. 34*, 1953-54

*Elegy to the Spanish Republic No. LV*, 1955-60
*Elegy to the Spanish Republic No. 70, 1961*

*Elegy to the Spanish Republic No. 79, 1962*

*Elegy to the Spanish Republic No. 132, 1975-1983*

Piet Mondrian

*Composition #9, 1939-42*

Pablo Picasso

*Violin and Sheet Music, 1912*

Student concentration portfolios from previous years at Northview high school

College Board examples of concentrations for the drawing portfolio

**Introduction/Motivation:**

As you approach the concentration section of your AP portfolio, you may be asking yourself (and me); what exactly is a concentration and how do I develop an idea for one?

According to the College Board:

*A concentration is a body of related works of art based on your individual interest in a particular idea. It focuses on a process of investigation, growth and discovery. It is not a variety of works produced as solutions to class projects, or a collection of works with differing intents. As a student artist you should explore a personal, central interest as intensively as possible. The concentration should grow out of, and demonstrate, a plan of action or investigation in which you have invested considerable time, effort, and thought. For this section, the evaluators are interested not only in the work presented, but also in visual evidence of your*
thought process, selected method of working, and development of the work over time.

To help you develop your own idea for a concentration, you will begin by looking at modern and contemporary artists who are included on the list I have provided to you. I may also have suggested some additional artists that may be particularly relevant to your own particular work. Or you may already have an artist you are interested in. You will then select an artist whose work inspires you or speaks to you in some way. You will research his/her artwork and methods of working in order to better understand the creative process and method of artwork development for the artist you have selected. Within your research report that will be presented to the class, you will answer these questions about the artist and their artwork:

- **Who were other artists who inspired or influenced the artist?**
- **From where does the artist derive ideas?**
- **How has the artist continued to expand and develop artwork over time?**
- **What drives the artist’s desire to continue to create artwork?**
- **What themes or connections can you identify within the artist’s work?**

In addition, you will present visual examples of the artist’s work and describe what specifically interests you about that particular artist.

**Content Paper:**

- Student handout on the requirements for the concentration section of the Advanced Placement Drawing Portfolio.
- PowerPoint presentation on Robert Motherwell
**Instructor’s Procedures:**

**Day One**

Distribute student handout on the requirements for the concentration section of the Advanced Placement Drawing Portfolio.

Discuss with students what constitutes the concentration section of the Advanced Placement Drawing Portfolio.

Explain a theme or concentration idea.

Show slides of student concentration portfolios and ask students to identify the concentration theme or idea.

Ask students to analyze individual concentrations as to their success and effective communication of idea.

Ask students to identify specific elements that contribute to the level of success within particular pieces of artwork by answering the following questions:

1. *How has the artist combined elements to create a unified (or disjointed) composition?*
2. *How does the choice of medium enhance or further the idea?*
3. *How does the drawing and/or painting approach enhance or further the artist’s idea?*
4. *Describe in what ways you feel has the artist been successful in his or her communication of the concentration idea or theme?*

Ask students how they might interpret the concentration idea in terms of subject matter and medium.
Day Two

Present PowerPoint on modern artist Robert Motherwell

Ask students to **identify** specific elements that characterize each artist’s work.

Ask students to **compare and contrast** the elements identified above in each of the different artist’s work.

Ask students to **speculate** as what the major themes are in the each artist’s work.

Present and **explain the criteria** related to the research and analysis students will conduct for their presentations.

Research and analyze the selected artist’s artwork and methods of working while answering the following questions:

1. *Who were other artists who inspired or influenced the artist?*
2. *From where does the artist derive ideas?*
3. *How has the work evolved over time? Identify mature work, what led up to it, and ideas within it.*
4. *What themes or connections can you identify within the artist’s work?*

Include visual examples that support findings and conclusions

Days Three, Four, and Five

Review the criteria related to the research and analysis students will conduct for their presentations.

Direct students on media center use and computer internet research on a modern or contemporary artist chosen by the student.
Days Six and Seven

Direct student presentations of reports or PowerPoints.

**Materials and Materials Management:**

- Visual Verbal Journals
- Student slides of concentration portfolios
- Slide projector and screen for presentation
- LCD projector for student Powerpoint presentations

**Student Procedures:**

**Day One**

Students will discuss what constitutes the concentration section of the Advanced Placement Drawing Portfolio.

Students will identify concentration themes or ideas in the student portfolios presented.

Students will analyze individual concentrations as to their success and effective communication of idea.

Students will identify specific elements within the artworks that contribute to the level of success of particular pieces answering the following questions:

1. *How has the artist combined elements to create a unified (or disjointed) composition?*

2. *How does the choice of medium enhance or further the idea?*

3. *How does the drawing and/or painting approach enhance or further the artist’s idea?*
4. Describe in what ways you feel has the artist been successful in his or her communication of the concentration idea or theme?

Students will explain how they might interpret the concentration idea in terms of subject matter and medium.

**Day Two**

Students will identify specific elements that characterize each of the artist’s work presented in the PowerPoint.

Students will compare and contrast the elements identified above in the artist’s work.

Students will speculate as what the major themes are in the each artist’s work.

Students will generate ideas as to what the artist’s influences may have been.

**Days Three, Four and Five**

Students will select a modern or contemporary artist whose work inspires or speaks to them in some way.

Students will research and analyze the selected artist’s artwork and methods of working while answering the following questions:

1. Who were other artists who inspired or influenced the artist?

2. From where does the artist derive ideas?

3. How has the work evolved over time? Identify mature work, what led up to it, and ideas within it.

4. What themes or connections can you identify within the artist’s work?

Students will include visual examples that support their findings and conclusions.
Days Six and Seven

Students will present their research report or PowerPoint to the class.

Students will provide feedback to the presenting student in the form of questions and written analysis of their presentation based on the following:

- **Quality of the information presented**
- **Relevance of the information presented**
- **Answering of the required questions**
- **Overall quality of the presentation to engage the audience**

Closure Review:

Through a classroom discussion students address the following questions:

1. *Do you feel you have a better understanding of what is meant by a concentration topic?*

2. *Do you feel you have a better understanding of how an artist develops a body of work?*

3. *How is an artist’s body of work different or similar to a concentration topic?*

4. *Has the research on the artist you selected and the other student’s presentations given you some insight into how artists create their artwork?*

5. *What is the most important learning you have taken away from this assignment?*

Assessment:

**Assessment Questions**

1. *Did students identify concentration themes or topics within the examples presented?*
2. Did students select a modern or contemporary artist on whom to complete research based on the artist’s approach, technique, and development of artwork?

3. Did students identify and analyze specific concepts and aspects within the artist’s work and answer questions related to the artist’s influences, idea generation, themes, techniques, and reasons for making art?

4. Did students present to the class and turn in a report or PowerPoint presentation in which the previous ideas and concepts were addressed along with visual examples to support their findings?

Assessment Instrument

Name ____________________________ Date _____________

**Artist Research Rubric**

Standard: Students select a modern or contemporary artist to complete research based on the artist’s approach, technique, and creative development of artwork.

