

**Art SACC Learning Assessment**  
**Critical Thinking and Problem Solving**

*“It is impossible to make art without analytical and critical thinking.”*  
*Portland Community College Painting Student*

# Summary of Learning Assessment Activities

## *The Art SACC conducted three learning assessment activities*

### **1.Think Tank: Critical Thinking Project and Portfolio Share**

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This first project was a kind of think tank for analyzing teaching methods used to promote critical thinking by our students. Jacqueline Ehlis (painting), Vicki Wilson (drawing), Ben Buswell (3 Dimensional Design) Christine Weber (Art History) and Mark Andres (painting) shared projects that they use in their classes which are designed to promote and assess critical thinking by the students. Each instructor gathered a portfolio of work for a specific project , explained the project to the SAC members, and described how the critical thinking exercise was incorporated.

Each instructor went about this in a different way. Both Ben Buswell and Jacqueline Ehlis presented studio art projects that were followed by formal written critical assessment that the students wrote about each other's work. Ben's method was more structured--with specific questions the students had to respond to. Jacqueline's method was more open; the questions she posed were suggested topics. Both Ben and Jacqueline essentially asked the students to describe, interpret, and evaluate the works their peers had created.

Vicki Wilson's project involved the students doing a self evaluation of their work. She had a printed list of criteria that the student evaluated with a numbering system. This was at the bottom of her project description page that she hands out when beginning the project. In the case of Vicki Wilson's drawing project; the student's self evaluation was next to the instructor's evaluation, so students could immediately see where their critical assessment of their work differed from the instructor's. We noticed students are often harder on themselves than instructors might expect.

Mark Andres gave a power point presentation of his beginning drawing assignment "Rythmic Progressions". Students had to interpret the rhythmic relationships of forms in a two-part process of interpretation of old master paintings. In the first step students drew over black and white photocopies with magic markers. Their objective was to find the 20 most significant lines in the composition. In the second step, using a fistfull of pencils, students made an 18 x 24 " transcription (version) of a new painting using line, stating aspect ratio and major forces emphasizing dynamic energy of curvy vs. straight lines within stated aspect ratio. Fistful of pencils is a leveler for drawing students, discouraging pseudo mastery and attachment to exact contour in favor of design and composition, creating an even playing field for students of varying skills and promoting a gestural, holistic view of drawing. Students learn to discriminate the essential forms from many details, understand organization and present this in a clear and distilled image. Mark shared a portfolio of student examples and explained the rationale behind each students success or lack of success on the project.

Christine Weber's project was for her Modern Art History course. Students were given the opportunity to curate a room of modern art. They had to select the artwork, create a model/presentation of the room of artwork, and develop the writing that accompanies the work of art. Then the students had to write reviews of three of the other students curatorial projects. This was a really innovative way to have the students think critically about the curatorial process and the importance of the influence that presentation has on the interpretation of works of art.

### **2.Develop and Apply a Rubric to two portfolios of work.**

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After the project share think tank; we developed a very simple rubric for directly assessing our students critical thinking and problem solving skills as evidenced by their portfolios of work. We realized from the project share that the essential areas where we assess the level of critical thinking and problem solving for our students artworks are craft/technique, design, and concept/content. The evaluating system was also simplified for the exercise. The evaluators used Excellent, Satisfactory, or Unsatisfactory.

We looked at Mark Smith's portfolio of student works based on the rubric. Mark's assignment used Sherman Alexie's book *Absolute True Diary* as basis for painting response. He encouraged layering and repetition rather than direct illustration. Background for the students included considering stylistic approaches of Cubism, Surrealism, and Pop art. Mark showed 7 paintings to us. Two painting faculty members (Mark Smith and Mark Andres) evaluated the paintings using the established rubric and then compared assessments. The evaluations between the two were sometimes similar and sometimes different. The SAC felt that this was typical of a studio critique. We all evaluate using the same rubric, but contexts can be different. The context – two different entry points to the assignment (one instructor was in the classroom and one was an outside evaluator) – possibly demonstrated the disagreement in the assessment.

Kim Manchester showed her portfolio of digital daguerreotypes. Kim explained the qualities and subjects in traditional daguerreotypes. Kim and photo instructor John Barna assessed the portfolio together. The assessments were much closer around this assignment. Some faculty felt that the closer the parameters of the assignment, the closer the rubric-evaluations tended to be between the two faculty evaluators. So, in setting up assignments, some students may need tighter parameters – when we compare and contrast the larger rubric application to the two assignments (painting and photography). It is also possible that some classes may require assignments with tighter parameters while for others it is appropriate for more independent thinking and personal direction to define a student's critical thinking.

