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Studio Art

Beyond any foundational course, enrollment in an art course must be an agreed upon choice by both student and art teacher. I have taught in situations that lacked established course selection criteria that allowed unqualified, unskilled, and disinterested students to participate in advanced art classes. Any time disinterested students lacking visual intelligence enter an art course the result is always negative, causing class disruptions and limiting class production. Students entering an advanced course need to demonstrate interest through a portfolio of practiced work or a record of visual achievement in a foundation course. Enrollment in art classes must be based on the quality of the visual intelligence of the students rather than on requirements administrators feel are necessary to conduct an art class. High level visual learning, production, and achievement can only be attained by students with the correct cognitive profile of the visual learner or interested student. In my current teaching position, I have continually proven that a few qualified students produce more quality work than what can be achieved in larger classes filled with unqualified students.

The Studio Art course I currently teach is much like the art courses I have taught elsewhere. It is an island detached from the sustained linear learning that one is accustomed to finding in structured academic courses. Not much can be done with isolated learning structures other than creating highly successful experiential-based projects that over-direct the limited knowledge and abilities of the participating students.   The students' success in this type of program rests on the knowledge of the instructor; the students will never develop the knowledge and skill to be successful in producing their own unassisted artwork.

What is necessary for students to be successful in any of the arts is directed, sustained practice. To learn to play a musical instrument and to become a professional musician one must practice several hours every day in a linear progression program designed for learning. The same is true for the visual arts: most visual art students 'practice time is grossly inadequate, causing them to remain visually illiterate in both their own production skills and the knowledge of art and art history.

The typical studio art course is designed for failure, not by the instructor, but by the learning institution that fails to provide the same learning structure it affords its successful standard academic courses. If there is not an established and sustained linear progression of courses that span the entire student's enrollment, then learning will be sporadic, causing knowledge to be compartmentalized and isolated.

In my current teaching position, students receive instruction in a foundation course in their freshman year and return for a Studio Art course two years later in their senior year. What little skill they had developed in their freshman year completely erodes during the time lapse and they enter an advanced course with little to no skill or knowledge. In the remaining 180 days of a senior's instructional time, it is pointless to attempt to teach a complex notation system that takes years to assimilate and understand. In this situation, the art instructor must compromise and accept the only option given by the institution that unfortunately views art as a talent-based, recreational, and extracurricular activity. Learning is set aside for project-based, experiential activities that allow students to complete projects with limited transferable skills and knowledge for production beyond the assigned project. Through project design, students can be made to look like good and knowledgeable artists without the sustainable skills and

knowledge necessary to be one. Lesson plans can be written with the appearance of objectives fully achieved without the occurrence of learning. Their learning failure, caused by the learning practices of the project-based studio programs, are easily visible by having the students demonstrate their skill and knowledge through unassisted production that usually falls below the false skill and knowledge level shown in the carefully designed project lessons. The appearance of studio art program successes is based upon the skill and knowledge of the instructor and the instructor's ability to problem solve and manipulate unskilled students to a successful project outcome.   Without the learning bridge of time and practice, the studio course remains a remote island program of project-based visual art experiences that are impossible to plan for, not knowing the number, skill, and knowledge level of the participating students from year to year.   The studio art program allows students, for an abbreviated time, to get a glimpse into what it is to work within the domain discipline of the fine arts without the knowledge and practiced learning required to be successful in the visual arts.

Once Studio Art is accepted as an isolated program separated from scholastic learning, it should be allowed to evolve into a distinct learning experience that is separate from the standards of the scholastic institution. Scholastic institutions operate using a linear logical intelligence system that demands compliance and subservience to the rules of thought governed by the use of the language symbol system. Visual art operates with a distinctively different visual symbol system that often requires a more open, non-linear thinking process with very different, divergent rules that require different learning practices.

As a teacher, I am expected to operate using the language symbol system to justify a visual production learning system. I am expected to make the visual learning process comply with the standard scholastic institution's language symbol operating system. I am required to translate what can be visibly seen into a different logic system of what can be read. The cumbersome effect of mediating these two symbol systems causes the type of confusion that justifies and allows failure in visual program learning. Learning, to be justified, must be objectified with established predetermined goals and outcomes in a manner accustomed to academic scholastic learning in language, math, history, and science. Art teachers are evaluated by their usage of the scholastic institution's language-based operating system and not by the visual symbol system they were contracted to teach.

 I have a picture I keep on my classroom bulletin board that will add some clarity to the incompatibility of the two symbol systems. The picture is of two high school students standing in front of an art display of their seascape paintings. What is wrong with the picture is their artwork is indistinguishable from any 6th grader's work. The visual image of the paintings indicates the outcome is not age-appropriate and that no knowledge of subject or production skill techniques was learned.   The art teacher, in this case, did not have sufficient knowledge of the visual symbol and notational system necessary to teach visual art. What the instructor did have was the knowledge to justify and objectify their limited visual teaching knowledge through the use of the scholastic institution's language symbol operating system. The teacher was able to use the language symbol system to keep their job for many years.

I also have met an art instructor who had been teaching for many years and still did not know how to correct students' portraiture work. If math teachers could not correct students' work they would be fired rather quickly. If an art teacher cannot correct a student's work, nobody notices because it is believed to be based in talent, not knowledge. If a high school student produces a sixth-grade level

landscape, it is assumed the student lacks talent, rather than the knowledge that art instructor was responsible for teaching them.

If visual art programming is inadequately structured for sustained learning, then the mediating correspondence of scholastic language, such as objectified lessons, should be severed, allowing the program to develop into an independent learning experience without learning expectations.

A requirement of teaching is the construction of course outlines with corresponding lesson planning. This entails the usage of descriptive words projecting preconceived goals and outcomes that in visual art form limitations in learning. In most scholastic courses there often is just one correct learning process leading to a single correct answer, but in the visual arts the process isn't always linear and its derailment often leads to greater learning and skill development.