<table>
<thead>
<tr>
<th>Category</th>
<th>Advanced 20-18</th>
<th>Proficient 17-16</th>
<th>Emerging 15-14</th>
<th>Unsatisfactory 13-0</th>
<th>Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>Information presented exhibits a complete and comprehensive investigation of the artist selected. Student demonstrates a high level of thought, originality and research.</td>
<td>Information presented exhibits a complete and comprehensive investigation of the artist selected.</td>
<td>The student did the assignment in a satisfactory manner but some of the information was not pertinent to the subject being researched.</td>
<td>The student provided a minimum of information; much of which was irrelevant to the criteria of the assignment.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td>Questions</td>
<td>Who were other artists who inspired or influenced the artist? From where does the artist derive ideas? How has the work evolved over time? Identify mature work.</td>
<td>Student has addressed the required questions with a high level of insight and originality. Answers are succinct and to the point.</td>
<td>Student has addressed some of the required questions in a satisfactory way but is not particularly insightful. Answers sometimes stray from the main point.</td>
<td>Student has addressed half or less of the required questions. Answers are superficial and/or do not address the main point of the question.</td>
<td>Student Teacher</td>
</tr>
</tbody>
</table>

| | | | | | Points Earned |
**Teaching Reflection for Lesson One**

This lesson provides a foundation for thought, analysis, and observation within the AP student. Art is not created from a void. It is related to prior and contemporary cultures and influences. It is important for students to research and identify characteristics within previous or working artists that may affect them on a personal or aesthetic level.

This lesson provides the opportunity for students to select an artist that is personally relevant to their interests.
Lesson Two

Make It Your Own

Grade Level: Advanced Placement Studio Art, Drawing Portfolio, Grades 10-12

Designer: Bonnie Lovell

Overview/Concept: Students will create artwork that incorporates some aspect of the artist’s work chosen by the student through previous research. Bloom’s Taxonomy: Students will use synthesis when they incorporate an aspect of the selected artist’s work into artwork of their own.

QCC Standards:

- Analyzes drawings by significant artists and synthesizes information gained into the production of drawings that express mood, motion, and energy. \( QCC \ D.14 \)
- Begins to develop and describe artistic voice (own style, approach to art, and personal messages to communicate). \( QCC \ D.18 \)

Specific Objectives:

- Students will identify and select a particular technique, concept, or idea from their selected artist’s body of work.

- Students will translate the identified aspect into a work of art that is uniquely their own.

Sample: Teacher example of transferring an aspect of a particular artist’s work and incorporating it into a new and personally unique piece of art.
Resources:

- Student’s previous research and analysis of a particular modern or contemporary artist.

Introduction/Motivation: Your previous assignment included selecting an artist with which you identified in some way. You researched the artist’s method of working, inspirations, and influences. From this investigation, you identified a particular aspect of the artist’s work that speaks to you in some way. Take that information, approach, or idea from your selected artist incorporate it into a work of your own. This does not mean copy the artist but to learn from the artist and present your own, unique interpretation of what draws you that particular artist. This artwork will become part of the breadth section of your Advanced Placement portfolio.

Content Paper: PowerPoint on Alice Neel

Instructor’s Procedures:

Day One

Present PowerPoint to students on Alice Neel and the teacher sample.

Ask students to identify what aspect of the artist’s work has been incorporated into the teacher sample.

Ask students to identify a particular aspect of the artist’s work they researched in the previous assignment with which they would incorporate into an artwork of their own.

Ask students to write a short paragraph describing what they plan to do for their own artwork in their visual journals.
As homework, ask students to develop a pen or pencil sketch for their proposed artwork in their visual journals.

**Days Two and Three**

Discuss with students on an individual basis the sketches they completed as homework from the previous day.

Ask students to develop a more complete or detailed sketch if needed. If color is to be included, students should complete a color sketch. These more developed sketches should be a full page in their visual journals.

As students complete sketches, instructor will distribute materials according to individual needs.

**Days Four, Five and Six**

Assist students on an individual basis as they proceed with their artwork.

**Day Seven**

Direct classroom critique by asking students to present their artwork to the class and identify what aspect of the artist’s work selected was incorporated into their artwork.

Ask students to describe how they made the aspect identified within the artist selected into their own unique artwork as opposed to copying the artist’s approach.

As homework, ask students to write a reflection, in their visual journals, on the artistic process they experienced in developing their work of art.

**Materials and Materials Management:**

- Visual Verbal Journals
• Materials needed for art production will be determined on an individual basis due to the unique nature of each student’s artwork. Materials will be limited to drawing and painting supplies such as: graphite, charcoal, pastels, colored pencils, watercolor, acrylic paint, paintbrushes and surfaces of different drawing papers, watercolor paper, and canvas board. Materials will be discussed with and distributed by the instructor on an individual basis to the students.

**Student Procedures:**

**Day One**

Students view PowerPoint on Alice Neel and teacher sample.

Students identify what aspect of the artist’s work has been incorporated into the teacher sample.

Students identify a particular aspect of the artist’s work they researched in the previous assignment with which they would incorporate into an artwork of their own.

Students write a short paragraph describing what they plan to do for their own artwork in their visual journals.

As homework, students develop a pen or pencil sketch for their proposed artwork in their visual journals.

**Days Two and Three**

Students discuss with the instructor on an individual basis the sketches they completed as homework from the previous day.

Students develop a more complete or detailed sketch if needed. If color is to be included, students complete a color sketch.
As students complete sketches, students will discuss material needs with the instructor.

**Days Four, Five and Six**

Students proceed with and complete on an individual their artwork. Additional time outside of class may be required for completion of the artwork within the specified timeframe.

**Day Seven**

Students to present their artwork to the class and identify what aspect of the artist’s work selected was incorporated into their artwork.

Students describe how they made the aspect identified within the artist selected into their own unique artwork as opposed to copying the artist’s approach.

As homework, students write a reflection, in their visual journals, on the artistic process they experienced in developing their work of art.

**Closure Review:** Students present their artwork within a classroom critique. Fellow students give feedback as to how successful they believe the presenting student has been in incorporating an aspect of the selected artist’s work into the artwork and creating their own unique work of art. Students reflect within their visual journal on the artistic process they experienced answering questions such as:

1. *Do you feel this assignment has helped you understand how and artist develops a work of art?*

2. *In what ways has your own approach to developing artwork been affected by your investigation of an artist?*
Assessment:

Assessment Question:

1. *Did students identify and select a particular technique, concept, or idea from their selected artist’s body of work?*

2. *Did students translate the identified aspect into a work of art that is uniquely their own?*

Assessment Instrument:

**Studio Art Assessment of Breadth**

<table>
<thead>
<tr>
<th>Name ______________________</th>
<th>Assignment ____________________</th>
</tr>
</thead>
</table>

9-10 Excellent: idea of breadth is strong; engages the viewer with the work and idea; there is evidence of thought in the work; technically excellent.  
AP scale: 5

7-8 Good: sense of breadth, inconsistent in terms of technical competence.  
AP scale: 4

5-6 Moderate: represents breadth, but includes loosely related ideas or work is weak; limited investigation; little growth is evident and limited skill is demonstrated.  
AP scale: 3

3-4 Weak: not convincing as a breadth exploration, inadequate in terms of technical competence; idea is appropriate for breadth but skills needed to execute it are not evident.  
AP scale: 2

1-2 Poor: Breadth is not carried out; little or no evidence of technical competence.  
AP scale: 1

<table>
<thead>
<tr>
<th>Student Evaluation</th>
<th>Teacher Evaluation</th>
<th>AP Score</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Materials well used; technique is excellent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Development of image, with respect to accuracy, proportions and perspective, if that is the intent of the artwork.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inventive; imaginative</td>
</tr>
</tbody>
</table>
Now assess the strengths and weakness of your work. If your scores are consistently in the 4 or 5 category or below, you need to use your answers below to help you rework it.

1. Have you done anything special with the use of the elements (line, shape, color, value, texture, space, form)?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. What are some of the dominant shapes, expressive forms, color schemes, and textures that carry significance in this artwork?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. Is the work ordered/balanced? Or chaotic/disturbing? What makes for the order or chaos? How would you use words such as unity, variety, contrast, balance, movement, and rhythm to describe the formal characteristics of this work?