### 3. Indirect Assessment

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We distributed the following question to 17 different classes in the Art Program. **“How has this course taught you to use critical thinking and problem solving?”** The following are excerpts from the students comments in response to the question. I have placed their responses into basic categories. These categories were defined by the students themselves. They were not prompted. However, what it is of interest is that the responses resoundingly address the core outcomes described in all of the art courses. I have divided the responses into two sections; teaching methods (what students say instructors are doing to give students the ability to think critically and solve problems) and the outcomes that students express as their new found abilities related to critical thinking and problem solving.

#### Section 1: Teaching Methods and Subject Matter

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*The students responses address what instructors are doing to give students the ability to think critically and solve problems.*

##### **Fundamentals of Composition and Design are presented**

The course helped increase my awareness of design decisions. The instructor gives us tools for problem solving by teaching important fundamentals of drawing and seeing. We learn about value, line, composition, color, etc. Both critical thinking and problem solving are used in composition... Truly putting on paper some creative form needs these tools because its just like a puzzle.... I love problem solving.

##### **Mediums and Techniques are demonstrated**

He teaches us how to use mediums and techniques. Through the variety of art methods we have learned we have increased our critical thinking. Our new techniques are like tools, which we choose from and use in a variety of ways to propel a potent image.

Each class has taught me a specific technique to observe and draw objects with a critical eye. I've developed more accuracy in my observations and execution of my drawings with helpful techniques such as measuring and comparing objects with my pencil and one eye (closed), observing negative space, using a vanishing point for perspective, and use of light and dark. I now have all these techniques to tackle my drawings with sophistication and confidence. I can render an interesting picture that has depth and accuracy. I've learned that there can be

many ways to use materials besides the obvious ones. This course has taught me to use critical thinking and problem solving by learning how to mix colors, how to make an object clearer, and how to contrast colors.

To build something takes accurate measuring, cutting, and a good weld to keep it all together. The help of the instructor by teaching me how to use the many tools and equipment needed to build projects. This course has taught me a lot about how to use power tools...knowing these tools has helped me to be able to decide what to do to make the art I want to create. This course has taught me how to use the dark room from the ground up. It has taught me to view my (photographic) prints with a critical eye and how to assess how to alter my print correctly. It has taught me many techniques for dealing with negatives.

### **Group Critiques and Instructor Feedback are given**

Specific feedback on exercises has helped me to learn how to evaluate my own work

The process of looking at art, discussing how a piece of art works, and trying to make art helps all areas of critical thinking and problem solving. In critique he is very open to new ideas and discusses what works and what may not work as well. Critiques-to honestly look at your own work. This course has taught me critical thinking through observation of peers, evaluation of paintings during critiques, and figuring out how to compose an articulate, meaningful, and academic painting.

### **Observing, analyzing, discussing examples of historical examples of Art**

The instructor provides many examples for us. He points out elements of art that are not so obvious. As we look at the work of other artists we may integrate it into our own.

### **Hands on Projects**

He gives challenging, yet fun homework assignments pertinent to the lessons. He allows us freedom to approach our problem solving in our own way allowing for individual expression. Our critical thinking skills come into play as we plan and execute our images. This class has taught me patience when drawing, which has extended to other parts of my education. The encouragement of exploring beyond your own known capabilities.

When I make a mistake thinking of different ways to fix it develops problem-solving skills. The problem solving process is accounted for when I'm trying to figure out what type of medium I want to use to portray a specific quality in a painting. To create a painting is to immediately engage one's unique critical thinking faculties, and the process of painting is a continuous sort of free fall act of problem solving. This course has helped me with planning my time and dealing with step-by-step procedures. Also thinking ahead to the final outcome with my project. I have learned a lot about patience. I know how to ask people questions to get the answers I need. The assignments encourage creativity within a given context, which makes students think carefully about how to blend their personal inclination with the requirement to achieve an end product that is both aesthetically pleasing and contextually relevant. I didn't learn anything about critical thinking or problem solving because this is a painting class. I signed up for this to learn the basics of painting. That goal has been achieved. I suppose, though, I did learn a little about solving how to paint a painting. Drawing and Painting is critical thinking; we are constantly solving one problem after another as they arise as we are painting. This course has taught me a lot about time management. This course was all about the process, and I learned so much by participating in it. Well, seeing as how (with painting that is) there really isn't a need to use problem solving since it's more of a calming activity rather than a stressful one. However, the variety in assignments definitely gave me (personally) an opportunity to think about different subjects as it applied to my art.

