



**THE UNIVERSITY  
OF THE ARTS**

**The Relationship Between the Use of Rubrics and Student  
Response Quality in Online Art Critiques**

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## **Abstract**

This action research project examined the relationship between the use of rubrics and student response quality in online art critiques. The research took place with three classes of New Jersey public high school students who were enrolled in the elective of Digital Photography, with a total of 51 participants. Students uploaded their photography projects to an online website called Seesaw. They were first asked to comment on three photographs, given little direction as to how to comment. They then commented on a second photography project, using a rubric to guide their responses. Data was collected using a cell phone stopwatch to record time on task, as well as word count of the first and second responses. Students then were instructed to comment on a third project, using the rubric again, but given more examples of well-constructed comments and composition vocabulary. The results of the study indicated that students spent more time on task, used more words to respond, and used better grammar and sentence structure when responding using a rubric. The results also indicate that with practice, using a rubric can improve students' responses. The feedback on the student questionnaire indicated that overall, students prefer the online commenting to whole class discussion, and enjoyed commenting and viewing the comments of their classmates. Future research would the use of audio and video commenting, as well as how online commenting practice would affect whole class art critiques.

**Keywords:** aesthetics, art appreciation, art criticism, class discussion, critical thinking, critique, elements of art, Feldman, higher order thinking skills, low participation, portfolio, principles of design, rubric, visual literacy

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## **Chapter 1: Introduction**

### **Background**

In today's world of technology students are accustomed to posting images and seeking peer feedback online, so it makes sense that their educational needs should imitate their lifestyles. I initiated this project to show educators a way to use online discussion and technology to create meaningful student communication. This study was undertaken for many reasons. First, it is important for students to be able to discuss art and what they have learned, rather than simply creating art (Subramaniam, Hanafi & Putih, 2016). Art criticism is an invaluable skill that students should be taught in their art classes. Secondly, the ability to comment online in education is being used more substantially in today's classrooms, but there are few resources for teachers to make these activities meaningful for students (Hsu, 2016). This study will provide a method for developing skills for meaningful student commentary online. Thirdly, students need guidance in using critical thinking skills when discussing works of art Williams, Jaramillo, & Pesko, 2015). Thus, the study's use of rubrics will provide that guidance (Brookhart, 2010). After students post their artwork online, their classmates will have the opportunity to give feedback that they can read in a controlled, non-threatening environment.

If students are to think critically about their comments, they must have something such as a rubric to guide their responses. Theoretically, if students have a specified goal they usually perform better (Andrade, 2000). Without instruction, students who are asked to comment on an image will do so without much or any effort (Williams, Jaramillo, & Pesko, 2015). They will usually write whatever first comes to mind, or respond how they normally would on social media using acronyms and emojis. Students should be able to answer why one student's work looks better than another's or why the student was successful in their photography project. They must

reflect on what they have learned about composition and the elements and principles of design, as well as what they have learned in a specific photography unit. In doing so in their writing, they are making their learning or lack thereof apparent to the teacher (Brookhart, 2013).

There are four primary goals in this action research project. First, it will assess how well students are understanding the photography project they are currently working on. Second, it will build on their knowledge of the elements of art and principles of design as they relate to each assignment. Third, it will guide students to make informed, educated observations when viewing a work of art, and be able to offer constructive criticism to their peers based on what they have learned in class in an online platform. Fourth, students will learn to communicate more meaningfully using an online platform.

### **Statement of the Problem**

This action research project examines the relationship between the use of rubrics and student response quality in online art critiques. Action research refers to a wide variety of research methods designed to diagnose problems or weaknesses in educational practices and help educators develop solutions to address them quickly and efficiently. I found no literature to date that has been written about doing online art critiques with students. Art criticism is a subject covered in class by many art teachers, but is a subject that very little has been written about for many years (Subramaniam, Hanafi, & Putih, 2016). While there has been literature written about online discussion, I could find none has been written about it at the highschool level (Hamann, Pollack, & Wilson, 2012). One study concentrated on the discussion posts of undergraduate marketing classes at a state college, where the professor deemed many of the discussion levels minimal quality (Krentler & Willis-Flurry, 2005). Their postings were evaluated by length and thoughtfulness by the professor, but the study does not state that the students had a rubric to

follow. Therefore their grade was based on the opinion of the professor to assess their answers. This is a perfect example of how incorporating a rubric would have benefitted those students, so they were able to know what the professor's expectations were for the postings. Most found literature concentrates on the quantity of student responses, not the quality (Yu, 2009). There is much literature pertaining to the use of rubrics for student assessments, but none to do with using rubrics for online comments (Brookhart, 2013).

In this project students posted their art work online, and commented on peer work without much direction. For the next photograph assignment they posted, students followed a rubric as they made their comments, and the study compared their responses to their first comments. The study also recorded the time it took them to make the first and second responses. This study will be valuable for any teacher who uses online methods for discussion, not just art teachers doing art criticism. At the end of the project, students filled out a survey stating their opinions of the correlation of their responses using rubrics, their level of comfort making and viewing comments online, and their ease in using the online tools.

### **Purpose of the Study**

There are three key elements that pose a need for this study. First and foremost, with the use of technology being used more often in high school classrooms, teachers are lacking resources in how to best use the technology in their lessons (Psu, 2016). In talking to my own colleagues, they try new technology methods with students and when educational results are not what they had hoped for, the technology approach is abandoned and they go back to their classic approach. With technology ever-changing, more resources for teachers must be written and updated constantly. Secondly, art criticism in the classroom has not been written about since the days of Feldman, and any current literature that addresses art criticism cites Feldman. Therefore,

this study addresses the need of outdated literature regarding art criticism in today's classroom.

Thirdly, education demands that students in the twenty-first century must be critical thinkers (Pink, 2006). They must also be able to express their thoughts clearly and concisely.

Commenting on peer artwork using a rubric will force them to think about what they mean to say, and reflect what they have learned.

### **Research Questions:**

This research study will be conducted to answer the following questions about the relationship of the use of rubrics and student response quality in online art critiques.

1. How do students respond online with minimal direction from the teacher, and what is their response time?
2. What is the relationship between the use of rubrics and student response quality in online art critiques?
3. What is their response time when using a rubric?
4. How do students react to viewing online peer comments about their photography work?
5. What do students think about the process of online art criticism and using rubrics?

### **Research Design**

This study will be in the form of an action research project. The setting for this educational research study will be in a computer art classroom of a public high school in New Jersey. Students who participate in this research are current students in one of three of the investigator's Digital Photography classes. Data gathering will be conducted in all three classes with 59 students participating in the study.

Participation in this study does not differ greatly from their regular classwork. Students will be instructed to start an online account in an educational digital portfolio site, called Seesaw.



Students will upload their completed photography assignments to the Seesaw site. This site will allow students to make a portfolio of their work, as well as view and comment on the work of their classmates. Students will be asked to comment on three photos of other students. Notably, comments cannot be viewed by others until the teacher approves the comments. After comments have been approved, the students will be encouraged to check for comments made about their photography work. Students will repeat the commenting process again with the next class projects, but when they comment the second time they will be given a rubric which describes how they will be graded based on their responses. Students will receive a graded rubric from the teacher so they know how well they commented. During the commenting activities, the teacher may record written observations on student response activity and reactions to comments, and record their response time. These response activities will take place at the end of each photography project, which will be once every 2 to 3 weeks. At the end of the research study, the students will be asked to fill out a questionnaire about the online art critique process.

### **Definition of Terms**

There are several key terms used throughout this study. It is important for the reader to understand how these terms are used for the purposes of this study.

1. **Aesthetics:** An attempt to explain human reactions to what they see- especially what they see in art (Feldman, 1970).
2. **Art Appreciation:** The knowledge of the general and everlasting qualities that classify all great art. It is seen used to refer to the exploration of visual art forms or the introduction of basic principles of visual literacy. It refers to analyzing the form of an artwork to general audiences to enhance their enjoyment of such works of art. Art appreciation can be subjective depending on personal preference to aesthetics and form,

or it can be based on several elements and principles of design and also depends on social and cultural acceptance.