________________________________________________________________________
4. Describe the quality of execution and technique. What gives the work its uniqueness?

5. Does the work evoke any feelings? To what do you ascribe your feeling – the use of colors, shapes, technique, or theme?

6. Is there “symbolism” used in the work to convey meaning other than what one sees?

7. What is your general impression of the work? What did you want the viewer to think about? Did you successfully get your message across?

Teaching Reflection for Lesson Two

By incorporating the learning from the previous, the concepts related to creative process as implemented by artists are reinforced. Students gain first hand experience in understanding how other influences can be utilized and adapted to create new, unique artwork based on others influences. This also provides safer entry into art production rather than jumping directly into concentration artwork. This artwork could also form the beginning of the breadth section of the student’s portfolio.
Lesson Three

Brainstorming for Ideas

**Grade Level:** Advanced Placement Studio Art, Drawing Portfolio, Grades 10-12

**Designer:** Bonnie Lovell

**Overview/Concept:** Brainstorming is a creativity technique of generating many and varied ideas to solve a problem. Alex Osborn describes the creative group thinking he introduced at his advertising company as “brainstorming sessions” in his book *Applied Imagination*. Brainstorming criteria includes; delayed criticism, free-wheeling, quantity, combination, and improvement. Students can implement the brainstorming concept to help develop ideas for the concentration section of their Advanced Placement Portfolio.

**Bloom’s Taxonomy:** Students will use synthesis to generate multiple and varied ideas for concentration topics. Students will use analysis and evaluation to appraise the worth of the ideas generated.

**QCC Standards:**

- Applies higher-order thinking skills (e.g., nuanced judgment, tolerance of ambiguity, complex thinking, finding structure in apparent disorder) in the creation of multiple solutions to drawing problems and discusses their transfer to real life and work force situations. *QCC D.3*

- Applies concepts and ideas from other disciplines and their topics as sources of ideas for own artwork. *QCC D.11*
Specific Objectives:

- Students will generate, through brainstorming, multiple and varied ideas for their concentration topic based on the criteria of delayed criticism, free-wheeling, quantity, combination, and improvement.

- Students will analyze and appraise their brainstorming results to select a concentration topic.

Sample: Teacher example of a brainstormed idea.

Resources:

Text: *Applied Imagination; Principles and Procedures of Creative Thinking*

by Alex F. Osborn

Introduction/Motivation:

Choosing an idea is the first step to beginning the concentration section of the AP Portfolio. You may already have an idea or need some help generating ideas to choose from. Either way brainstorming will help you. Brainstorming is a way to produce many and sometimes radical ideas in a short period of time. However, there are some guidelines to effective brainstorming. Quantity is important; do not stop until you have at least one hundred ideas. Write every idea down. Suspend judgment; at this stage, all ideas are viable. Unusual, crazy, and wild ideas are welcome. Combine and improve your ideas. This approach leads to better and more complete ideas. Once you have completed your list of ideas, you can begin to judge and analyze them. Narrow your list to your top five ideas. Brainstorm these top ten ideas and develop at least fifteen ideas for artwork for each of the five. At this point, you will divide up into groups of three or four. Within your
group, help each other select the top two from the brainstormed list of five. Then brainstorm each other’s top two ideas. Go back to the original guidelines for brainstorming. By working as a group, you will expand your creative resources. Remember, two heads are better than one. From this group brainstorming session, make a judgment as to which of the two ideas provides you with the most possibilities for idea direction and development and I will discuss your choice on an individual basis.

**Content Paper:**

PowerPoint presentation on Brainstorming

**Instructor’s Procedures:**

**Day One**

*Present* PowerPoint on brainstorming.

*Discuss* while allowing student questions about the specific criteria related to brainstorming.

*Demonstrate* the brainstorming process beginning with teacher-generated responses.

Ask students to provide additional responses.

Ask for a volunteer to *write all responses* on the whiteboard.

Stop when a minimum of one hundred ideas has been recorded.

Ask students, for *homework*, to generate a list of one hundred ideas using the brainstorming criteria.
Day Two

Demonstrate, with the list from the previous day, how to narrow the list to the top five ideas by selecting ideas with which the student has the most interest and possibility for development.

Ask students to brainstorm one of the five ideas with a minimum of fifteen additional ideas as an example for students.

Ask students to narrow their original list to their top five.

As homework, ask students to generate fifteen additional ideas for each of their top five choices.

Day Three

Divide the students into small groups of three or four to assist in collaborative learning.

Ask students to help each other narrow their top five to their top two based on the additional fifteen ideas generated and student interest.

Ask students to brainstorm as a group each student’s top two ideas.

As homework, ask students to brainstorm additional ideas for their top two.

Day Four

Ask students to draw thumbnail sketches in their visual verbal journals of the ideas selected as their top choice.

Discuss with students on an individual basis their choice of concentration topic, ideas generated, and direction of development.

Materials and Materials Management:

- Visual Verbal Journals
• Pens and/or pencils

Materials are distributed to students at the beginning of the semester.

**Student Procedures:**

**Day One**

Students view PowerPoint on brainstorming.

Students discuss and ask questions about the specific criteria related to brainstorming.

Students provide responses to the brainstorming topic.

A student volunteer writes all responses on the whiteboard.

As homework, students generate a list of one hundred ideas using the brainstorming criteria for their individual concentration.

**Day Two**

Students brainstorm one of the top five ideas from the previous day’s example.

Students narrow their list of one hundred concentration ideas to their top five idea by selecting ideas with which they have the most interest and possibility for development.

As homework, students generate fifteen additional ideas for each of their top five choices.

**Day Three**

Students divide into small groups of three or four to assist in collaborative learning.

Students assist each other in narrowing their top five ideas to their top two based on the additional fifteen ideas generated and personal student interest.

In the small group, students brainstorm each student’s top two ideas.

As homework, students brainstorm additional ideas for their top two choices.
Day Four

Students select their top choice for a concentration topic.

Students draw thumbnail sketches in their visual verbal journals of the ideas brainstormed for their top choice.

On an individual basis, students discuss with the instructor their choice of concentration topic, ideas generated, and direction of development.

Closure Review:

Students discuss with the instructor, during an individual conference, their results from the brainstorming experience. Students may answer questions related to:

1. *What were the most important criteria related to brainstorming (delayed criticism, freewheeling, quantity, combination, or improvement), were most important in developing a direction for your concentration topic?*

2. *What were the most effective methods for you?*

Assessment:

Assessment Questions:

1. *Did students generate through brainstorming multiple and varied ideas for their concentration topic based on the criteria of delayed criticism, “free-wheeling”, quantity, combination, and improvement.*

2. *Did students analyze and appraise their brainstorming results to select a concentration topic.*
Assessment Instrument

Name ___________________________________________  Date_______________

Brainstorming Rubric

Standard: Students generate multiple and varied ideas for their concentration topic through brainstorming.