Watercolor is a much less forgiving medium than traditional opaque paints. Many times a mistake cannot be simply painted over or even lifted, so they have to be avoided, which requires the artist to approach the painting with a plan. It taught me to be patient. I have learned to be a bit more flexible, by allowing my project to evolve on its own, continuously readjusting my priorities and reconsidering my next steps. This watercolor class was hard for me because my skills as a drawer are not very well developed. I really had to concentrate and really look at the figure I was drawing. I definitely got frustrated, but it was assigned so I had to work through it. Now that this class is over, I feel that my observational skills have improved as well as my drawing skills.

Art Classes help you think in a completely different way than you do in any other class. It brings out a different creativity that you don't normally explore. It shows you strategic ways in getting to a goal; taking your time and relaxing and being as creative as you can. This course has taught me to use critical thinking and problem solving by the projects I have built. Almost everyday in class we must use problem solving to create our sculptures. If you run into a problem, you either solve it or you can't finish the project.

I constantly have to figure out how to overcome the problems of photography. Analyzing a lighting situation to figure out what are the best settings on my camera, to figuring out how to develop film and what areas of a print need more detail and whether to apply more or less light to get the desired effect. The light exercises helped me to problem solve with natural lighting much better. This will improve my current work because I can't afford expensive flashes.

When working with ceramics, you constantly are problem solving. I had to picture the pieces as a whole before I made them. As I was building, I had to fix things on it and figure out how to make it better and more stable. It helped me to practice project planning and thinking ahead to all of the potential issues. It also taught me to cope with unexpected surprises when something doesn't turn out exactly as you planned it.

The planned project made you think ahead and plan the construction working out possible problems before starting the project.”

## **Section 2. Outcomes-**

*These comments summarize the relationship of core outcomes to problem solving and critical thinking. Again, the students have defined these categories themselves; they were not prompted. It is really exciting to find that they addressed problem solving and critical thinking in reference to the other core outcomes of our courses.*

### **New Ways of Seeing**

The course allows me to see things in a different (new) perspective. I have learned totally new ways of seeing and drawing. This class has helped me to see the visual world more analytically. As a result (of the course) I look at everything differently now-not just artwork! Primarily...this course has honed my ability to visually analyze information and has taught me to analyze spatial relationships in any situation. I look at the world in a new way. Full of shapes and colors and beauty I had always just looked passed before. Drawing helps to open up your mind to new ideas. The class exposed me to many new ideas and philosophies, which are continuing to shape how I view the world. I am looking more closely at things and seeing more detail in my surroundings. I have learned new ways not only to approach incorporating what I have learned into my work, but also to view other artists' work to extract ideas from their work. I have learned that there is more to a painting than how it makes me feel, that you can approach a painting for its intellectual aspects, its historical context, evaluate it through different cultural lenses (i.e. feminist, African American, economic etc) and he even the medium used is significant.

Art 181 has taught me how to think outside the box and really be mindful about what I put on my canvas. The lectures helped me to develop my own ideas and interpretations of how photography works in the real world such as the discussion about the ethics of photography with regards to photojournalism and even in home.

### **Giving Form to Ideas**

The course has helped me to translate visual thinking into images.

I have learned to break the human form down into conceptual pieces and then put them back together into something that makes sense. First you have to conceptualize an object and then put thoughts into how it can appear on paper. Now I don't just draw, I think first and my results are better than ever. I have learned to look at things in a more detailed manner and study it to translate it onto paper. Painting challenges you to solve spatial problems and use images creatively to depict ideas.

### **Meaning and Content in Art**

I can reflect on the content in the elements of Art. I have learned to break the human form down into conceptual pieces and then put them back together into something that makes sense. To assess the meaning I want to

convey in my art pieces and make them relevant to others, I need to critically think about what my point of view really is despite all the images and opinions thrown at me in our society. I must look at what I'm drawing and study the shapes and feelings of my observation. I take time to study my surroundings, stopping and seeing, observing, breathing what is going on and then creatively pressing that on paper. I think that helps me to problem solve because it helps me to constructively relive what I process in my emotions and my surroundings.