3. **Art Criticism:** The process of exercising a serious and objective examination on a work of art and making a systematic judgment of it (Subramaniam, Hanafi & Putih, 2016); the discussion or evaluation of visual art.
4. **Class discussion:** Having face-to-face discussion; participants of the class are involved as a whole in communication (Foster, Krohn, McCleary, Aspiranti, Nalls, Quillivan, Taylor, & Williams, 2009).
5. **Critical Thinking:** Being able to apply wise judgment or produce a reasoned critique (Brookhart, 2010).
6. **Critique:** To review something critically; the evaluation of student artwork (Barrett, 1988), (House, 2008).
7. **Elements of Art:** The visual components of color, form, line, shape, space, texture, and value in an artwork; may be two-or three-dimensional, descriptive, implied, or abstract.
8. **Feldman:** Known as the founder of art criticism and evaluation; created the art criticism model which included description, analysis, interpretation, and judgment (Subramaniam, Hanafi, & Putih, 2016).
9. **Higher Order Thinking Skills:** When students learn by constructing meaning and incorporating new content into their existing representations (Brookhart, 2010).
10. **Low participation:** Students who respond minimally or not at all during a class discussion (Foster, Krohn, McCleary, Aspiranti, Nalls, Quillivan, Taylor, & Williams, 2009).

11. **Portfolio:** A portfolio is an edited collection of an artist's best artwork intended to showcase an artist's style or method of work.
12. **Principles of Design:** Describe the ways that artists use the elements of art in a work of art to create a composition.
13. **Rubric:** A rubric is a document that articulates the expectations for an assignment by listing the criteria, or what counts, and describing levels of quality from excellent to poor, as stated by Brookhart (2013).
14. **Visual Literacy:** The ability to both create and understand certain types of information, in this case visual materials created with a computer (Spalter & van Dam, 2008).

### **Conclusion**

This chapter discussed the background of the study, examined the problem with the existing research, outlined the purpose of the study, proposed research questions, identified research questions, and defined key terms. The next chapter will review the literature related to this study.

## **Chapter 2: Literature Review**

This literature review provides justification of the need for the present action research study. First will be an outline of the definition of art criticism, as well as its importance in twenty-first century education. The need for art criticism to teach higher order thinking skills will be discussed. Based on the art criticism methods of Edmund Feldman, a description will be given about how art criticism will be pursued in the classroom. There are significant challenges to implementing art criticism in the classroom. The literature will examine the difficulty in ascertaining every student's understanding through large group discussion and the benefits to students when they can comment individually on works of art. Following the discussion of art criticism generally, the focus will be on is using online platforms as an effective space for art criticism. There is also conversation about the parallel of using technology to students' everyday lives-- using the technology they are familiar with as an educational tool. Lastly, a review of how rubrics are an important educational tool in formative assessment will be explored. An explanation of how rubrics are used in the high school classroom, and how they can be a way to assess online responses will be examined. Though the evidence is limited, discussion of existing literature on the use of rubrics for art criticism will be introduced. Of importance will be the evaluation of student responses, and the significance of why their feedback about art should be meaningful.

### **Importance of Art Criticism**

Art criticism is important because it promotes higher order thinking skills, enhances cognition and perception, teaches the relationship between works of art and society, and cultivates creativity. Feldman (1973, p.50) describes art criticism as "talk about art"... "the result this informed and organized talk about art is what might be called the sharing of discoveries, not

only about art, but also about the human condition.” This process, notably, does not come naturally, students have to be taught to really see, observe, and question the visual stimuli they are looking at. In the current era, students are challenged with responding to visual cues incessantly throughout their days. Jensen (2001) corroborates that today the mind of a person is incessantly being challenged by an array of visual problems. Teaching students art criticism refers to the process of objectively examining a work of art and making an informed judgment of the work (Subramaniam, Hanafi & Putih, 2016). Too often, people without a background in art will jump right to judgment about a work of art, without trying to understand the work first. A current literature review written by graduate student Tia Blackmon (2015) on the nature and importance of art criticism in the K-12 classroom reiterates, the purpose of art criticism in the classroom is to educate students on appreciation, aesthetics, and evaluation of works of art while promoting critical thinking and analysis. Art criticism has to be taught to students in a way where they are able to make connections and form conclusions about works of art in a meaningful, thoughtful way.

Art criticism teaches the relationship between artwork and our society, our humanity. Works of art are created by man, and therefore by understanding works of art, we are understanding mankind. Risatti (1987) describes the arts as being essential to our culture, because they teach individuals about themselves, their society, and the values that arise as individuals interact with society. By understanding art, students are better able to appreciate the cultural and societal values that art represents. Elliot Eisner (1998) writes that the goal of arts education is about helping students become accustomed to aesthetic qualities of art and life in the worlds in which they live. Although quite dated, many of Feldman’s statements about art criticism are completely relevant today. He states that “a good deal of our environment is

designed to control behavior (1973, p.52).” Feldman goes on to say that the value of education ought to be a force against the many commercial images that are always trying to tell us something. By giving students the power to observe and exercise skills needed to choose among values, art criticism can be that force. When students are able to observe and understand art and the images they are exposed to daily, we as educators are giving them insight into understanding themselves and the world they live in.

There are many twenty-first century skills learned through the process of art criticism. Daniel Pink (2006) states that the future belongs to a very different kind of person with a very different kind of mind- creators and empathizers, pattern recognizers, and meaning makers. The very process of art criticism forces students to see, understand, and find meaning in works of art. When comparing the arts to how our brains are designed, Jensen (2001) says the overall process in visual arts is the search for the constant, essential qualities of our visual experiences. These allow us to enhance not only pattern detection, but a generalized knowledge about the world in which we live. These skills are very important in today’s society. Jensen validates Daniel Pink’s beliefs in that the most valued skills, the talents in highest demand in this new century will be creativity, imagination, and emotional expression--which are all nurtured by the arts and the appreciation of art. Creativity comes to some students very easily, while others must be taught to be creative. Hence, teaching art criticism and appreciation can be one approach to cultivating creativity.

In addition to the importance of art criticism for creativity and twenty-first century skills, there have been links of the visual arts to brain based education. The visual arts can play a significant role in the learning process through enhancing cognition and perception. (Jensen, 2001). Students today have to be educated beyond rote memorization, which some subjects in

today's high schools still incorporate in the classroom-- subjects such as history or math.

Students' brains have to be taught to think for themselves, which is another reason for teaching art criticism. Participating in art criticism leads to higher-order thinking skills with being able to think means students can apply informed judgment or produce a rational critique (Brookhart, 2010). In her review, Vanada (2014) declares that teachers should design experiences of learning that go beyond content knowledge, in order to develop students' independent quest for knowledge. Art criticism is an example of education that is lasting, and skills they learn are enduring and will take students into adulthood. The abilities that students use in art criticism will be used throughout their lives. Art criticism can actually deepen one's feelings for other human beings, and strengthen one's empathy for others (Subramaniam, Hanafi, & Putih, 2016). Therefore, art criticism can teach students about the values of a society in which they will grow into adulthood.

Art criticism teaches students to respond to visual images with a method for understanding art. In my classroom, I approach art critiques in a similar way to Feldman's approach, which is the method of art criticism that is one of the more widely accepted in art education classrooms (Blackmon, 2015). Feldman's method of observing and commenting on art are dated, but nonetheless the process is most used by art teachers today. Hamblen (1985) asserts Feldman's method consisting of (1) description, (2) formal analysis, (3) interpretation, and (4) judgement has been the most prominent and thoroughly examined art criticism format in art education. This was the method that I learned as an art education undergraduate, and one I consistently use in my classroom. Every introductory art class in my school is instructed to teach the elements of art and principles of design, which are used as building blocks in discussing art. Blackmon's (2015) research shows that what art educators need to teach their students in

formalist critical judgment is the basic foundations of the elements of art, and how they can use that vocabulary when critiquing a work of art. Starting with this foundation, I teach students to observe what they are seeing, analyze the formal qualities of the work, interpret the work through societal norms and/or beliefs, historical relevance, and emotional qualities, and finally to make a judgment. The idea is if students are able to master this method they will then be able to talk about and think critically of art which evidence demonstrates benefits them both within and outside of the art classroom (Blackmon, 2015).