Course outlines with their Roman numerals, numbers, bullets and declarations that students will learn, will perform, will know and will…… has the potential to work when applied to a predictable learning process. However, it will not work well within the unpredictable and unsustainable non-linear learning limitations and structures of studio art programs, due to the wide ranging skills and knowledge of incoming students.

What I offer is a different kind of outline, one that reduces word structures that create artificial predetermined boundaries and learning expectations. The origins of my ideas presented are from Friedrich Holderlin's poetry, Martin Heidegger's elucidations of Holderlin's poetry, and Paul Klee's journal *The Thinking Eye*.   Essentially, I am using their ideas to transform a closed structure into a flexible open structure. What are to be gained are not objective goals but what Heidegger terms a learning journey or thinking experience. I simply cannot teach my students about art, given their limitations; but with this system of search I can teach them, or more accurately, help them learn something about themselves and about the thinking and creative process. It is a process that leaves them open to ideas rather than closed by preconceived solutions and outcomes.

I am an admirer of Paul Klee's intellect and of his often sublime artworks. He also taught at the Bauhaus and had much to say about the learning process, or what Heidegger would refer to as the learning journey, which is free from the learning restriction of systemized education.   Klee's essentials for success in the arts are stated as follows:

- "Never work with a preconceived final image in mind."

- "Draw upon those parts of the creative process which are carried on, largely in the subconscious, while the work is taking form."
- "To learn the free use of one's own possibilities means to devote oneself more and more exclusively to being open for that which is assigned, to be alert to what is coming."
- "Man is not finished. One must be ready to develop, open to change; and in one's life an exalted child, a child of creation, of the Creator."
- "Will and discipline are everything and you must dedicate everything to the task at hand."
- "Art does not reproduce the visible. It makes the visible."

Most of the above list from Klee corresponds well with the creative ideas of Holderlin and Heidegger. The main concept is that one must remain open to possibilities and not closed to preconceptions. The process requires the artist to be fully attentive in the dream-like subconscious state where non-linear

thinking occurs and new solutions can be found. The process of making art becomes an inner intuitive experience, a responsive thinking experience, and a learning experience, or journey of self.

It is impossible to determine what can be learned by students of such limited experience and knowledge of visual art. Neither is it possible to preconceive what a student can or will accomplish, and so the goal is to remain open and respond to the process rather than rely on the preconception and misconceptions of course outlines and planned objectives. What are required are lessons reduced to this simple formula: (1) known starting point, (2) production process, and (3) unknown stopping point. Learning is the product of change, caused by the process of progressing from the known to the unknown, and what is gained is not a product but the learning and creative process necessary to make art. The process of making art must always begin without borders, boundaries, or preconceptions.

I had a friend who was an exceptional painter and had reached a point where he would begin paintings, but never finish them. His explanation was, "What is the point, I know what they are going to look like when they are finished." The sad fact is that he was painting within a closed system of predetermined outcomes and was not open to the dialog a work of art demands to remain in a creative learning process. For me, painting is about the process, not the product. At the start of each work, I never know what my paintings will look like and that remains to be true up until the very end of the painting. This gives truth to the statement that the painting paints itself, musical instruments play musicians, and books write themselves. The visual learning and creative process is not a product belonging to the scholastic institutions' language-based symbol system learning structure and should be allowed to function within its own visual learning structure that supports the visual symbol system.

Cubist Guitar
To put the learning equation into practice, the course begins with an existing idea in the form of a work of art that becomes the stimulus to initiate a student response. Because most high school students have a limited knowledge of art history, materials, and techniques, they are unable to form any preconceived outcomes in their mind. Their lack of knowledge puts them in a position of uncertainty, which is the ideal learning condition for the students and myself to begin the project. Even though I am presenting them with a visual idea or concept, it must not be connected to a pre-determined project outcome. In order to work effectively and in learning partnership with the students, I have to be open to all possibilities. Objectives are preconceptions that become learning limitations in a project-based curriculum.

A thinking model I can use for this type of structured assignment is musician composer John Cage's random chance organization, which he used in his own work. In his method there is a list of possibilities that are thrown together to be assembled by random chance selection to form a work of art that can be continually restructured and reformed by chance associations of the selected parts. One work has innumerable possibilities and the potential for self-renewal.

I like Cage's ideas of chance, but I also like the idea of interacting and responding to what develops through the initial chance associations. Cage seems willing to allow chance occurrences to completely form his work. In one sense, this is recognition that every event, occurrence, and association in life happens by chance, rendering his work a reflection of that life process. So Cage's chance work is a little like conceptual artist Bruce Nauman's concept that art, like life, is the unknowing self in confrontation with the unknown. The intended result is that his work is as unpredictable as life experiences. Cage is using random chance as a rigid structure to create what is unpredictable.

The assignment begins by showing the students a picture of Picasso's cubist guitar construction that is presented to the class as the thinking model of "what is" known in the assignment. Picasso's cardboard and string guitar construction is compared and contrasted to an actual guitar in the classroom so students can see how Picasso used the visual elements of a guitar in his multi-planed construction.

After viewing Picasso's thinking model and guitar the students are given a box and are instructed to cut the box so that all the planes are connected by at least one side. They are informed and become aware that the guitar shapes they cut out are negative shapes; what remains are positive shapes, and both must be used in their construction. After the start of the project, students are allowed to cut and separate the adjoining planes of the boxes and use additional materials. The adjoined sides of the box make it easier for the students to release any preconceived ideas they might have had stemming from the models of the guitar and Picasso's construction. The students' sculptures are a culmination of chance elements becoming visible and known through the construction process.