<table>
<thead>
<tr>
<th>Category</th>
<th>Advanced 20-18</th>
<th>Proficient 17-16</th>
<th>Emerging 15-14</th>
<th>Unsatisfactory 13-0</th>
<th>Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brainstorm One Hundred Concentration Ideas</td>
<td>Brainstorm list has 100 or more ideas. Student has created an excellent list that demonstrates an exceptional level of divergent and original thought based on the criteria.</td>
<td>Brainstorm list has 100 or more ideas. Student has created an above average list that demonstrates a good level of divergent and original thought based on the criteria.</td>
<td>Brainstorm list has 100 ideas. Student has created an average list that demonstrates an ordinary level of divergent and original thought based on the criteria.</td>
<td>Brainstorm list has fewer than 100 or more ideas. Student has created a substandard list that demonstrates an limited level of divergent and original thought based on the criteria.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td>Brainstorm Top Five</td>
<td>Student has a brainstorm list of at least 15 ideas for each of their top 5 concentration topics that demonstrates an exceptional level of divergent and original thought based on the criteria.</td>
<td>Student has a brainstorm list of at least 15 ideas for each of their top 5 concentration topics that demonstrates an good level of divergent and original thought based on the criteria.</td>
<td>Student has a brainstorm list of at least 15 ideas for each of their top 5 concentration topics that demonstrates an ordinary level of divergent and original thought based on the criteria.</td>
<td>Student has brainstorm list with fewer than 15 ideas for each of their top 5 concentration topics that demonstrate a limited level of divergent and original thought based on the criteria.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td>Creativity</td>
<td>Brainstorm ideas are highly creative and exceptional in their diverse thought.</td>
<td>Brainstorm ideas are above average in creativity and diverse thought.</td>
<td>Brainstorm ideas are average in creativity and diverse thought.</td>
<td>Brainstorm ideas are below average in creativity and linear in thought.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td>Effort</td>
<td>The student gave effort far beyond the requirements of the assignments.</td>
<td>Student completed the assignment in an above average manner.</td>
<td>The student finished the assignment, but showed no effort beyond the minimum requirements.</td>
<td>The student did not finish the assignment in a satisfactory manner.</td>
<td>Student Teacher</td>
</tr>
</tbody>
</table>
### Improvement

| Student demonstrates a true understanding of the brainstorming process. Idea generation has improved dramatically and shows evidence of risk taking and connection to previous learning. | Student has made significant improvement in idea generation and shows evidence of risk taking and connection to previous learning. | Student has made little progress in improvement in idea generation. | Student has made no improvement in idea generation. | Student Teacher |

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### Teaching Reflection for Lesson Three

In my mind, brainstorming is the best way to produce a lot of different ideas very quickly. It is extremely important however to follow the rule of delayed judgment. Otherwise students become too critical and stop producing novel ideas. Brainstorming can be implemented over and over again as needed for new idea generation. It is also an easy concept for students to grasp.

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### Lesson Four

**Concentration Development Through Synectics**

**Grade Level:** Advanced Placement Studio Art, Drawing Portfolio, Grades 10-12

**Designer:** Bonnie Lovell

**Overview/Concept:** Once students have decided on a central idea, theme, or topic for their concentration, they must expand their thought processes to create possible image ideas for the series of concentration pieces that comprise the AP drawing portfolio. Synectics, developed by William Gordon in 1961, uses analogy and metaphor as an approach to creative thinking by bringing different elements together in a search for new ideas. Synectics thinking involves a process of making the strange familiar and making the familiar strange; of discovering links that unite seemingly unrelated elements.
Bloom’s Taxonomy: Students will use analysis to make the strange familiar and synthesis to generate multiple and varied ideas for their concentration topics by making the familiar strange.

QCC Standards:

- Applies higher-order thinking skills (e.g., nuanced judgment, tolerance of ambiguity, complex thinking, finding structure in apparent disorder) in the creation of multiple solutions to drawing problems and discusses their transfer to real life and work force situations. *QCC D.3*

- Applies concepts and ideas from other disciplines and their topics as sources of ideas for own artwork. *QCC D.11*

Specific Objectives:

- Students will generate at least thirty varied responses using direct analogy related to their concentration topic.

- Students will develop a minimum of five questions that relate the direct analogies generated to the concentration topic.

- Students will generate at least six personal analogies for each of the five direct analogy questions developed.

- Students will create a minimum of ten symbolic analogies based on compressed conflict related to their concentration topic.

- Students will create at least three fantasy analogies related to their concentration topic.
Students will create an imagery idealist of at least twenty for their concentration topic based on analogies generated using synectics strategies.

**Sample:** Teacher example of applying the synectics strategies.

**Resources:**

Texts: *Synectics: The Development of Creative Capacity* by William J. J. Gordon  
*Introduction to Synectic Problem Solving* by William J. J. Gordon  
*Art Synectics: Stimulating Creativity in Art* by Nicholas Roukes  
*The Art of the Possible* by W. J. J. Gordon and Tony Poze  
*Introduction to Synectics Problem-Solving* by William J. J. Gordon

**Introduction/Motivation:**

Now that you have selected your concentration topic, your next step is to further expand your ideas for artwork related to it. Today you will learn about a technique called synectics which uses analogy and metaphor to help you bring different elements together and make new connections in order to generate novel ideas. It is a way to connect what seem to be irrelevant elements of thought into fresh and many times surprising ideas. Your idea development will involve four areas of analogical thought: direct, personal, fantasy, and symbolic. You will also utilize mind mapping as a way to visualize your thoughts.

**Content Paper:**

- PowerPoint presentation on synectics strategies  
- Student handout on synectics strategies and mind mapping
**Instructor’s Procedures:**

**Day One**

Introduce the synectics concept to students.

Present PowerPoint on synectics strategies and the four analogical approaches and mind mapping that will be utilized by students to facilitate their idea development.

Ask student to take notes on the presentation in their visual verbal journals.

Present an idea suitable for a concentration topic to the class (examples: circle, tools, disorder)

Ask students to write a short paragraph describing the topic including characteristics, uses, sources or anything else the student feels is relevant to the topic within a five-minute timeframe.

Ask students to summarize the paragraph into one basic sentence within a five-minute timeframe.

Select one of the student-generated sentences to use as the statement of the topic.

Write the statement on the board.

Ask students to generate direct analogies (similar in some respects but otherwise dissimilar) to the selected topic statement.

Promote stretching of comparisons to encourage students to see familiar things in strange ways.

Demonstrate mind mapping by writing student responses as vines emanating from the topic or central theme.
Ask students to develop questions that relate the direct analogies to the main topic (example: How are a circle and a sound alike?).

Write student generated questions on the board.

Pass out handout that describes how students will conduct synectic strategies on their concentration topic.

As homework, ask students to develop a mind map (in their journals) of at least thirty direct analogies related to their concentration topic. From the mind mapped analogies, ask students to develop five questions that relate the direct analogies generated to their concentration topic.

**Day Two**

Review basic concepts related to synectics.

Continuing with the concentration statement from the previous day, ask students to create personal analogies from the direct analogy questions created earlier.

Explain to students that they become the subject and then they must describe what it would feel like to be to be that subject (How would it feel to be sound and circular?). Students may need to elaborate their questions to elicit better personal analogies.

Ask students to write their responses in their journals.

Call on students to share their responses.

Demonstrate symbolic analogy by creating a two-word phrase with the selected topic that appears conflicted (example: square circle).

Ask students to generate additional responses.

Write student responses on the board.
For the last synectics strategy, fantasy analogy, ask students to imagine the subject in terms of wishes or perfection in order to view the topic in a new context.

Write student responses on the board.

For homework, ask students to complete the last three strategies in their journals.

Criteria includes:

1. Six personal analogies for each of the five direct analogy questions developed by the student for a total of thirty responses.
2. Ten symbolic analogies that represent compressed conflict related to the concentration topic.
3. Three fantasy analogies based on innovative viewpoint that helps the student see the concentration topic in a new context.

**Day Three**

Assign partners to students for cooperative learning and sharing of synectic analogies.

Ask each student to provide feedback and alternate ideas to other students regarding his or her synectics analogies developed from the homework assignment.

Discuss with students, in their groups, the results of applying the synectic strategies to their concentration subject.

As homework, ask students to develop a list of at least twenty ideas, based on the analogies generated through the use of synectics strategies, which may form the basis of imagery for their concentration topic.

**Materials and Materials Management:**

- Visual Verbal Journals
- Pens and/or pencils

Materials are distributed to students at the beginning of the semester.