### **Independent thinking to solve visual problems**

Every time I draw I am deciding how to draw. You learn to value your own processes.

The course has taught me to think simply and be more organized in my thought patterns

I have learned that creativity does indeed go hand and hand with critical thinking. By learning to focus my observation not only in art, but also in my thinking in general. I learned to not just look, but to see what I am looking at. What is an object (or idea) made up of? I learned how to see the collective pieces making a whole. To think outside the box! I must problem solve what I'm seeing verses what I'm drawing and use the appropriate skills learned in this class to convey the feeling and the appropriate shapes to create my end result. This class has taught me to really dive into the unknown. ...She is an incredible teacher and has taught us to be our own teacher at times. We learn to solve our own dilemmas through experimentation and analysis. Things take time and work. This course taught problem solving by teaching us to stop and consider different options before moving on. The simple fact that there is no right answer to a painting encourages a person to continue searching for improvement by trying new approaches, which sharpens the mind in all areas.

### **Art History Course Responses**

I believe this course has taught me about critical thinking-how to analyze course material. I don't think problem solving was inorporated into this class. This class taught me about the history of Graphic Design and how it all began—what to look at, observe, and analyze—how art was expressed in the Graphic Design world.

This class has taught me that there is more to art than when you first look at it. And to take the time to study it, and learn more about it. I know personally I will never look at art the same way again.

The compare/contrast essay and the weekly assignments.

This course taught me to analyze pictures better, and to understand the point of art. I've understood a lot better with the styles and how they are influenced.

By introducing themes and terms in the book and then in class placing them into a new context. The class allowed you to understand the themes in your own terms and it caused you to form your own thoughts about the uses of graphic design.

We were asked to compare and contrast two pieces of art after first visually analyzing them. Also, all the quizzes were short answer which meant you had to know the material.

This course has taught me to use critical thinking by asking me to dissect works of art to look deeper. By having me categorize different pieces of art into different genres, this class helped me see a common thread running throughout history.

It hasn't

To think critically about art and understanding the design principles.

It has clearly shown the various methods of critical thinking and problem solving through the instructor's weekly assignment of mind maps, cartoon depictions, Q&A quiz cards. I don't however believe that this is appropriate and/or necessary for students taking a higher level college class. I would be appropriate for middle/high school students to help them effectively study, but a college level class should already expect this from their students and challenge them to the next level.

The teacher used fun and interesting engagements and assignments that forced you to think critically. I very much enjoyed this course.

I am more aware of what I need to be looking for when doing art analysis.

Although this course was taught very well, I do not feel it helped in my critical thinking and problem solving skills. I learned how to evaluate art.

This class taught me an entire new vocabulary in regards to art and graphic design and has helped me to develop ways to describe, compare, and contrast visual elements.

When comparing/contrasting in essays, I was able to follow provided instructions as a guide. By the end of the term I felt confident to apply critical thinking to other assignments.

By having to write a compare/contrast essay about two completely different mediums.

I am able to analyze photos and prints more and understand elements of them.

By comparing and contrasting prints. We had to learn to look at many different aspects of it, size, texture, color, shape, so many things. Every single one says something about the era it was made in. It has taught me to pay closer attention to details I may not have before.

This course taught me about visual elements of art and how to communicate those elements and characteristics. The instructor was very positive and encouraged all comments and views. I don't think problem solving really applied to this class.

I think we used a lot of critical thinking and problem solving in the main term project which was to replicate a historical technique for the replication of images and text (relief printing).

Without learning about the past we cannot know the present.

This course has Taught me to use critical thinking in the making of a wood block print. By challenging me to create a negative image into a block I was inspired to find creative solutions. To problems such as the grain being a different density.

I do feel that this course taught us to use critical thinking. We needed to use critical thinking when trying to connect style of art to the time period in which it was invented. For example, thinking about how the printing press affected the masses. We also used this skill when analyzing the portraits from the art museum.

Learning to analyze and evaluate art through the writing assignments, field trips, and final project in the class has helped me to refine my critical thinking skills.

It was necessary to exercise my critical thinking and problem solving skills while working on projects, writing essays, and preparing for exams in this class. I found that it took a lot of research and thought to produce answers and understand different concepts and information. You are required to piece together a lot of facts to fully understand the big picture.

In the beginning of the course, we studied cave art and the invention of writing. Many questions were raised in regard to why early civilizations needed writing, how it evolved