The newly constructed sculptures become the "known," and will be the starting point for the

"unknown" in the next assignment. Below are a few of the examples of the students' sculptures.
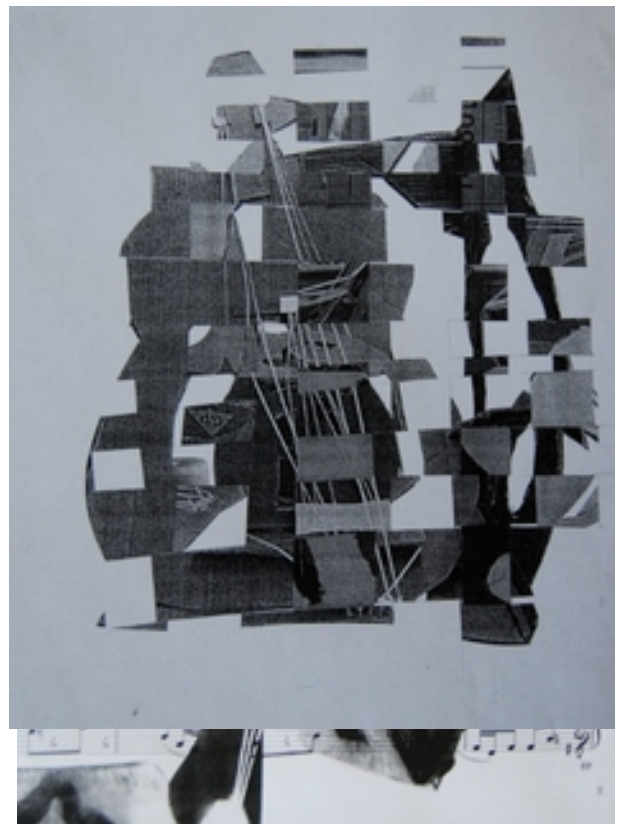
The sculptures were photographed from multiple angles to be printed and photocopied at different scales and set aside to be used later. To finish their sculptures, students are shown cubist paintings by Gris, Picasso, and Braque, to assist them with understanding painting to be something other than flatly coloring a surface area. The students were encouraged to be painterly and mix paint directly on the surface of the sculpture. Below are examples student's painted sculptures.

After the guitar sculptures are painted, the students return to the photographs of the unpainted sculptures that were printed and photocopied at different scales and given to the students to cut and assemble as collages. The process is that of chance relationships between the predetermined imagery of their sculpture and their interaction and reactions occurring during the collage construction process that will create an outcome that is inconceivable to the students. The idea for this assignment was in response to the students' sculptures and was not preplanned at the outset of the construction assignment. It was a reaction to the students' work, and seemed to be a logical next-step in an ongoing project.

 Below are some examples of the outcomes.

Each student made ten to twenty collages and then selected either one collage or elements of a few collages with which to construct a painting. Below are the painting compositions based on the guitar collages.

Below are a couple of comparrisons of student sculptures with completed paintings.

The final paintings are a product of a visual process that uses visual language to solve visual problems and arrive at unknown and unstated objectives. It was inconcievable at the start of the project that I could have assigned students with limited knowledge and ability to make a painting based upon a guitar and have students produce the results they had achieved. Their accomplishment was only possible through the learning journey in which they had participated. What the students learned in this process is impossible for anyone other than the individual student to determine. The lesson is the experience of working within the creative process of the visual arts. The purpose of the Studio Art course is to provide a memorable art experience for the students - that is the only outcome the course is capable of producing due to its isolation from sequential at instruction within the curriculum.

Hockney Chair
In the class of students that participated in the Hockney assignment, the drawing skills of most were very poor, and so the choice was to teach them drawing or teach them process. The students were all seniors and teaching them to draw would have been counter-productive because it was impractical to think that students would have practiced their drawing skills outside of class and impossible for any drawing skill improvement to occur in a three-hour-per-week class schedule. If they did manage to learn how to draw, they might quickly lose the skill after the completion of the course because none intended to become practicing artists. The only choice was teaching process.

The students are shown pictures of multi-viewed chairs created by artist David Hockney. Hockney describes his chairs as a walk around a chair, meaning he is trying to convey as much about the chair as possible through combining multiple views of the chair into one drawing or painting.

To bypass the students' drawing limitations and their preconceptions of what a chair drawing should be, I gave each student several photocopied images of a chair photographed from different views. The students were instructed to create a collage that would construct a multi-viewed chair, or as Hockney suggests, the memory of a walk around a chair. The students were instructed to fill the entire space, cut and paste images of the linoleum floor, and use cut newspaper to form the background wall.

Once the collage was complete, students were instructed to make a drawing of their collage on a larger sheet of paper and paint their drawings using complementary colors. Complementary colors are colors that are opposites on the color wheel. For example, blue and orange, red and green, and yellow and violet are complementary color opposites.

I have always had an interest in written word combined with visual image, and in particular, artist Robert Arneson's self-portrait, where words become part of the visual image. The beauty of the internet is that it is simple to initiate a search for poems about chairs and a number of poems will appear. The poems were printed and given to the students and they were instructed to integrate a chair poem into their painting. Since the students had invested so much time on their chair projects, they carefully read and selected their chair poem and deliberated on how best to integrate their poem into the painting.

The assignment, void of preconceptions, was allowed to grow, expand, and develop. Students were permitted to follow what developed in front of them and, once again, preconception was thwarted and each artwork flowed to the next.

Below are the examples of the chairs. For comparison, I am including the painting of the chair compositions to demonstrate that the paintings are unrestricted by the photocopy construction. It is

based on but allowed to become a painting different from the original. The constructed collage image flowing through the artist's mind finds the passageway into becoming a painting. The differences can be seen between the collages and paintings, and each is seemingly what it must be in the chosen media.