**Student Procedures:**

Students take notes on the presentation in their visual verbal journals.

Students write a short paragraph on the topic presented by the instructor describing the topic including: characteristics, uses, sources or anything else the student feels is relevant to the topic within a five-minute timeframe.

Students simplify the paragraph into one basic sentence within a five-minute timeframe.

Students generate direct analogies (similar in some respects but otherwise dissimilar) to the topic statement.

Students develop questions that relate the direct analogies to the main topic (example: How is a circle and a sound alike?).

As homework, students complete a mind map with at least thirty direct analogy responses, in their journals, that relate to their concentration topic. From the mind mapped direct analogies, student will create a minimum of five questions that relate the analogies to their concentration topic.

**Day Two**

Continuing with the concentration statement from the previous day, Students create personal analogies from the direct analogy questions created earlier.

Students may need to elaborate their questions to elicit better personal analogies.

Students write their responses in their journals.

Students share their responses with the class.
Students generate symbolic analogies by creating a two-word phrase with the selected topic that appears conflicted (example: square circle).

For the last synectics strategy, fantasy analogy, students imagine the subject in terms of wishes or perfection in order to view the topic in a new context and generate responses.

For homework, students complete the last three strategies in their journals.

Criteria includes:

1. Six personal analogies for each of the five direct analogy questions developed by the student for a total of thirty responses.
2. Ten symbolic analogies that represent compressed conflict related to the concentration topic.
3. Three fantasy analogies based on innovative viewpoint that helps the student see the concentration topic in a new context.

**Day Three**

Students provide feedback and alternate ideas to the other students regarding their synectics analogies developed from the homework assignment.

Students discuss with the instructor the results of applying the synectics strategies to their concentration subject.

As homework, students develop a list of at least twenty ideas, based on the analogies generated through the use of synectics strategies, which may form the basis of imagery for their concentration topic.

**Closure/Review**

Through small group conference and questions, students will analyze the effect of
applying the synectics process to their concentration subject. Students may answer questions related to:

1. *How do you feel that using the synectics process helped you generate divergent ideas for your concentration subject?*

2. *What kind of helpful feedback from members in your group?*

3. *Do you feel you more successful on your own or within the group developing analogies?*

4. *How will synectics help you with other areas where you need to come up with ideas or solve problems in more creative ways?*

5. *What do you think would improve the process or make it easier for you?*

**Assessment**

**Assessment Questions:**

1. *Did students generate at least thirty varied responses using direct analogy related to their concentration topic?*

2. *Did students develop a minimum of five questions that relate the direct analogies generated to the concentration topic?*

3. *Did students generate at least six personal analogies for each of the five direct analogy questions developed?*

4. *Did students create a minimum of ten symbolic analogies based on compressed conflict related to their concentration topic?*

5. *Did students create at least three fantasy analogies related to their concentration topic?*
6. Did students create an imagery idealist of at least twenty for their concentration topic based on analogies generated using synectics strategies?

Assessment Instrument

Name ________________________________ Date _______________

**Synectics Rubric**

Standard: Students generate multiple and varied ideas for their concentration topic with synectics strategies.

<table>
<thead>
<tr>
<th>Category</th>
<th>Advanced 20-18</th>
<th>Proficient 17-16</th>
<th>Emerging 15-14</th>
<th>Unsatisfactory 13-0</th>
<th>Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Analogy</strong>&lt;br&gt;Criteria: mind map a minimum of 30 direct analogies (metaphorical comparison between two things or concepts) related to student’s concentration topic. Develop 5 questions that relate the direct analogies to the topic.</td>
<td>Student has created an excellent mind map and questions that demonstrate an exceptional level of divergent and original thought based on the criteria.</td>
<td>Student has created an above average mind map and questions that demonstrate a good level of divergent and original thought based on the criteria.</td>
<td>Student has created an average mind map and questions that demonstrate an ordinary level of divergent and original thought based on the criteria.</td>
<td>Student has created a substandard mind map and few to no questions that demonstrate a limited level of divergent and original thought based on the criteria.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td><strong>Personal Analogy</strong>&lt;br&gt;Criteria: From the 5 direct analogy questions, create a minimum of 6 personal analogies (empathetic identification with an object or thing) for each.</td>
<td>Student has created excellent responses for the personal analogies that demonstrate an exceptional level of divergent and original thought based on the criteria.</td>
<td>Student has created above average responses for the personal analogies that demonstrate a good level of divergent and original thought based on the criteria.</td>
<td>Student has created average responses for the personal analogies that demonstrate an ordinary level of divergent and original thought based on the criteria.</td>
<td>Student has created below average responses for the personal analogies that demonstrate a limited level of divergent and original thought based on the criteria.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td><strong>Symbolic Analogy</strong>&lt;br&gt;Criteria: create a minimum of 10 symbolic analogies (compressed conflict in the form of a poetic, two-word description) related to the concentration topic.</td>
<td>Student has created excellent responses for the symbolic analogies that demonstrate an exceptional level of divergent and original thought based on the criteria.</td>
<td>Student has created above average responses for the symbolic analogies that demonstrate a good level of divergent and original thought based on the criteria.</td>
<td>Student has created average responses for the symbolic analogies that demonstrate an ordinary level of divergent and original thought based on the criteria.</td>
<td>Student has created below average responses for the symbolic analogies that demonstrate a limited level of divergent and original thought based on the criteria.</td>
<td>Student Teacher</td>
</tr>
</tbody>
</table>
Fantasy Analogy
Criteria: create a minimum of 3 fantasy analogies (represented by a wish or an ideal) related to the concentration topic.

<table>
<thead>
<tr>
<th>Student</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student has created excellent responses for the fantasy analogies that demonstrate an exceptional level of divergent and original thought based on the criteria.</td>
<td>Imagery ideas are highly creative and exceptional in their diverse thought.</td>
</tr>
<tr>
<td>Student has created average responses for the fantasy analogies that demonstrate a good level of divergent and original thought based on the criteria.</td>
<td>Imagery ideas are average in creativity and diverse thought.</td>
</tr>
<tr>
<td>Student has created below average responses for the fantasy analogies that demonstrate a limited level of divergent and original thought based on the criteria.</td>
<td>Imagery ideas are below average in creativity and linear in thought.</td>
</tr>
</tbody>
</table>

Imagery Idealist
Developed from analogies generated using synectics strategies
Criteria: Minimum list of 20 ideas.

<table>
<thead>
<tr>
<th>Student</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Student has created excellent responses for the fantasy analogies that demonstrate an exceptional level of divergent and original thought based on the criteria.</td>
<td>Imagery ideas are highly creative and exceptional in their diverse thought.</td>
</tr>
<tr>
<td>Student has created average responses for the fantasy analogies that demonstrate a good level of divergent and original thought based on the criteria.</td>
<td>Imagery ideas are average in creativity and diverse thought.</td>
</tr>
<tr>
<td>Student has created below average responses for the fantasy analogies that demonstrate a limited level of divergent and original thought based on the criteria.</td>
<td>Imagery ideas are below average in creativity and linear in thought.</td>
</tr>
</tbody>
</table>

Teaching Reflection for Lesson Four
This lesson allows students to develop varied solutions centered on the concentration topic that emerged from the brainstorming lesson. It is however, a difficult concept for students to understand and may require additional examples and practice.