Much of the research done on art criticism is not current or relevant to my teaching at high school. Most of the art criticism articles I found date back to the 1970's and 1980's, and more recent articles cite those very articles. Therefore, the theories about art criticism have not changed very much in the last 35-40 years. Feldman's theory is the most prominent and long withstanding, which discusses a four-part method of describing, analyzing, interpreting, and making an informed judgement about a work of art. There were other theorists such as Johansen, Silverman, and Clements whose formats were similar to Feldman's but deleted one or more of his steps or elaborated on anticipatory exercises (Hamblen, 1985)-- although they did not stand the test of time as Feldman's approach to art criticism does. Many of the subjects in current art criticism studies are at the collegiate or elementary levels. I could only locate two articles that were specific to the secondary school level (Mittler, 1980, House, 2008). I only located two studies of art criticism that were written in the last five years. The first article (Subramaniam, Hanafi, & Putih, 2016) discusses how studio work is linked to the evaluation of art. It describes written art criticism as persuasive writing with interpretations supported by reasoned judgements. This is helpful to my research in that students must use their knowledge to make informed evaluations about artwork, using the vocabulary they have learned in class as well as explaining



the techniques we used for the project. The second article (Vanada, 2014) discusses communication of ideas and critical thinking which lends support to a critical element of the present study regarding the importance of art criticism in the classroom. It is not enough for students to create art- they need to be able to discuss art in a knowledgeable way (Barrett, 2004).. My study of art criticism in today's art classroom is not only pertinent, but necessary. The lack of appropriate resource materials for art educators is detrimental to the appropriate teaching of art criticism in the classroom (Subramaniam, Hanafi, & Putih, 2016).

### **Challenges of Art Criticism in the Classroom**

The first challenge I face when conducting an art critique in the classroom is that students have to be taught how to do it. They are quick to rush to judgment about a work of art before trying to understand it. It is my job as their art instructor to have them slow down the process so they can make informed judgments based on knowledge, rather than emotion. Decelerating that process by really looking, as in observing visual art seems to enhance our ability to elicit and even mediate our emotional responses (Jensen, 2001). My belief, as is Blackmon's (2015), is the ability to simplify the critical steps and leave the judgments based on visual facts and relationships makes the Feldman method objective. It is also important in my classes to be able to talk about the student as the artist, as well as be able to discuss the work of their peers. My main goal of an art critique is to help students to learn to talk about art, as well as learn to talk about their work (Barrett, 2004). By starting out with elements of art and design basics, students are encouraged to reflect upon their own work and the work of others while articulating what they see, thereby developing the necessary vocabulary to express their thoughts (House, 2008). When empowering students to be able to discuss and defend their own art as well as the work of their peers, we are enabling them with the tools to make their education relevant to their lives.

The next challenge is getting all students to participate in the discussion during an art critique. My classes usually will have a select group of students who are more inclined to respond in a whole class discussion. While they make many interesting insights into art work, I notice they usually monopolize the conversation and others cannot or do not have to participate. The inherent problem is that I cannot ascertain if everyone is learning the material. In order to assess individual learning, I need all students to participate and respond to showcase their knowledge. Even when I try to get the entire class involved by asking specific questions to the quiet students (Barrett, 2004), some still reply “I don’t know” or shrug their shoulders . This makes the process of individual assessment unattainable for everyone during a class critique.

The final challenge to conducting art critiques with high school students is to get them to make substantial and relevant comments. Often, when I ask my students why they like one photograph more than another, they will respond in simple terms. They may say, “I think it’s pretty”, or “It’s very creative”. In a whole class discussion, I often prompt students to answer with more meaning (Barrett, 2004). When they say something is unique, I will ask them how it is unique. When they respond that a photo is creative, I ask what about that photo is more creative than the others. Does it show emphasis? Tell me more about the pose they chose for the person in the photo. I can push students in face-to-face discussions to expand their responses, but what if they are responding to works of art online? How will I prompt them to answer with better responses? That is just what I will discuss in the next two sections.

### **Online Discussion**

In order to manage the logistical challenge of using art critiques as an assessment tool, I chose to use an online discussion pattern. Using online discussion in the high school classroom is not a subject that has been researched extensively. Most of the research I have found on the topic

of online discussion has been written about the college level student, which makes sense because many of their classes now are online or hybrid in nature. Online classes are still evolving at the school level. Some broad statements have been made about online discussions, such as in group discussions in the classroom, only a few students respond to questions but in the online world, everyone participates (Kachel, Henry, & Keller, 2005). Unfortunately, many of these claims are based on the behavior of college, not high school, students.

Using technology in the twenty first century high school classroom seems to be an ongoing trend in education today. Digital tools can transform learning by bringing a new level of relevance to the previously confined classroom (Pahomov, 2014). Students today are accustomed to using technology in their everyday lives, and therefore it seems only natural that we involve the technology that they are most comfortable with into their learning. It is our job as teachers to provide students with “innovative technologies as a means of improving instructional delivery and increasing relevance” (Krentler & Willis-Flurry, 2005) As with many new reforms, teachers who embrace technology sometimes miss the mark. They are excited to use a new tool, but they focus on the simply using that new device instead of thinking about how it could influence their curriculum or teaching (Pahomov, 2014). I am seeing this more and more with my colleagues, especially in the case of conducting online art criticisms in art classes. The art teachers that I work with are quick to try technology to create interesting lessons, but I know of many who give up quickly because of the lack of effort in student responses, most specifically when critiquing artwork. While it is great that students can see and comment on each other’s work, we most often get responses like “That’s cool!” or “Very pretty”, which doesn’t involve any critical thinking about the work they are viewing. Without the proper resources, art teachers quickly revert back to whole class discussions of art criticism, so that they are able to direct students’ responses in a

more meaningful way. Teachers need strategies to help them to direct students in their online responses as well, and the resources to guide teachers in online discussions with students don't yet exist.

One of the major challenges faced in typical classroom art critiques is a lack of or limited participation. As is reiterated in much of the literature, a major drawback of (class) discussions is that students never or rarely participate in class (Hamann, Pollack, & Wilson, 2012). There are many theories of why students don't participate in class discussions, but the one that seems the most notable at the high school level is the fear of looking stupid in front of peers (Barrett, 2004). That is one major benefit of using online discussion-- students do not interact with each other in real time, so they do not have to think of something to say while maneuvering the complex rules of group discussion. (Yu, 2009) They can then focus their efforts in their response without worrying about what they look like to their peers. In a typical classroom there are students who choose not to participate and those who monopolize the conversation. Online discussion is an effective tool for moderating both of these groups (Pahomav, 2014).

The inherent problem is twofold--as a teacher I cannot assess everyone's understanding if some students are not responding, and there are some students who never get their voices heard. It is important that teachers are meeting the needs of individual learners and by requiring online responses, teachers can assess every student's understanding and every student has the chance to respond (Kachel, Henry, & Keller, 2005). Pahomov (2014) writes that students digital tools make it easier for students who need to stop and think about what they are going to say before they say it to make a quality response. Pahomov also contends that if students are going to benefit from their reflections, their thoughts should be documented. Thus, online discussion is the perfect tool where students can write responses, and their writings can be saved and reflected

upon. This does not happen with a large group classroom discussion. In the subject of online art criticism, students will not only see how their writing has changed, but also how their artwork has evolved throughout the year, which is an additional benefit of online tools. All of their artwork, as well as their writing, can be easily viewed and compared in their online space.