Creating the Matrix: Removing the Source and Object to Create Art

One of Leonardo da Vinci's main tenets or matrices used in drawing and composition states that everything must flow. This concept is particularly clear in the flowing lines of his nature drawing studies. I like to apply Leonardo's concept of flow to establishing a matrix that changes objective lesson planning into a process that flows freely from a source idea, through a learning experience, into a final product. To flow through the learning experience, the original source idea must be forgotten to discover the potential of the process that will lead to the many possibilities of the product.

The concept for the designed flow of the Matrix is derived from Martin Heidegger's philosophy that learning requires the forgetting of preconceptions in order to be to be open to a new learning experience. This is combined with Arthur Koestler's creative theory of bisociations where function is forgotten and replaced with possibilities through associations. Combined, these concepts create a learning journey that is open to possibilities.

The artist must not try to imagine or know what the work of art will be or of what materials it will be composed. The work can be viewed only as a material translation initiated by the original thought or Idea. Artists' thoughts and materials are two separate mediums and are incapable of achieving an identical outcome or product. Any preconception caused by the original thought will limit the search and discovery process, blinding students to the many possibilities the production materials inherently

possess. The students must be aware and conscious of only the flow of what transpires in front of them and respond only to what has just occurred, without thought to the previous or next response.   This process becomes the flow and repeats itself until the process produces a final outcome.
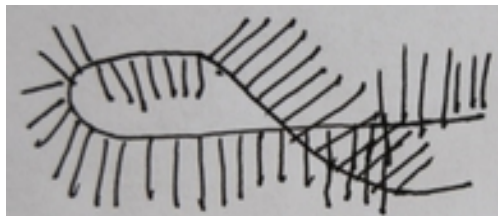
This is a process where students forget proper material usage and think only of how the materials can be used. It is a process where all materials and thoughts are transformed into art. The diverse materials used will maintain their separateness while forging a new unity, and the process of construction and deconstruction will complete the unity of the work of art. What is gained is an expanded visual thought vocabulary of unforeseen possibilities for art work production and a new matrix from which to work.

Klee/Still life

This assignment has two source ideas. The first is the still life below.

The second source was drawings from Klee's journal *The Thinking Eye*.   The drawing employed the idea of a contour line with perpendicular lines added to create patterns from lines, as illustrated below.

Students were assigned to do a multiple blind contour line drawing of the still life objects. A blind contour drawing is one in which the students are not permitted to look at their paper while drawing. They attempt to achieve hand-eye coordination while drawing. The drawing on the top left is an example of a multiple blind contour line drawing.

The students were to interpret the Klee drawings and apply them to their blind contour drawings. The students had a difficult time translating what Klee had done in his drawings to their own contour drawings. The translation difficulties were caused by the students' inability to abandon figurative object recognition and replace it with Klee's drawing concepts.

The drawing on the bottom left is an example of the application of Klee's drawing concept to the student's contour line drawing. When the combination of the student's contour and Klee's style of drawing proved unsuccessful, the student expanded their drawing by including a checkered pattern using what they perceived as Klee's style and technique of drawing.
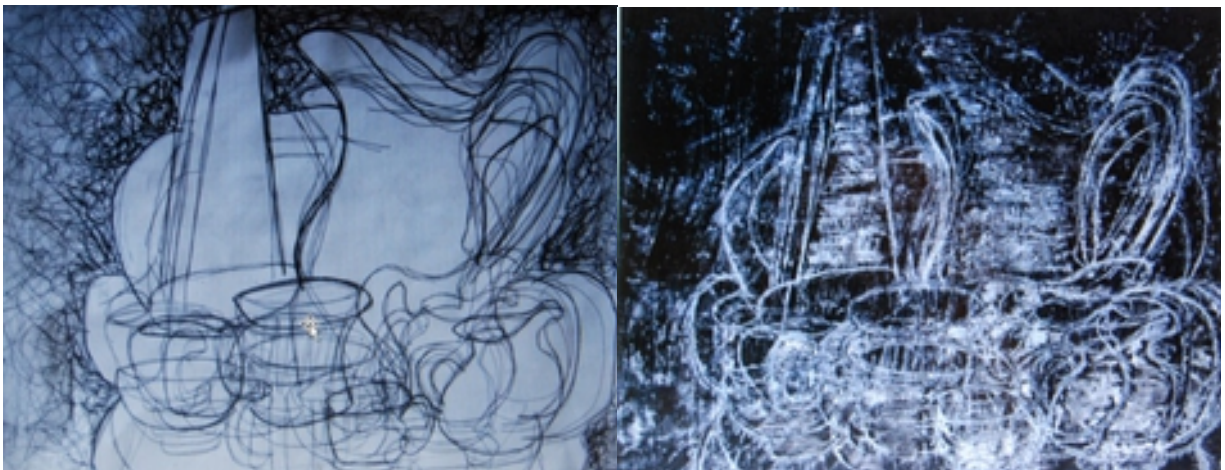
At this point, the student is unable to integrate the idea of the still life object and the contour drawing. It is simply a contour drawing with a strict but inaccurate interpretation of the Klee drawing, with a grid pattern to fill up negative space and hide compositional and drawing weaknesses.

After considerable exploration of various mixed media and collage methods producing several drawings, the student developed the drawing above. The mixed media collage has striking similarities to the first drawing, but in the above artwork the student achieved greater success in integrating the elements of her first drawing.

As the drawing above indicates, the student had a difficult time releasing her dependency on the grid as a compositional structure. To push her beyond the simple grid, I insisted that she keep adding and subtracting from the composition until I decided she could stop. In the end, it was the process of addition and subtraction that created a unity and coherence to her static grid formula.

The below left drawing is the multiple contour line drawing with a different twist on the Klee style drawing model. In the drawing below right, the student had little success in her initial drawing in black that was eventually scribbled over to become another interpretation of the Klee drawing model. The multiple blind-contour line drawings were added in white. In this drawing, the student destroyed one drawing to create another.