Lesson Five
SCAMPERing for Ideas

Grade Level: Advanced Placement Studio Art, Drawing Portfolio, Grades 10-12

Designer: Bonnie Lovell

Overview/Concept: Robert Eberle developed a technique called “SCAMPER” for alternate idea generation based on Alex Osborn’s idea generating list in his book *Applied Imagination*. “Scamper” is an acronym for a list of active verbs that can be used to stimulate new ideas or think differently about a subject. It is most useful for students when they are running out of ideas or who are stuck. Bloom’s Taxonomy: Students will use synthesis develop divergent ideas related to their concentration topic.
QCC Standards:

- Applies higher-order thinking skills (e.g., nuanced judgment, tolerance of ambiguity, complex thinking, finding structure in apparent disorder) in the creation of multiple solutions to drawing problems and discusses their transfer to real life and work force situations. *QCC D.3*
- Applies concepts and ideas from other disciplines and their topics as sources of ideas for own artwork. *QCC D.11*
- Begins to develop and describe artistic voice (own style, approach to art, and personal messages to communicate). *QCC D.18*

Specific Objectives:

- Students will formulate a minimum of four questions for each of the seven SCAMPER verbs that are related to their individual concentration topic.
- Students will generate a minimum of two responses to the questions formulated to facilitate their creative thought related to their chosen concentration topic.
- Students will formulate a minimum of three questions that address personal style and/or message and generate a response for each.

Sample: Example of a concentration idea that has been SCAMPERed.

Resources:

Text: SCAMPER; Games for Imagination Development by Robert F. Eberle

Visual Images: PowerPoint presentation on How to SCAMPER
Introduction/Motivation:

Sometimes it is really tough to come up with new ideas for your concentration.

Sometimes you just get stuck in one place and can’t seem to get beyond that point.

Today, you will learn a technique that will help you expand you ideas called SCAMPER.

Scamper is an acronym or mnemonic for the action verbs: substitute, combine, adapt,
modify, put to other uses, eliminate, and rearrange. It is a checklist to get your creative
juices flowing again. With this technique, you take your concentration idea and apply
these verbs to create alternative ways of thinking about your topic. By asking SCAMPER
questions you will challenge your current way of thinking. You can try this technique on
your own or with a partner. For example:

Substitute

Take your subject/idea and ask; what can you substitute? What can be used instead? Who
else instead? What other images? Other materials? Other processes? Other places? Other
approaches? Ask yourself: Instead of ... I can ...

Combine

What can you combine or bring together somehow? How about a collage of images?
What materials, features, processes, people, products or components can I combine?
Ask yourself; I can bring together ... and ... to ...

Adapt

What can you adapt for use as a solution? What else is like this? What other idea does
this suggest? Does the past offer a parallel? What could I copy? Who could I emulate?
What part of the idea/subject could I change? And in exchange for what? What if I were to
change the characteristics of a component? Ask yourself; I can adapt ... in this way ... to ... 

*Modify*


*Put to other uses or purposes*

How can you put the idea to different or another use or purpose? New ways to see it? Other uses if it is modified? Ask yourself; I can re-use ... in this way ... by ...

*Eliminate*

What can you eliminate? What can be removed? Think of what might happen if you eliminated various parts. Ask yourself; I can eliminate ... by ...

*Rearrange*

What can be rearranged in some way? Interchange components? Other patterns? Other designs? What about the order or sequence? Transpose images? Reverse images? What about different angles? Ask yourself; I can rearrange ... like this ... such that ...

*Content Paper:*

PowerPoint presentation on How to SCAMPER
Instructor’s Procedures:

Day One

Present PowerPoint on How to SCAMPER

Discuss with students the teacher example of a SCAMPERed idea suitable for a concentration.

Ask students for feedback and questions related to their thoughts on the SCAMPER technique.

Ask students to provide an idea for a concentration that they will SCAMPER as a group.

Day Two

Review basic concepts related to the SCAMPER technique.

Cooperative learning is implemented by dividing the class into small groups of three to four students.

Assign each group a SCAMPER verb to develop a minimum of four questions related to the class developed concentration subject.

Ask groups to trade questions with another group of students.

Ask students in one group to develop a minimum of four responses to the questions generated by another group related to the assigned SCAMPER verb.

Ask each group will present their responses to the questions another group developed.

Ask students, other than those in the presenting group, to interact, and provide alternative questions and responses.

Ask students to complete their individual SCAMPER on their concentration subject as homework that includes developing a minimum of four questions for each of the seven
SCAMPER terms with a minimum of two responses to each of the four questions.

Ask students to develop a minimum of three questions that address personal style and/or message.

**Day Three**

Assign partners to students for cooperative learning and sharing of SCAMPER ideas.

Ask each student to provide feedback to the other student regarding his or her SCAMPER ideas developed from the homework assignment.

Discuss with students in their groups the results of their applying the SCAMPER technique to their concentration subject.

**Materials and Materials Management:**

- Visual Verbal Journals
- Pens and/or pencils

Materials are distributed to students at the beginning of the semester.

**Student Procedures:**

**Day One**

Students view PowerPoint on How to SCAMPER

Students discuss and analyze the teacher example of a SCAMPERED concentration subject.

Students develop a concentration subject idea with which to group SCAMPER as a class.

Students divide into small groups and develop a minimum of four question related to their assigned SCAMPER verb about the subject.
Students trade questions with another group and provide a minimum of four responses to each question from that group.

Small groups present the SCAMPER questions developed by another group and their group responses to those questions.

Students, as a class, interact and provide alternate questions and responses to each group’s presentation.

Students complete their individual SCAMPER on their concentration subject as homework developing a minimum of four questions for each of the seven SCAMPER terms with a minimum of two responses to each of the four questions.

Students develop a minimum of three questions that address personal style and/or message.

**Day Two**

Students work with a partner to feedback to each other in an effort to further develop concentration ideas.

Students discuss with the instructor the results of their applying the SCAMPER technique to their concentration subject.

**Closure/Review**

Through small group conference and questions, students will analyze the effect of applying the SCAMPER technique to their concentration subject. Students may answer questions related to:

1. *Do you feel that using SCAMPER provided you with alternative approaches to your concentration subject?*
2. Were particular SCAMPER verbs more helpful than others?

3. Did you get helpful feedback working with a partner?

4. Do you feel SCAMPER would help you with other areas where you need to come up with ideas or solve problems?

5. What do you think would improve the process or make it easier for you?

Assessment:

Assessment Questions:

1. Did students formulate a minimum of four questions for each of the seven SCAMPER verbs that are related to their individual concentration topic?

2. Did students generate a minimum of two responses to the questions formulated to facilitate their creative thought related to their chosen concentration topic?

3. Did students formulate a minimum of three questions that address personal style and/or message and generate a response for each?

Assessment Instrument:

SCAMPER Evaluation

Name ___________________________________________ Date __________________

100 points total

Student  Teacher

_______  _______  1. Student has developed a minimum of four questions related to their concentration subject that explores the SCAMPER verb Substitute. (4 points)

_______  _______  2. Student has developed a minimum of four questions related to their concentration subject that explores the SCAMPER verb Combine. (4 points)
3. Student has developed a minimum of four questions related to their concentration subject that explores the SCAMPER verb **Adapt**. (4 points)

4. Student has developed a minimum of four questions related to their concentration subject that explores the SCAMPER verb **Modify**. (4 points)

5. Student has developed a minimum of four questions related to their concentration subject that explores the SCAMPER verb **Put to other uses/purposes**. (4 points)

6. Student has developed a minimum of four questions related to their concentration subject that explores the SCAMPER verb **Eliminate**. (4 points)

7. Student has developed a minimum of four questions related to their concentration subject that explores the SCAMPER verb **Rearrange**. (4 points)

8. Student has provided a minimum of two response answers to each of the four questions based on the seven SCAMPER verbs. (56 points)

9. Student has developed a minimum of three questions that address personal style and/or message. (6 points)

10. Student has been an active participant in the discussion and exchange of ideas. Student has cooperated and given his or her partner feedback. Student has used class time wisely and completed the homework assignment on schedule. (10 points)

**TOTAL**

**Teaching Reflection for Lesson Five**

This lesson could be used in addition to the synectics lesson as time permits. Both lesson promote varied and unique solution while creative problem solving.
Lesson Six

Best of the Best

Grade Level: Advanced Placement Studio Art, Drawing Portfolio, Grades 10-12

Designer: Bonnie Lovell

Overview/Concept: After students have created many divergent ideas related to their concentration theme they must narrow the ideas to the ones with the greatest potential for production. This can be accomplished outlining specific criteria, which are important to the concentration, and rating each idea on a scale of one to four for each of the determined criteria. Bloom’s taxonomy: students will use analysis to outline the specific criteria important to their concentration and evaluation to judge the value of the ideas developed through applying brainstorming, synectics, and SCAMPER strategies.