Yet another advantage of using online responses in the classroom is that students can easily share their reflections with others. Pahomov (2014) contends that students' fluency with digital tools elevates their voice in society, and when students are involved with a subject that matters to them they will use their skills in online technology to get their thoughts known to a larger group of people. After researching discussions in general, one study asked students about their thoughts of online discussions versus small and large group discussions. It was determined from the study that "online discussions are particularly suitable to promoting deeper understanding of the material as the students rated the online discussion to be best suited for expressing thoughts, rethinking values, and applying learned material to new issues." (Hamann, Pollack, & Wilson, 2012). While online discussions are an important and effective tool, previous literature also indicates that art criticism is not a skill that comes naturally. One method for guiding these discussions online is through the creation of rubrics that outline what the teacher is looking for.

### **Using Rubrics**

To address the challenges involved in teaching students how to think and respond analytically in an art critique, I introduced rubrics. Rubrics are an important educational tool. Most teachers use rubrics to assess a complex assignment, long-term project, or research paper. Types of rubrics can vary, but all rubrics have two features in common: (1) a list of criteria in an assignment; and (2) gradations of quality, with descriptions of strong, average, and weak work."

(Andrade, 2000). In art education, rubrics are exceptionally useful for explaining a grade for a subject that can be very “subjective” in nature. The genius of a rubric is that you match a performance to the description rather than a judgement (Brookhart, 2013). I have been using rubrics in my classroom for at least the last ten years, and I believe they are an important way to communicate to students what it is you are looking for from their assignments. Rubrics are easy to understand, and articulate teacher expectations as well as standards of quality they should meet in their work. Many sources suggest that “the key to improving instruction in online discussion boards lies in feedback, clarification, questioning strategies, and guidance”-- all which can be accomplished through the use of a rubric in an assignment (Williams, Jaramillo, & Pesko, 2015, p. 47). Using rubrics is also a more efficient way of delivering feedback to every student. They are able to see exactly where their strengths and weaknesses lie.

It is important that rubrics are designed correctly. The biggest mistake teachers make when designing rubrics is putting the focus on the task, and not the learning outcome to be demonstrated (Brookhart, 2013). Teachers must look for exactly what they are trying to get the students to understand and learn, and that is what should be on the rubric. They should stay away from grading extraneous features that don’t matter in the learning outcome, like the number of facts that are included in the work (Brookhart, 2013). One method that has been mentioned repeatedly in the literature is developing a rubric with the students, so everyone can determine what the criteria should be (Andrade, 2000). If students are involved, they will feel more invested in the rubric and likely understand it better. “Involving students in this process of self-evaluation empowers them in the development of critical thinking skills” (Skillings & Ferrell, 2000). When students become partners with the teacher to see and monitor their own levels of

success, it builds trust and confidence (Stiggins & Chappuis, 2005). If the criteria listed is definable and observable, it leaves out the possibility of student surprises and excuses.

The primary justification of using a rubric for students' responses in online art critiques is that I want to see if a rubric will change the way that students respond to artwork. From my observation, students in my classes are most motivated by their grades. Sadly, a teacher today cannot give an assignment to students without giving a grade, both because most students would not do the assignment if they knew they were not getting a grade for it and because the administration demands it. Essentially, not only do I want students to respond in online critiques, but I want them to show me in their response that they understand what they are learning about art. I know they like to take photographs, but I agree that "learning to talk thoughtfully about art is especially valuable, perhaps more valuable than learning to make art" (Barrett, 2004). They need to show me that they understand what makes a good composition, or why one photograph looks so much better than another. "Many openly challenge the long-standing assumption that understanding is a natural outcome of an art program which places major emphasis upon developing the creative capabilities of students" (Mittler, 1980). I believe that there are two very different skills students are being taught in my class--one would be to create, and the other would be to take what they have learned about the creation and be able to translate that in the works of others.

### **Conclusion**

In conclusion, there are quite a few deficiencies in the research that necessitate my action research project. Most of the research in art criticism is dated back to the late twentieth century. While most of the theories remain highly valuable, research on the application of those theories in new contexts is lacking. Since online discussions are a relatively current trend in secondary

education, not much has been studied or written about, especially online discussions at the secondary level and even more rarely in secondary art. Art teachers are lacking resources in how to incorporate technological uses with art critiques, and therefore would benefit from my research. Finally, since there are no studies about conducting online critiques in a high school art classroom, there are also no studies about using rubrics to improve meaningful student participation in online art critiques, so it is of worthy further study. This project seeks to change that history, by evaluating the use of rubrics in a high school art setting. The following chapter will review the methodology associated with this action research study.



### **Chapter 3: Methodology**

The methodology chapter will discuss the process of the action research project. Subjects of the study will be defined, as well as the selection process of the subjects. All materials and equipment used in this study will be identified. Ethical considerations that could be possible will be thought out and discussed. Finally, the procedure for the action research will be illustrated in detail.

#### **Participants**

Student participants were chosen from a public high school in southern New Jersey. Participants were enrolled in one of my three digital photography classes, which is an introductory level art course. Students were both male and female, and ranged from grades ten to twelve. Students came from various ethnic and socioeconomic backgrounds, as well as possessed a range of educational aptitudes. These participants had been selected for the study because they were a high school population enrolled in an art course, and many did not have any formal training in art. They received instruction in art criticism, most of them for the first time. Therefore, it was this group that would most benefit from the study.

All fifty-nine students were invited to participate in this study. Students were handed a parental permission form to get signed which explained the study and student participation. Consequently, students who returned the signed form became the participants of the study. All students were asked to perform the various academic exercises related to this study since it was part of their classroom work and their marking period grade, but only results from active participants were used as data for the study. Students did not receive monetary or extra credit incentives for this study. However, these activities were part of their classwork responsibilities, for which they received classwork grades for each assignment regardless of whether or not they

participated in the study. Qualitative data were students' online written responses, students' actions during the art criticism activities, as well as a questionnaire at the end of the study. Quantitative data were student time on task which was recorded, word count for comments 1 and 2, and rubric grades for comments 2 and 3. No student was penalized for not participating in the study, but they still must have completed the work to earn their grades.

### **Apparatus & Materials**

This study took place in a Mac laboratory used for Digital Photography and Animation classes in the Visual Art Department. Hence, students used the computers in the iMac laboratory. Some used their one-on-one, school issued laptop computers for commenting activities. This study used an online, student driven portfolio website called Seesaw <https://web.seesaw.me/> which allowed students to upload their photography work, create a digital portfolio, see peer photography work, and comment on the works. Seesaw was also used by the instructor for data collection for the study. An internet connection was needed to use Seesaw. For classroom photography work, students used Canon T5i DSLR cameras to take photographs, and took photographs of varying subject matter depending on the unit we were learning about in class. Adobe Photoshop was used on the iMacs to edit photographs. Students also used a variety of photography equipment, such as soft box lighting, reflectors, lenses, and external flashes.

Paper materials were used in this study. The first was the parental consent form that students had to get signed to become an active participant in the study (see Appendix A). Second was the commenting rubric that students used to guide their online critique responses (see Appendix B). To create the rubric, I researched examples of online commenting rubrics using Google images. I also used my past art rubrics as a reference. When formulating the online art criticism rubric for this study I combined, what in my opinion was, the best of what I found

online with my previous project rubrics. Online I found rubric variables such as the grammatical and sentence structure component and making a total of three comments. From previous project rubrics I formulated the columns for photography terms and techniques as well as explaining composition through the elements of art and principles of design. The third paper material was a questionnaire given to each student at the end of the study to gather student feedback on the process of the research, for which they filled out with a writing utensil (see Appendix C). To create the questionnaire, I asked questions which focused student opinions of online versus group discussions, ease of use of the software, level of comfort making and viewing comments, and helpfulness of using a rubric during the process.

### **Ethical Considerations**

Student risk involved in this study was minimal. Students who were not usually receptive to constructive criticism about their work could have found it difficult to accept peer criticism. All comments in Seesaw were approved by the instructor, therefore no negative or harmful comments were viewed by others. Students were warned that all comments had to be appropriate and constructive- all negative and inappropriate comments were deleted. Students who normally struggled with writing skills were dealt with in the same manner. If any student wrote a response that the instructor deemed embarrassing in the eyes of peers, their response was deleted from peer viewing and they still received credit for their response.