As a facilitator, it was my job to make available as much material as possible for the students to use in their multi-media collages. The students were to interact with and react to their artworks by sequentially adding or subtracting different material media. They continued the process of construction and deconstruction until a unity emerged and the work had a visual completeness that did not require any further additions or subtractions.

The students are not held to the limitations of the still life or the visual idea presented in Klee's drawing. The works are free to expand and to become unique records of visual thought. As can be seen in the displayed artwork, thoughts and material usage have taken the students in different directions with different outcomes.

An important part of the lesson is that the students always must be in the process of forgetting past solutions.   The process of forgetting then becomes the process of remaining open to the many possibilities that will present themselves in the course of the thinking experience of making a work of art.

Below are more examples of artworks created by the students using the described process.

The next step in the project was to remove line from a flat picture plane and make a three dimensional drawing. This involved using wire to complete a three-dimensional contour line drawing and casting hands to be involved in drawing or making the line sculpture. Below are the results in the first step of creating the sculptures.

The final step, which is shown below, was to create an installation that combined both processes of the students' sculpted hands with their two-dimensional multimedia still life artworks. These multimedia and sculpture assignments were all products of the single-source line drawing of Paul Klee.

In the beginning there were no lesson plans, no preconceptions, and no limitations on the learning process. It began as a response to the linear ideas presented by Klee. Students were not going to learn how to draw, paint, sculpt, or construct. They were going to learn the matrix of the creative process - how it begins at a starting point and leads them through a series of unplanned associations to arrive at an unknown product by material investigation.

As the instructor, it was my job to observe and interact with the students' investigative process by introducing new materials that would pose new visual and production problems to be solved. The end result of the assignment were products of the students' interpretation of the Klee drawings, arrived at through a process that seemed to be a logical response to the directions taken by the students' production of their artwork.

Pointillism: Teaching Color
When teaching traditional techniques to students with limited visual knowledge and visual intelligence, a model must be selected to help guide students to an outcome that will advance their production skills and visual learning beyond the limitations of their preconceptions. The model I chose for this assignment was the sea and landscape paintings of French impressionist painter Paul Signac. I used the paintings of Signac to teach color.

Professional artists have extensive knowledge of color, and there are many available resources on the application of color from artists' treaties, manifestos, and books on color theory and mixing. Color is far more complex and complicated to apply than form and drawing techniques. The complexity involved in the application of color is the reason why students have to master form and drawing skills before they can attempt color. If students cannot see and understand form in a monochromatic rendering, then it would be impossible for them to construct form from the much more deceptive color mediums. Color can be somewhat delicate and fragile, and if overworked due to lack of understanding of visual form and color, the painting will quickly digress into a murky, muddled mess. I have worked students through some horrific messes where every suggestion in response to the students' painting was so poorly applied that a solution often looked unattainable. The key to surviving this type of situation is never to allow the student to give up on the painting. Through the many layers of trial and error, a successful painting eventually will emerge and the students' knowledge of color will be substantially increased.

There is no place for a mistake to hide in a drawing because a drawing is always a skeletal structure that forms the substrate of all other art forms. Color, though more difficult to work with, is far more forgiving, and if handled properly, can hide many mistakes that would be unforgivable in a drawing. For example, in the portraiture work of Alice Neel and Vincent van Gogh, they sometimes get away with structural form murder because they are capable of visually seducing believability from the gullible viewer through their extraordinary use of color and composition.

The students, limited in drawing, composition, and color skills, are asked to select a Signac painting to reproduce on watercolor paper. The Impressionist painter Signac was selected because he applied colored paint to his canvas in the form of small dots in the painting technique known as pointillism. At a short distance away from the painting, the eye and brain of the viewer optically mix the dots to create complex colors that define form and space. When viewing the painting or reproduction up close, the dots reveal and maintain their true color, which makes it possible to see the many different colors that the eye and brain are mixing on the surface of the painting. The students are to match and apply the color dots they see on their reproduction to their own paintings. Students are also given a brief lecture

and demonstration on color theory. They produce a color chart that identifies each color they have in their paint set and identify each color as being either warm or cold. Warm and cold colors are explained in greater detail in chapter eleven's visual lesson plans on painting techniques and the importance of warm-cold contrast in creating form and space.