QCC Standards:

- Analyzes the effect of subject matter, technique, and medium on the expressive quality of drawings. QCC D.12
- Evaluates, based on predetermined criteria, own performance and progress on skills and written and visual products. QCC D.15

Specific Objectives:

- Students will develop criteria related to their concentration topic that is relevant to evaluating the merit of ideas generated.
- Students will rate and evaluate previously generated ideas based on criteria determined to be relevant to their concentration topic.
• Student will select twelve ideas with which to develop imagery, plan, and produce artwork for concentration section of the Advanced Placement Drawing Portfolio.

• Student will plan production of the twelve concentration ideas by creating thumbnail sketches, evaluating appropriate media, and locating any needed reference material.

**Sample:** Teacher example

**Resources:** Creative Problem Solving: an Introduction by Donald J. Treffinger and Scott G. Isakson

**Introduction/Motivation:** Now that you have generated so many intriguing and promising ideas for implementing your concentration topic, it is important to narrow the list to the top twelve ideas that show the most potential. You will analyze and evaluate your ideas with an eye towards growth and exploration while developing a unified body of work for your concentration. You will develop specific criteria for evaluating and judging your ideas and then rate each one on a scale of one to four. This will be implemented by using a criterion matrix and adding up the resulting scores from the rating to determine the top rated ideas.

**Content Paper:** Handout and worksheet on criterion matrix

**Instructor’s Procedures:**

**Day One**

Present example of criterion matrix to students
Discuss with students how to select criteria related to their concentration topic such as degree of difficulty, time required, availability of reference material, novelty or uniqueness, degree of growth or evolution, or others.

Demonstrate to students how to set up the worksheet with the criteria on the top and the ideas lists on the left side.

Demonstrate to students that they evaluate each idea on a numerical rating scale of 1 to 4 (1= poor, 2= average, 3= good, 4= excellent).

Ask students to assess all of their on the first criteria before assessing the second and subsequent criteria.

When students have applied all the criteria to all the ideas, ask students to tabulate their scores for each idea in the total column on the right.

Explain to students that the twelve ideas with highest scores represent their final idea selection list for their concentration.

Explain that if a tie occurs for the lower scoring ideas, students will develop a chart in which they list the pluses, potentials, and concerns for each of the ideas to further evaluate and judge the ideas merit.

Explain to students that if the evaluation is not completed in class, it should be finished for homework.

Days Two and Three

Now that students have developed their list of concentration ideas, ask students to create thumbnail sketches (3½” x 5 ½”) for each of the twelve ideas. Sketches should concentrate on composition, value, and communication of idea.
Ask students to **analyze** sketches in terms of appropriate media and needed reference material.

**Discuss** with students on an individual basis their sketches and production plans.

**Materials and Materials Management:**

- Criterion Matrix handout distributed by instructor.
- Visual Verbal Journals distributed to students at the beginning of the semester.
- Pens and/or pencils distributed to students at the beginning of the semester.

**Student Procedures:**

Students select criteria related to their concentration topic such as degree of difficulty, time required, availability of reference material, novelty or uniqueness, degree of growth or evolution, or others.

Students set up the worksheet with the criteria on the top and the ideas lists on the left side.

Students evaluate each idea on a numerical rating scale of 1 to 4 (1= poor, 2= average, 3= good, 4= excellent).

Students assess all of their on the first criteria before assessing the second and subsequent criteria.

Students tabulate their scores for each idea in the total column on the right after they have applied all the criteria to all the ideas.

Students list the twelve ideas with highest scores to represent their final idea selections for their concentration.
If a tie occurs for the lower scoring ideas, students develop a chart in which they list the pluses, potentials, and concerns for each of the ideas to further evaluate and judge the ideas merit.

If the evaluation is not completed in class, students finished it for homework.

**Days Two and Three**

From their list of twelve concentration ideas, students create thumbnail sketches (3½” x 5 ½”) for each of the ideas. Within the sketches, students concentrate on composition, value, and communication of idea.

Students analyze sketches in terms of appropriate media and needed reference material.

Students discuss with instructor, on an individual basis, their sketches and production plans.

**Closure/Review**

Through individual conference and questions, discuss with students the results of applying the criterion matrix to their concentration ideas and the subsequent development of thumbnail sketches. Students may answer questions related to:

1. *Do you feel that that using the criterion matrix helped you narrow the ideas for your concentration subject?*

2. *What do you think would improve the process or make it easier for you?*

3. *Are you satisfied with your sketches in terms of composition, value development and communication of idea?*

4. *Is there anything you would like to change or sketches you feel need reworking?*

5. *Are you satisfied with the medium you have selected?*
6. What reference material have you located? Do you foresee any problems in finding any additional reference material required?

Assessment

Assessment Questions:

1. Did students develop criteria related to their concentration topic that is relevant to evaluating the merit of ideas generated?

2. Did students rate and evaluate previously generated ideas based on criteria determined to be relevant to their concentration topic?

3. Did students select twelve ideas with which to develop imagery, plan, and produce artwork for concentration section of the Advanced Placement Drawing Portfolio?

4. Did students plan production of the twelve concentration ideas by creating thumbnail sketches, evaluating appropriate media, and locating any needed reference material?