### **Procedure**

The design chosen for this study was an action research project. In schools, action research refers to a wide variety of research methods designed to diagnose problems or weaknesses in educational practices and help educators develop solutions to address them quickly and efficiently. Action research may also be applied to programs or educational

techniques that are not necessarily experiencing any problems, but that educators simply want to learn more about and improve (Ferrance, 2000). The goal was to create a practical and repeatable process of learning, evaluation, and improvement that leads to increasingly better results for schools, teachers, or programs. My action research was an investigation into educational research dealing with using an online forum to conduct art criticism activities at the high school level. The goal of this research was to develop practical solutions for the teacher in managing and improving online peer art criticism with students. Students experienced the study in their regularly scheduled class periods. The following is a summary of procedural steps for the action research study.

1. Students were handed a consent form and had a week from when it is handed out to bring it back, signed by a parent or guardian.
2. Students were instructed to start an online account in an educational digital portfolio site, called Seesaw.
3. Students uploaded their completed photography assignments to the Seesaw site. This site allowed students to make a portfolio of their work, as well as view and comment on the work of their classmates.
4. Students were asked to comment on three photos of their choosing. All comments were not viewed by others until the teacher approved the comments. Students only commenting in writing- they did not use audio or video commenting in Seesaw.
5. After comments were approved, the students were encouraged to check for comments made about their photography work.
6. During the second commenting process, students were handed a rubric (Appendix A). The rubric was intended to be used to guide students' comments into art criticism, rather

than make superficial comments that lack insight and depth. Students were told that this time their comments would be graded. The investigator reviewed the rubric with each class, and highlighted how students must comment to earn the highest amount of points. The rubric showed that students will be graded on sentence structure and grammar, understanding and evaluation of the photography project, composition arrangement, and typing at least three comments. The rubric also showed how points will be deducted. The investigator explained that students should elaborate on responses. If they thought a photo was creative, then they should explain why it was creative. If they wrote that a photo was unique, then explain why it was different from the others. The teacher also clarified what constructive criticism was- the process of making valid suggestions for improvement in a friendly manner rather than an oppositional one. The students then began the online commenting process.

7. During these activities, the teacher observed and recorded written observations, student response activity and reactions to comments, and their response time.
8. These response activities took place at the end of each photography project, which was once every 2 to 3 weeks.
9. At the end of the research study, the students were asked to fill out a questionnaire about the online art critique process.

### **Conclusion**

While this was the proposed procedure, because it was an action research study, the teacher modified the procedure as needed depending on student need, clarification of expectations, or other observations that arose during the study. The following chapter will describe the results of the action research project and any unanticipated outcomes of the study.

## **Chapter 4: Data Analysis and Results**

The data analysis and results chapter will discuss the results of the action research project. All procedural outcomes of the project will be established. Comparisons between class and student results will be distinguished. Student performance, reaction, assessment, and judgment will be explained, as well as any setbacks in the administration of the project.

### **Preliminary Findings**

The total number of students who participated in the research was 51 students who returned signed consent forms for the project, which is 86% of the student population. All students in the three digital photography classes did the online commenting activities which reflected their classwork grades, but as stated earlier, only the data collected from students who returned signed consent forms will be used in the findings.

Students created an online account on Seesaw, and uploaded their finished photography projects as they were completed. Most students were able to start an account easily. A few students had difficulty using Seesaw on a certain web browser and were told to switch web browsers and try again. The majority of students were able to repeatedly log onto their accounts and upload files. Again, a few students had difficulty time after time logging onto their account because they either forgot the logon process or their password. For these students, they were told to record the information on their phone, and the investigator also kept a record of their logon information.

The first project that students commented on was their Shrunken Selfie project, in which students took a photo of a background and then took a “selfie” using the timer on a DSLR camera. They had to combine the two photos in Photoshop to make themselves look small in the background scene, as if they had been shrunken from their normal size (see Figures 1 & 2).

When all students had uploaded their Shrunken Selfie photography project to Seesaw, it was time for the first commenting process. The investigator went through the Seesaw site for each class and approved each work of art that was uploaded. Students were told to log onto Seesaw, find three photographs that most interested them, and comment on each of the three. They were told that only appropriate comments would be approved and able to be viewed- all negative or inappropriate comments would be deleted. A student in Class 2 asked for more clarification in the commenting process, and was told that they could discuss what was successful about the photograph and/or what could be improved about it.



**Figure 1**



**Figure 2**

After the directive, students began to scroll through the photos, and some classes were more talkative than others during the process. Class 1 was very quiet, and began dutifully finding photos and typing comments. In this class it appeared that many of the boys only wanted to

comment on the work of their male friends. When students finished typing their comments, they immediately started texting on their cellphones or playing games on their computers. All students in Class 1 were done commenting by 7 minutes, 24 seconds. In Class 2, students began to talk to one another about the projects they were viewing. Some laughed at the ways their classmates posed for their self-portrait, and commented out loud about the poses. Some students commented out loud to others, praising their work and saying phrases such as “Good idea!”. Students in Class 2 appeared to be more attentive than those in Class 1, really taking time to look at the details of the photos. Students in Class 2 also started to take photos of the work with their cell phones, even though they were previously told they can simply download the Seesaw application to their phones and view the photos whenever they wanted. Numerous students in this class asked “How many comments do we have to make?”, to which they were reminded of three responses. The students in Class 2 were done typing comments in 5 minutes, 50 seconds which was less time spent than Class 1. Students in Class 3 were also very talkative during the commenting process, and laughed often as they viewed the photographs. Two students with special needs had difficulty beginning the exercise because they forgot how to log in, and then forgot their password. Many students in this class like the class before them commented out loud to their classmates, saying phrases such as “I like your shadow in your picture!”, which reflected a Photoshop editing technique the student used. Students in Class 3 were done in the least amount of time which was 4 minutes, 20 seconds. The two students who began the process late because of login difficulties finished by 8 minutes, 9 seconds.

Comments were reviewed by the investigator and approved for viewing- only one comment needed to be deleted for inappropriateness. At the start of each class that day, students were asked to log back into Seesaw to see if they received any comments about their photograph.



Students really seemed to enjoy reading the responses to all of the work, not just their own. Their reactions to the written comments in each class were similar. They thanked their classmates out loud for positive comments. They made verbal comments such as “Man, you got a lot of comments on your photo!”, “Look! You got an exclamation point!”, “Awwww”, and “Honestly, you need to bring your opacity down!”. They laughed together as they read some of the responses. They even repeated some of the written responses out loud to one another. Through the investigator’s observations of their reactions, reading the responses and getting feedback from their peers seemed to be a positive experience for all students.

The second project that students commented on was from their action photography unit. Students took photos using a high shutter speed of a liquid drip or splash (see Figures 3 & 4). They edited their photos in Photoshop, and uploaded the photos to Seesaw. For this project, students were allowed to upload more than one edited photo to Seesaw, which many students did. The investigator again approved all photos so they could be viewed by the students.



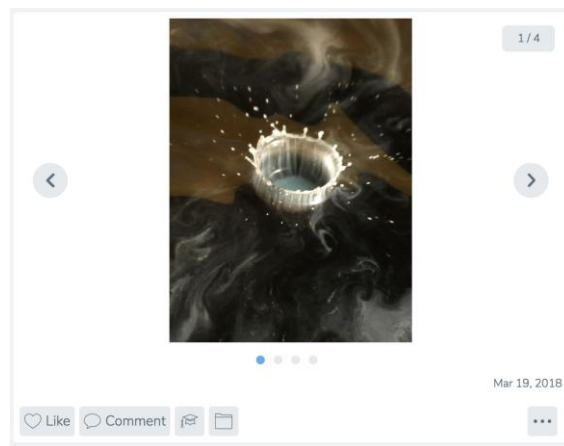
**Figure 3**



**Figure 4**

In Class 1, there were a few students who had some difficulty with this second commenting process. Two students did not previously upload their photos due to class absence the day before. They were told to upload their photos before starting to type their comments.