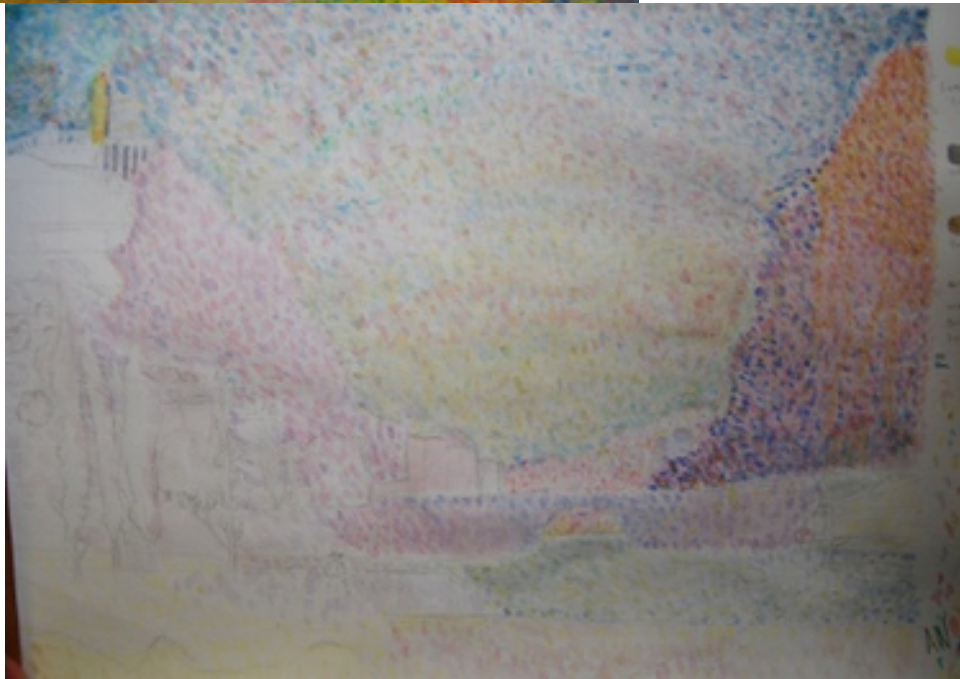A problem to be encountered with novice student artists is that they lack the ability to see color. For example, they only understand the concept of a color being yellow; they are unable to distinguish if a particular yellow is warm or cold, or of high or low chroma. Each of these characteristics of the color yellow, and all other colors, determines the color's visual space that is being optically created on the surface of the painting. Without the understanding of warm/cold contrasts and high/low chroma, it is difficult if not impossible to create space and form in a painting, regardless of how well the artist understands the modeled form of drawing. Color takes more skill and knowledge to use than what can be taught and learned in the limited time of a studio art course with unpracticed students. There is also the question of whether students actually can see the subtle differences in color responsible for color movement or for the space color creates in a painting. For example, if musicians hear a played note, they can distinguish if that note is a b or e, where non-musicians only recognize the played note as sound. The same is the case for color: it can be easily analyzed and identified by the trained, visually intelligent artist.

The Signac painting assignment requires much coaching and interaction with students during the production process. They must begin by gridding the reproductions, and through the grid system, reproduce the Signac as a line-drawing on their watercolor paper. Students must also follow painting procedures such as beginning with the background and working to the foreground. The medium they use is watercolor, so they must apply transparent and lighter colors first, and gradually more opaque and darker colors. The colors in the background must be muted, of lower chroma, and the colors in the foreground need to have a higher chroma, or a brighter intensity than the background colors.

In the artwork on the left, the landscape was drawn and then erased to the point where it is barely visible. As the painting progressed, the few remaining light lines were erased through the light transparent layers of the watercolor paint. The student also made two mistakes in starting her painting. The sky should have been completely painted first, and since there is water in the foreground, the colors of the sky should have been used to paint part of the water. Out of sequence are the pink mountain in the background and the building on the top left side of the painting. The yellow of the building was applied too opaquely, and its chroma is too high, meaning it will optically advance too far forward in the painting rather than occupying its intended space of the middle/background.

In the painting below, the student made the necessary procedural adjustments and began to work the entire background while applying the sky colors to the foreground water. The building was still too bright, but over the course of the painting it was toned to lower its chroma and visually move back to its correct space in the painting.

On the left is the finished painting.

The initial purpose of the painting assignment was not to copy a painting, but to replace the students' simple concepts of color with a more complex understanding of the professional artist's application of color to create form and space in a painting. The students were to learn the complexities of color through the simplified dot system of pointillism and then apply the colors used in their pointillist painting to create a painting using traditional watercolor techniques.

Below are the steps taken to create a pointillist painting.

This student has a very high interest and is practiced in animation drawing. Her animation work has made her heavily reliant on line, and she is accustomed to outlining and filling in flat shape, which is precisely what is occurring in Step 1. The tree line in the background is reduced to a line and the trees in the middle ground are carefully outlined and filled-in flat shapes. Also noticeable in Step 1 is the complete lack of control in using the brush to create a uniform dot size and consistency in color transparency.

In Step 2, she misread the color of the sky at the horizon and an opaque, white tempera paint had to be applied so she could make corrections over a sky that had become too opaque, dark, and too high in chroma. The application of the opaque white is noticeable in the lower left side of the sky in the painting. The student also went too bright with the applications of her oranges, making the orange used on the background buildings on the left the same color as the orange beach tone in the immediate foreground. This same color application of the orange optically flattens the painting. Color of the same tone, hue, and chroma will occupy the same optical space, or they optically advance or recede to the same optical space, causing a flatness in the painting. The two small buildings on the left and in the background will not hold their assigned drawn position. The orange will advance them forward. To put them back in their correct position, the chroma must be reduced by adding a small amount of its compliment color: a cold blue.
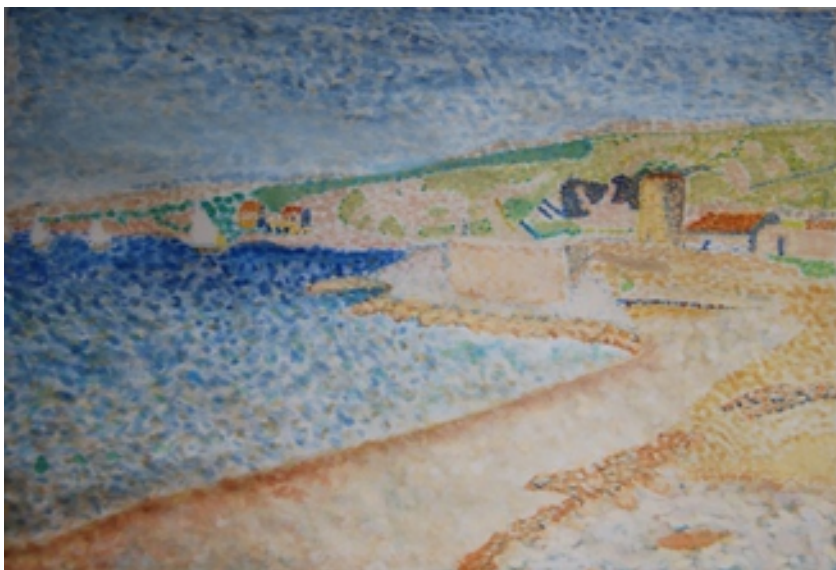
Another problem that occurred in Step 2 regards contrast. The contrast is too high in the buildings in the background left, middle ground trees, middle ground buildings, and middle ground wall near the center of the painting. High contrasts of light and dark tones usually occur only in the foreground. High contrast and detail will always optically advance the image forward. The student used the same degree of contrast in each of the objects noted above, which does not allow the images to hold the assigned optical space. They are all working together to flatten the pictorial space. It can also be noted that the tree line in the background has too bright or too high a chroma, and is also not holding its assigned space in the painting.