Assessment Instrument

Name ____________________________________________ Date ________________

Best of the Best Rubric

Standard: Students analyze and evaluate ideas related to a concentration topic based on specific criteria.
<table>
<thead>
<tr>
<th>Category</th>
<th>Advanced 20-18</th>
<th>Proficient 17-16</th>
<th>Emerging 15-14</th>
<th>Unsatisfactory 13-0</th>
<th>Points Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration Criteria</strong></td>
<td>Student has created at least five excellent criteria categories for his/her topic. Categories do an outstanding job of analyzing the critical needs of the student’s topic.</td>
<td>Student has created at least five above average criteria categories for his/her topic. Categories do a good job of analyzing the critical needs of the student’s topic.</td>
<td>Student has created at least five average criteria categories for his/her topic. Categories do an adequate job of analyzing the critical needs of the student’s topic.</td>
<td>Student has created at below average or fewer than five criteria categories for his/her topic. Categories do a poor job of analyzing the critical needs of the student’s topic.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td><strong>Criterion Matrix</strong></td>
<td>Student has created an excellent matrix for the rating of concentration ideas. Evaluation of ideas has been extremely well done, thoughtful, and remained consistent throughout.</td>
<td>Student has created an above average matrix for the rating of concentration ideas. Evaluation of ideas has been well done, thoughtful, and remained consistent throughout.</td>
<td>Student has created an average matrix for the rating of concentration ideas. Evaluation of ideas has been adequate, there is evidence of some thought and consistency throughout.</td>
<td>Student has created a below average matrix for the rating of concentration ideas. Evaluation of ideas has inadequate, there is little evidence of some thought and consistency throughout.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td><strong>Idea Selection</strong></td>
<td>Student has selected twelve excellent ideas that demonstrate an exceptional level of divergent and original thought and reflect a high level of development and evolution.</td>
<td>Student has selected twelve above average ideas that demonstrate a good level of divergent and original thought and reflect an above average level of development and evolution.</td>
<td>Student has selected twelve average ideas that demonstrate a moderate level of divergent and original thought and reflect a limited level of development and evolution.</td>
<td>Student has selected twelve below average ideas that demonstrate a poor level of divergent and original thought. Ideas need to be reevaluated.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td><strong>Idea Planning</strong></td>
<td>Student has created twelve outstanding thumbnail sketches for the ideas selected. Sketches show exceptional development of idea and composition.</td>
<td>Student has created twelve above average thumbnail sketches for the ideas selected. Sketches show good development of idea and composition.</td>
<td>Student has created twelve average thumbnail sketches for the ideas selected. Sketches show typical/ordinary development of idea and composition.</td>
<td>Student has created twelve below average thumbnail sketches for the ideas selected. Sketches show little or development of idea and composition.</td>
<td>Student Teacher</td>
</tr>
<tr>
<td><strong>Media Evaluation and Reference Acquisition</strong></td>
<td>Student has done an excellent job in analyzing the appropriate media and obtaining reference material needed.</td>
<td>Student has done an above average job in analyzing the appropriate media and obtaining reference material needed.</td>
<td>Student has done an average job in analyzing the appropriate media and obtaining reference material needed.</td>
<td>Student has done a below average job in analyzing the appropriate media and obtaining reference material needed.</td>
<td>Student Teacher</td>
</tr>
</tbody>
</table>
Reflections on Teaching Lesson Six

This is where the students have an opportunity to select their best twelve ideas. It doesn’t mean they discard the unused ideas. But by putting them aside, students can focus on and pursue the ones that show the most promise for development into a work of art. The unused ideas may be revisited if any of the initial ideas are deemed unworthy.
Chapter Five

Conclusions, Implications, and Recommendations for Further Research

This thesis originated from a perceived need to provide teachers and students with a foundational direction for the development of the concentration section of the Advanced Placement Studio Art curriculum. It also grew from my personal experiences teaching Advanced Placement art and my struggles with creativity and idea generation within my own artwork. The success of these lessons is directly related to the time and energy invested by both the student and the teacher. Some students found the techniques difficult to apply or not particularly pertinent to their topic but others found them extremely helpful. This may have been a result of lack of understanding or time investment. However, with additional practice, I feel the majority of students would have found these strategies beneficial.

The curriculum offers six lessons in which lessons four or five may be eliminated if time constraints are a problem. However, for maximum idea generation, it is suggested that all lessons be utilized. Lessons three, four, and five present specific creative strategies that may be reintroduced any time a student develops a mental roadblock. Due to the time constraints represented within the production of the portfolio, other suggestions include presenting these lessons prior to the summer before the Advanced Placement year. Because Advanced Placement Studio teachers almost always require some summer work, it may be advantageous to introduce these lessons prior to that work. This could be in the form of after school sessions or possibly a pre-AP course during the year prior to the actual Advanced Placement course.
The creative strategies for generating ideas around which these lessons were
developed are by no means the only ones available to both teachers and students, but
represent, in this author’s view, the most productive and reliable methodologies in terms
of results. As with any curriculum, the lessons present basic concepts that may be
interpreted by individual teachers to meet the specific needs of their students.

These strategies are rooted in creative problem solving that can be applied to
other areas of instruction where varied and imaginative responses are required. This
could lead to further research as to the transferability of these methodologies by the
students to other areas.
References


Osborn, Alex (1951). *Your Creative Power; How to Use Imagination*, New York, Charles Scribner’s Sons


Torrance, E. Paul (1969). *Creativity.* California, Dimensions


Appendix A

Idea Generation Through Synectics

Synectics comes from the Greek word *synectikos*, which means “bring different things into a unified connection”. Creative thought and ideas are based on making new or unusual connections between seemingly unlike things. This is the basis of synectics; to make the “familiar strange” and the “strange familiar”. It involves discovering links that unite seemingly disconnected elements. By mentally taking things apart and then putting them back together in new ways you will discover new, fresh, and unique ways to view your concentration topic.

Synectics was developed by William J.J. Gordon and is based on some fundamental concepts:
1. Encouragement in the ability to tolerate complexity and apparent contradiction.
2. Utilization of mechanisms that stimulate new thought and ideas through divergent thinking.
3. Analogical and metaphorical connections.

So let’s get started…

**Step 1**: Write a short paragraph that describes your concentration topic. Include characteristics, uses, sources, or anything else that you feel is relevant to its description.

**Step 2**: Summarize your paragraph into one sentence.

**Step 3**: Create direct analogies. A direct analogy makes comparisons between two things. Generate at least thirty of these based on your topic sentence. Use a mind map in your journal to help you discover new connections.

**Step 4**: Develop five questions that relate the direct analogies created to your topic.

**Step 5**: Create personal analogies from the questions related to the direct analogies. Personal analogies require you to “become” the object and describe how it would feel to be that object. Create six personal analogies for each of the five questions.

**Step 6**: From the personal analogies, develop 10 symbolic analogies that relate back to the concentration topic. A symbolic analogy is represented by a conflict; a pairing that does not seem logical.

**Step 7**: Create three fantasy analogies that represent the ideal or an innovative viewpoint that allows you to view your topic in a new context.

Use your visual journal for each step.
Appendix B

What is Mind Mapping?

Description
Mind Mapping is a tool and learning technique of visually arranging ideas and their interconnections. It can be used to graphically arrange the linkages of central topic with new ideas and connections into memorable treelike diagrams.

A mind map always starts from some problem or idea, which is positioned in the center. Typically it contains words, short phrases, and pictures, which are connected to the central idea by lines.

You can use a mind map to organize your analogies related to your concentration topic.

Some Hints for the Mind Mapping Process
Position the main idea in the center; preferably a picture of it.
Use lots of space, so you can add things later.
Use colors and capitals where useful. Personalize the map.
Look for relationships.
Create sub centers for sub themes.
Appendix C

**Best of the Best Criterion Matrix**

Okay, now you have all these great ideas. Which ones are really best? You have generated so many intriguing and promising ideas for implementing your concentration topic. Some of your ideas have more potential for development than others. You have deferred major judgment in earlier idea generating sessions, now it is important to narrow your idealist to the top twelve ideas that show the most potential.

It’s not just a matter of deciding if they are good or bad; all ideas have strengths or weaknesses.

- You will analyze and evaluate your ideas with an eye towards growth and exploration while developing a unified body of work for your concentration.
- You will develop specific criteria for evaluating and judging your ideas
- You will use the criteria to develop categories
- You will rate each idea on a scale of one to four within the specific categories.
This will be implemented by using a criterion matrix and adding up the resulting scores from the rating to determine the top rated ideas.

**Getting Started**

Begin by writing down everything that you feel is important in the development and production of the artwork for your concentration. Some items might include: resources, materials, time, acceptance, interest level, and originality. Once you have developed your criteria list, form those into five main categories. List those on the slanted lines of the matrix at the top. List your ideas in the spaces on the left. You may need more than one matrix chart. Now, begin with the first category and rank each idea on a scale of one to four (1= poor, 2= average, 3= good, 4= excellent). Go through the entire idealist before moving on to the next category. When all the categories have been evaluated, add up your scores. Select the top twelve scores to proceed with. Try to be honest and objective in your assessment.

---

### Categories:

#### Criterion Matrix

率每个想法在一个尺度上的评分
1= poor, 2= average, 3= good, 4= excellent

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