Unfortunately, their photos would not get commented on, since the commenting process had already begun and their photos still had to be approved by the investigator to be viewed. Another difficulty that was realized was that students who double-checked their responses against the rubric and found grammatical errors in their responses on their own were not able to edit their responses in the software. The investigator's solution to that was that the class was told if they alert the investigator of a response error during the process, no points would be taken off the rubric. The final complication that arose during the process was that students who submitted more than one photo had scrolling arrows appear on the left and right of the screen to view each photo (see Figure 5). Students were made aware of the arrows in order to view each photo separately. Class 1 finished all responses in 12 minutes, 45 seconds.



**Figure 5**

Class 2 had similar difficulties as Class 1. In this class, three students were absent the day prior and had to upload their photos during the commenting process, which also could not be commented on that day. This class was alerted to the prior obstacles faced in Class 1 with editing of comments and scrolling through the photos. These students were also told to alert the investigator of response errors during the process, and to scroll through the photos to see all of them. One student in this class called the investigator over to his computer to ask if his responses were “acceptable”. The investigator observed the comments and responded that he had written

two sentences about composition and needed to comment on how well they accomplished the project. The investigator observed a student showing another student what was written on his screen and laughing about it. The student had written an inappropriate comment under one of their friend's photos. The investigator reminded the students that all inappropriate comments would be deleted and never seen by others. Most of Class 2 was finished commenting in 11 minutes, 50 seconds. The last student was finished commenting in 12 minutes, 40 seconds.

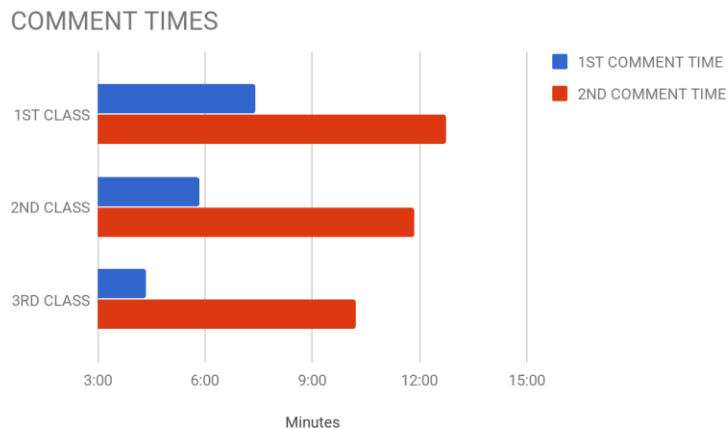
Class 3 was alerted to the prior obstacles of editing and scrolling through photos as was Class 2, and students began typing their comments. This class was the most vocal in discussing the photos out loud while scrolling through the pictures. Students called out phrases such as "Wow! Did you see this one?" and "Whoa! I really like yours!". One student in the class got out the textbook and used it as a reference for writing about composition and the elements and principles of design. I should mention that this student is a senior and at the top of his senior class. He is always motivated to get top scores. I will use his idea with students the next time we do online commenting, which I will discuss. A student with special needs had difficulty with sentence construction, and had to be assisted by the investigator. Most of the students in Class 3 were finished in 10 minutes, 13 seconds. The last two students finished at 11 minutes, 4 seconds.

### **Analysis Overview**

The first relationship between Comment 1, without using a rubric, and Comment 2, using a rubric, was time on task (see Table 1). Students in each class had varying times that they finished typing their comments, but one consistency between all three classes is that it took them longer to type comments when using a rubric than it did their first comments. In Class 1, time on task was 5 minutes, 21 seconds more on their second comment. In Class 2, students commented 6 more minutes on their second comment, which was almost double the amount of time as their

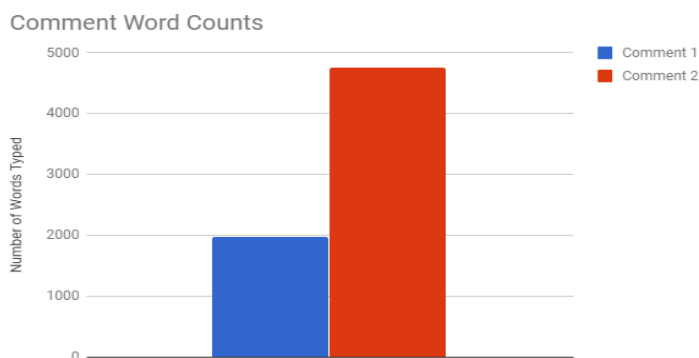
first comment. In Class 3, time on task was almost 6 seconds more, or more than double what is was for the first commenting process.

**Table 1**

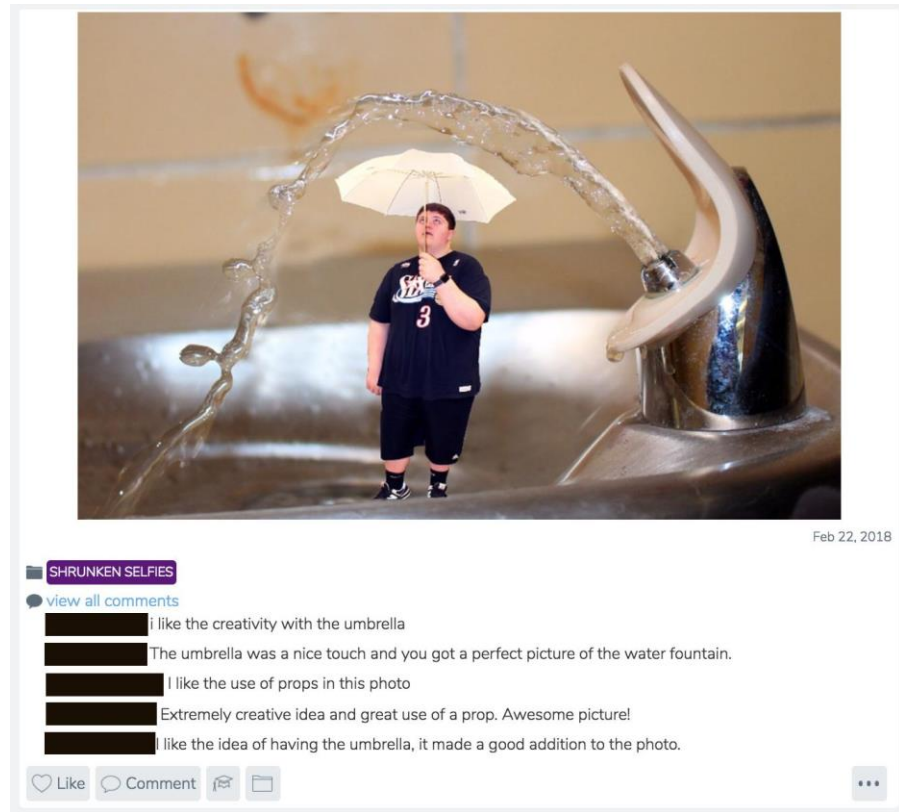


The second relationship between the use of rubrics in online art critiques and student response quality was the number of words used in students' comments (see Table 2). For this data, 5 students of the 51 participants were left out of the count because they were unable to do the first comment since they were away on a field trip for the week. On comment 1, students used a total of 1978 words. On Comment 2, students used a total of 4757 words. Comment 2 had a 42% increase in total words, or a difference of 2779 words. Therefore, using a rubric encouraged students to use more words in their responses.