In Step 3, the student has reduced the chroma in the background trees at the horizon, but the chroma and contrast is still too high and doesn't hold its assigned position in space. Additionally, all the background trees are too high in chroma or too bright and intense in color and will need to be toned with a complement to reduce the chroma of the trees.

In Step 4, the student reduced the shadow contrast on the buildings and wall in the middle ground. The colors had become too delineated in the foreground and she was not able to build a convincing rock formation in the bottom right corner. It was necessary once again to use an opaque tempera that would establish a new base on which she could continue painting. This time the tempera was applied semi-opaquely to take advantage of the colors used to create an undertone to the painting.

In Step 5, the foreground is being reworked transparently over a tempera base and form is being established in the rock formations around the wall in the middle ground and in the foreground.

In Step 6, the middle ground contrast has been reduced with tempera, providing a toned base to make corrections that will create foliage and ground formations. The line of background trees has been painted over to reduce the contrast and will be used as a base tone to repaint a tree line that will hold its optical position in the painting.

Above is the final painting. In the final stage there is a lot more control and continuity in her brush stroke as more semi-transparent tempera was used to make corrections. The colors used in the paintings, for the most part, are holding their correct assigned position: objects have form and contrast levels that no longer detract from the unity of the painting while focusing the viewer's attention on the key focal points in the composition.

As I stated in the beginning, painting is a long and complicated process. There is nothing to be gained by allowing students to paint with their preconceptions and limited knowledge of color. This student was unable to read and understand the color that was presented to her in the model image of the Signac painting. If she would have been allowed to progress through the painting as she did in Step 1, what would have manifested would not have be a painting but a record of all her misconceptions about painting, color, and form. The only way for her to learn the complexities of color and painting was through the artist apprenticeship visual dialogue. I must be involved in and support each student's learning at each step of the production process. For each mistake a student makes, I must counter with a solution, and in the end the painting must not be fettered to the image of the Signac painting but allowed to change into a unified, coherent work painted by a student artist. The student is learning how to paint, not learning how to copy. What I have done in this lesson is to take the musician's approach to learning, which is to begin by learning the notes (color) and then learn composition and structure (technique) by studying and playing the works of established artists.

In the second part of the project, the students were to repaint the same sea and landscape in a traditional watercolor technique without the dots.   The students were expected to use the same colors,

but this time the mixing would occur either in their pallets or optically through the application of thin transparent layers of paint on the surface of the watercolor paper. Traditional watercolor techniques will pose new technical problems for the students but will also indicate how much color theory had been learned through their pointillist paintings.

Below is the student's landscape painting done in a traditional watercolor style. She has produced a satisfactory outcome. The colors are complex and optically hold their assigned space and assist in creating representational three-dimensional form. The student did require the assistance of the artist apprentice dialogue, and it was necessary to make corrections using tempera, but she did demonstrate learning through a greater understanding of color and the ability to more skillfully handle a brush.
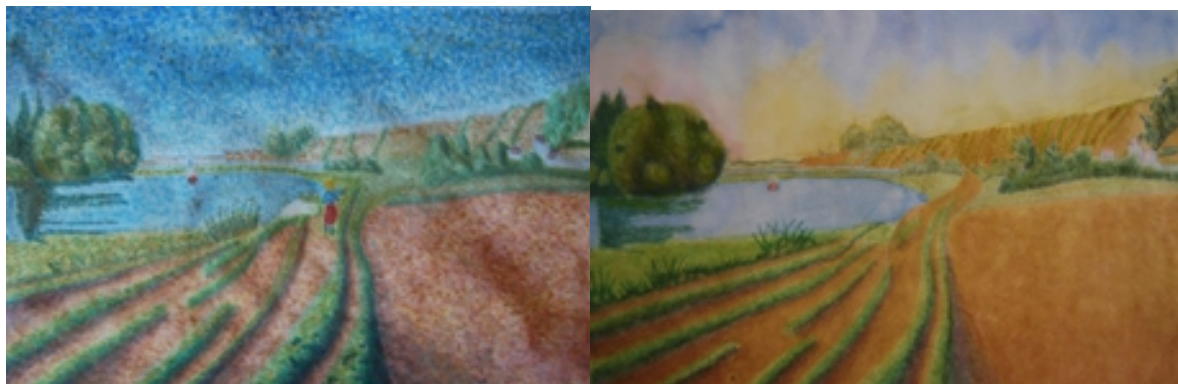

Rather than relying on written objectives, I opted to see visually what the students learned and could perform in their paintings. Each student had a separate objective provided in the visual format of the Signac reproduction. The word and visual symbol systems are not transliterate, so the objectives must be presented in a visual format in order to produce an outcome using a visual notational system. The language, from beginning to end, is visual, and a large volume of visual notations and information that either cannot be translated into words or would be too laborious to translate into words have been recorded on each work of art. For a trained artist, most of the visual dialogue is intuitive and at a subconscious level, but for learning to occur, eventually the visual language must be made conscious by the act of translating the visual system into a conscious word system. An artist can visually read a painting and learning does occur from artist to artist through the visual symbol system. The untrained and non-artist is unskilled and unknowledgeable in the language of the visual symbol system and needs words to mediate their visual illiteracy. Visual art always must be conducted in its own symbol system because the truer meaning is always lost in the translation: We can understand the narrative of Homer's writing, but we cannot understand the artistry and poetics of Homer's work without understanding his ancient Greek language.