**Table 2**



The third relationship between the use of rubrics in online art critiques and student response quality was the depth and insight shown in students' comments during the commenting 2 process compared with comment 1. In comment 1, most students responded in a way that was meaningless and shallow. Their comments did not show learning, only judgment. Some students responded with only one word, such as "Creative", "funny", and "Impressive". Most students responded with a brief one sentence answer that did demonstrated little or no knowledge of the subject matter (see Figure 6). Examples of this were "I like how realistic it looks", "i like how it looks like you are swimming in the water", "I like the way you edited yourself to hang from the branch", and "I really like this one because it is unique." One student responded in comment 1 by adding heart emojis under their favorite photos instead of responding with words! Most students did not pay attention to proper grammar and sentence structure. They wrote as if they were texting a friend. They used bc for because, and didn't capitalize their letter "i" when speaking from the first person. Twenty-five comments mentioned that a photo was "creative", but did not explain why they thought it was a creative idea. Eleven comments mentioned that a photo was "cool" but did not elaborate why it was cool. No comments were made about composition, and only one comment made use of any elements of art and principles vocabulary. Students were not directed to do this for comment 1, but statements about composition would have shown their knowledge of what sets the better photos apart from the rest.

**Figure 6**

However, some students were able to make some good insights about the project and the photography process. Examples of this were, “I like how you put yourself in the printer and made it seem real with the shadows behind your back”, “The positioning of your shrunk selfie makes it look like an action shot of going down a railing”, and “I think this was a really cool way to integrate everyday things into your photo. Your partner did a good job taking the picture and you did a great job editing the photo.” Five of the fifty-one students added constructive criticism in their first comments, such as “The only thing is that the photo looks grainy, but otherwise I think it’s really good.” While these insightful comments were stronger than most, there was still much room for improvement for all students.

Comments in the second commenting process using a rubric were tremendously improved! Comments were written in sentences, and students paid attention to using correct grammar. No emojis or one-word answers were used this time. Many comments showed in-depth

answers that were able to assess student knowledge. One example was, “I like how you used contrasting colors and how different yours is to everyone else. The background and paint is a good choice, the angle of the camera is also good.” Here, the student is not only thinking about the camera angle, but also thinking about contrast and style. A second example was “I like how you can see the movement in the water. I like how you use the white water to drip into the purple, so you can see the drip more. The picture shows good depth of field.” Here the student was commenting on the principles of movement and emphasis in the photo, as well as the depth of field being successful. A third example for comment 2 was “The focus in your image is very well done. The droplets are in focus and the backgrounds are slightly less; forming a great depth of field. Your timing was great and that created some unique shapes and figures. However, if you had used a different color drop in the first few, I think the shapes would’ve popped more. Excellent photo!” Here the student was discussing the successful photographic process, as well as giving some constructive criticism.” While the range of student responses improved from their first set of comments, many were still lacking information that was asked of them on the rubric. Their grammar and sentence structure improved dramatically, as did making their responses about the photographic process more specific. What many students left out of comment 2 was discussing the elements of art and principles of design, as well as discussing composition. After reading their second comments, I decided to make some changes when introducing comment 3.

### **Data Specifics- Third Comments**

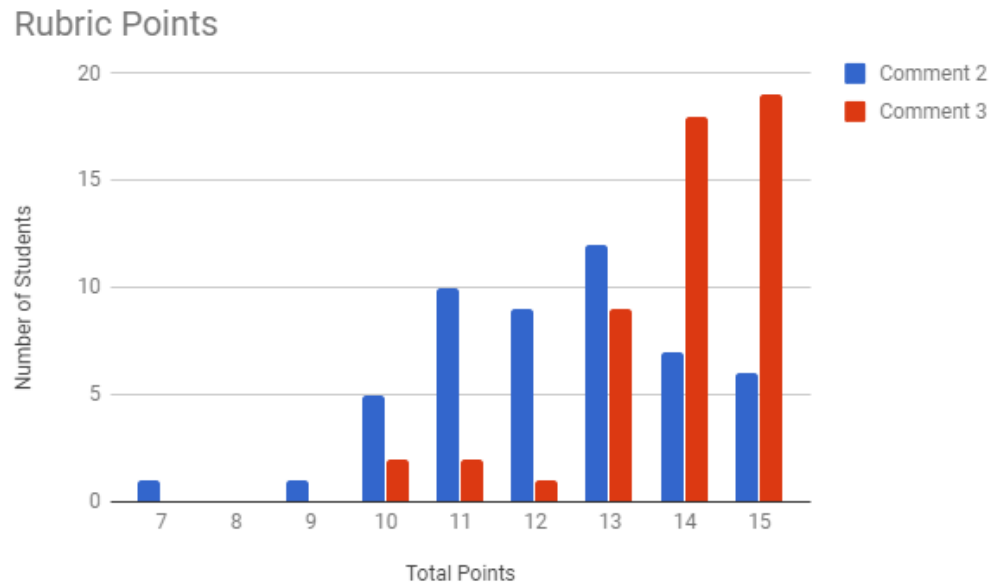
We began the third commenting process when students finished their Light Painting photo project. In this project, students had to use a slow shutter speed and record light trails in the dark with their cameras (see Figures 7 & 8) . They had to get creative in ways to move and change the light to get unique effects in their photos. For the comments, I showed students

examples of responses that earned all points on the rubric for comment 2; my thought being that on the current commenting process they will strive to get a higher grade. In comment #2, many students only talked about photo techniques, and did not discuss composition or elements and principles of the artwork to earn all of their rubric points. I made them aware of that, and suggested they focus one sentence on the photography style or process, and the second sentence on composition. This is where I took the idea of my senior who used the book for comment 2. I had all of the students get their textbooks out and showed students elements and principles vocabulary from earlier this year in the book. I suggested they use vocabulary on this page to help them discuss composition. One student asked if constructive criticism was mandatory, and I responded that it was optional.

### **Data Analysis- Third Comments**

The differences between student comments 2 and 3 were impressive! It seems that after responding once using a rubric and getting further instruction on how to improve responses, as well as having a vocabulary accessible to use while commenting, students were motivated to perform much better on the task at hand! Their rubric grades for all students improved for comment 3 (see Table 3). You can see by the red bars in comment 3 that many more students earned all or close to all of their points on the rubric. The data shows that continued practice of online commenting using a rubric allows for students to improve writing and become more successful in the art criticism process.



**Table 3**

The following is an analysis of the improvement between comments one through three for individual students. The first student (see Table 4) is a 12th grader with special needs who has an I.E.P., or Individualized Education Program. This student did not like to participate in whole class art criticism, even when called upon. In his first series of comments, he actually commented on 9 photographs- all with one or two words. It is immediately recognized that he is more comfortable participating in online commenting rather than whole class discussion. In his second comments, while he still makes some spelling errors he is constructing his writing in sentences using the rubric to guide him. In his third comments, he is adding much more detail to his answers. He discusses the photo techniques as well as explains the motion of the composition and the element of color. I think that it is apparent here that this student shows growth in his art criticism skills, using a rubric for guidance and practice.

**Table 4**

<b>Student 1</b>	
<b>Comment 1</b>	Thats cool; Creative; is funy
<b>Comment 2</b>	I like how the blu contrast the red so well. You can see the tiniest of details.
<b>Comment 3</b>	I like the depth of the picture and how you used the light. Due to how it moves away from the picture giving motion to start from the bottom to follow through the middle to the top. Also how every color blends well

The second student I will assess is an 11th grade girl of average academic abilities (see Table 5). Her first comment simply states her like of the photo and a judgment of it. When using a rubric, the second comment starts to discuss the success of the photo project, as well as state a principle of design used in the photo. The third comment examines color choice, and gives constructive criticism for improving the composition. With each commenting process, her answers get gradually longer and closer to what is expected on the rubric.

**Table 5**

<b>Student 2</b>	
<b>Comment 1</b>	I like this one it looks super cool.
<b>Comment 2</b>	I really like the difference of color inside of the drip. I also think that the ripples in the water look cool and give off a sense of movement.
<b>Comment 3</b>	I really like the way the colors swirl together and blend nicely. I think you could have made this image even better if you cropped out the right end and just focused on the perfect swirls.

The third student I will evaluate is a senior, who strives for above average grades (see Table 6). He starts out with his first comment by making a judgment and briefly explaining why he made that judgment. He also praises his classmate for a job well done! His second comment discusses emphasis in a simple way, and then the contrast of the composition. He also makes a

hypothesis in the state of the water, based upon his own experience in taking this type of photo. In his third comment, he really reflects his knowledge of the photography project by discussing the slow shutter speed and its effects on the photo. He also discusses how the element of lines form the principles of movement and repetition to create the composition. He ends with a judgment and also another compliment for his classmate. Even in this example of a student who started out commenting stronger than his peers, growth in his responses when using a rubric can be seen and understood.