My students are more versed in the language symbol system, and since they received visual suggestions throughout the entire process, I requested them to write a brief assessment delineating what they felt

they had learned through their assignment. The student responsible for the painting above began by stating "I came into this class with very little knowledge of painting. Honestly, I was surprised by how much I had yet to learn. I was happy to finally be taking an art class in which I knew I would learn something." She also stated that the techniques learned were used in her "personal paintings" done at home. The results don't get any better than what she had to say about the learning process and her learning experience.

To objectify what this student would have been able to do at the beginning of the learning process is not possible. However, what is predictable is the fact that students will learn how to make art, or in this case, how to paint based on their self-interest of learning. When the student works on her paintings at home she will not be as successful as with the paintings done in class because she does not have my knowledge to draw upon. However, over the course of time and practice, she will learn to paint in the manner of her own thinking within the same principles I have taught her to produce her own paintings. So what she has learned is nothing more than an entry point to working with color. It will take her many more years of disciplined study and practice before she will be competent and knowledgeable in the use of color.

Above are two more examples of the color learning assignment. The student who painted the above paintings had these comments to make about the assigned learning process: "Prior to this class I had the preconceived notion that painting is an easy process that requires a brush, paints, and a blank

canvas. The first technique taught me that there is more than one point of color to an object that the eye does not readily see. For example, an ocean may have the primary color of blue, but there are the undertones and overtones that need to be taken into consideration as well."

The student had more to say about her experience but her statements indicate that she is learning to see and understand color. She has replaced her simple preconception of painting with a more complex understanding of color through the learning process she encountered in the Studio Art program.

Summary
I have provided three examples of lessons that are typical for the Studio Art program. The guitar and chair assignments are designed for a product process, while the product of the pointillist landscape was traditional academic learning. What all three assignments have in common is that a learning pattern was provided for the students to succeed in their assigned learning task.

Pattern recognition is how everyone learns. For example, language is a pattern of sounds and, once understood, communication is possible. The understanding of the language pattern forms the platform for further understanding and learning, or for the formation of more complex patterns of understanding the language symbol system. Words and notations of a different foreign language are nothing more than meaningless sounds and marks until a recognizable pattern is created to facilitate understanding and learning.

Learning is pattern recognition, and further learning is generated from the understanding of the patterns created and being created. For example, when pointillism of the Impressionist art movement was first introduced, it created a negative outcry from the art critics and the public. The paintings, with their discernible, small dots, created a new pattern that the critics and public had not experienced before. Once the public had become more familiar with the visual pattern, it became one of the most appreciated visual art movements. The school's staff and our students loved the pointillist impressionist paintings produced in the Studio Art classes. It was greatly enjoyed because of the painting's recognizable and understandable patterns.

Modernism and abstractions create patterns that are more difficult for the public to understand. The trained artist, art critic, and art historian have a broader range of pattern recognition and understanding than the non-artist. The art professional can look at a Jackson Pollock painting and understand the pattern or patterns from which it was created, whereas the uninformed viewer lacks the pattern recognition necessary to understand abstraction. The uninformed viewer operates within the patterns of figurative visual imagery, and abstraction is the foreign visual language for which they do not recognize or understand the visual pattern.

My students lack the understanding of visual patterns from which to learn. They lack the structural patterns necessary to understand what they see and consequently have insufficient knowledge to construct a notational system necessary to make art. What they are lacking is a platform from which to learn. If I were to give the students an assignment and let them work and create on their own, nothing would be learned because there would be nothing on which to base their learning, other than their own visual misunderstandings and misconceptions.

When beginning the guitar and chair assignment, I issued the students an assignment and let them begin their work. The students were just working and had no developed pattern of knowledge to inform their construction process. When they began to establish a pattern in their work that I could recognize, I

offered guidance based upon their individual production patterns. When making my recommendations to the students, I pointed to the patterns they had created so they would understand what they had done and what would be needed to construct a cohesive work of art.

Once the project was completed, students still harbored limited learning beyond object recognition. It needed to be explained to the students, in the form of a group critique, how what they had constructed formed a unified work of art. The goal was and is to get students to understand, not the physical aspects of their structures, but the abstract concepts of unity that form the learning pattern necessary to create art.

What is necessary for learning to occur in the guitar and chair assignment is equally true for the pointillist landscape painting. The students are provided with a recognizable figurative image in the form of the Signac paintings. However, the students did not have the knowledge to understand the visual patterns they were seeing. What I saw in the initial steps of the students' paintings were elementary concepts in color and form. The visual patterns were right in front of the students, but they were unable to read them. Without understanding patterns that construct visual art, no learning is possible. If I had allowed the students to continue their paintings on their own, they would have constructed an elementary developmental level landscape based upon their misconceptions, stemming from the lack of understanding of visual patterns. What I must do in this teaching situation is to point out what they are seeing but not understanding in the learning pattern provided in the Signac painting. It is the abstract concept that forms the patterns necessary for learning. Students copy the painting incorrectly because they lack the visual understanding that can only be created through the knowledge of patterns that create the continuity of form they wish to create. Likewise, they can accurately parrot the image and not understand the patterns they have copied because they have failed to learn the concepts that construct the patterns necessary for understanding and learning. A parrot can mimic words without understanding them; likewise, a student artist can copy but not understand how to create a work of art on their own.

What students did or didn't learn from participating in the assignments is subjective speculation. All learning is the recognition of patterns combined with a system of consistently practiced patterned learning that builds knowledge. Without constructive learning opportunities and a system of prolonged consistent practice, no learning is possible. The students will never recognize the requisite patterns to be visually literate in art.