**Table 6**

<b>Student 3</b>	
<b>Comment 1</b>	The shadowing makes the picture look more professionally done. Overall great work!
<b>Comment 2</b>	This picture is great because of how the focus is more on the disturbance in the water than the droplet itself, making it stand out. The contrast of white and black really make this composition. The swirls in the water are also very good because you can tell this was one of the first drops since the water isn't too discolored.
<b>Comment 3</b>	The use of the elongated time the shutter was open was a great advantage in this image, showing the movement of cars on the road. The lines on the street show repetition and the light trails on the road give the photo depth. The picture you drew with the light was also very creative. Awesome job!

#### **Student Questionnaire**

At the end of the action research project, I handed out a questionnaire (see Appendix B) to all students to get their feedback about the online art criticism exercises, using Seesaw as an online technology tool to communicate, and their opinion on the usefulness of a rubric when making comments. The results were overwhelmingly positive. All students agreed or strongly agreed that Seesaw is user friendly. Photos were easy to upload and it was easy to scroll through and view the photos. They also felt it was easy to add comments under the photos. All students responded that they enjoyed viewing the projects of their classmates online. Most

students replied that they enjoyed commenting on the photo work of others, although 5 students were uncomfortable in making comments and 15 were neutral to making comments. One student did not enjoy seeing the comments of others about their photography work, five students were neutral about seeing others' comments, while everyone else enjoyed viewing the comments- 43% of students strongly agreed it was enjoyable! All but 3 students agreed that rubrics helped their writing, which can be disproven to them at a later date. Finally, when asked if they preferred online art criticism to whole class discussion, 30 students agreed or strongly agreed they preferred online discussion, 13 students were neutral about it, and 8 students preferred whole class discussions. Overall, most students reflected that this process has been a positive experience, and one that seemed to be enjoyable for all!

### **Conclusion**

The relationship between the use of rubrics and student response quality in online art critiques has many variables. First, students spent more time commenting with the use of a rubric than they did commenting without one- in one case more than double the amount of time on task. Second, students used 42% more words when commenting the second time with a rubric, so the rubric caused the word count to be higher. Third, using a rubric forced the students to use correct grammar and sentence structure, therefore improving their writing and communication skills. Fourth, the majority of students took more time and caution to respond when they found out they were getting graded for their responses. Fifth, students' comments were more meaningful and insightful when they were guided with a rubric. Students added more details to their comments and explained their answers more thoroughly. As the students practiced responding with a rubric, they showed more insight into their learning of photography and knowledge of good composition, as well as communicating their ideas better. Finally, their improved responses gives

the teacher a much better understanding of individual learning and growth. From this understanding, the teacher can decide if the necessary skills have been mastered and adjust their lessons accordingly.

The final chapter will discuss conclusions of the action research project. Findings will reflect back to the literature, as well as consistencies and inconsistencies in the data. Limitations in the validity of the results will be speculated upon. Discussion will ensue on the interpretation of results and their impact on future initiatives.

## **Chapter 5: Conclusions**

Chapter five will review research questions and analyze answers in light of specific relationships pertaining to this research project. This chapter will review the findings in Chapter 4, make generalizations that relate to the literature review, discuss limitations in the action research project, and theorize possible implications for future studies.

### **Findings**

It is apparent in this study that the use of rubrics does affect student response quality in online art criticism. Using rubrics affected greater time on task, use of more words in responses, focus on using correct grammar and sentence structure, and writing comments that show depth and understanding which can be assessed by the art teacher. When students were first asked to comment on peer photography online, they used simple words and phrases that showed little meaning or knowledge. Their responses were mostly opinionated and judgmental with no details written to explain their reasoning. When students commented the second time using a rubric, their responses improved dramatically. Students used complete sentences and correct grammar, as well as reflected on the success of the project and/or composition of the photo. They had a 42% increase in words used in their responses the second time. Students in all three classes spent more time writing their responses in the second comment- in one class their time on task more than doubled! Before students commented a third time, I showed students peer responses from the second comment that earned the highest points on the rubric. I also showed them elements and principles of art vocabulary to use to discuss composition. Therefore, in the third commenting process, student responses showed even greater improvement. This time, many more students earned all or close to all of their rubric points. Their answers were finally able to

show me what they knew, and I used the rubric to assess their knowledge and give them feedback.

### **Generalizations**

There are many consistencies between the results of my action research project and the literature. I will discuss the importance of art criticism and how students learned how to critique peer work in the study. Using an online platform to pursue art criticism will be evaluated. Students creating responses using higher order thinking skills through the use of a rubric will be demonstrated. Finally, the ability of the teacher to assess individual student understanding through their final responses will be considered.

### **Connections to Art Criticism**

Teaching students how to criticize the photographs of others was a challenge in this study. Students' initial comments of peer work were shallow and judgmental. Students had to be taught how to make informed judgments (Subramaniam, Hanafi, & Putih, 2016)-- this was not something that came naturally to most of them. The majority of my participants had no background in performing art criticism. Using the rubric when commenting guided students to strongly observe the art work and specify in detail what they were seeing. By making connections between what they were viewing and what they had experienced during their own photography process, students were able to communicate meaning in their criticism of art (Jensen, 2001). They were able to see patterns in results, such as with the drip photos, where many photographs obtained similar images. Pattern recognition is an important twenty-first century skill (Pink, 2006), and through observations of peer photos they were able to see and discuss the patterns between different works of art. Another twenty-first century skill that was demonstrated by students throughout the study was creativity (Pink, 2006). Students were able to

experiment with light and liquid during their photo shoots to achieve unique images that stood out among others. During art criticism, those differences were noticed, highlighted, and discussed. Participating in art criticism using a rubric led students to produce informed judgments and rational critiques (Brookhart, 2010). I also noticed in some comments how art criticism strengthened student empathy (Subramaniam, Hanafi, & Putih, 2016). Some students wrote positive phrases for their peers such as “Great work!” and “Terrific effort!” A few students actually wrote to the students by including their names to make it more personal, such as “I really like what you did here, Chris!”. By reminding students of their vocabulary of the elements of art and principles of design, students were able to make formalist critical judgment (Blackmon, 2015) as discussed in the literature. To my knowledge, this study is the first contemporary research into engaging in art criticism at the high school level.

### **Relations to Online Commenting**

In the research, online discussion had many positive outcomes. First and foremost, every student had a chance to participate in the discussion. Students were anxious to see comments about their work and the work of others. All student voices were recognized and heard by classmates, therefore elevating their voice in society (Pahomov, 2014). Seesaw was an innovative technological tool that improved the instructional delivery of an art critique and increased the relevance of the project to the students (Krentler & Willis-Flurry, 2005). In this study, technology was not just used as a tool but as a way to improve the photography curriculum. (Pahomov, 2014). Students can also use Seesaw as an online portfolio to view their work on any electronic device. Online commenting allowed for differentiated instruction. For those students who take more time to write or have difficulty in writing, or for those students who missed the assignment due to absence, they were able to finish the commenting process at



home. Therefore they were automatically given extended time to answer as needed (Pahomov, 2014). Student questionnaires at the end of the project indicated that all students agree that the Seesaw technology was easy to use for the critiquing process and they enjoyed reading the comments of others. The data also shows that the majority of students were comfortable commenting about others' photos online, and 59% of participants preferred online art criticism to whole class discussions. This study is also one of the first of its kind to study online commenting of high school students.

### **Rubric Assessment**

Using a rubric was an essential component to this study. The rubric I created used a list of criteria and gradations of quality, with descriptions of strong, average, and weak work (Andrade, 2000). During the second commenting process of the research, my students were better able to understand my expectations of their comments. The students were also able to improve their writing after I handed back their graded rubric with feedback in the form of comments for enhancing their ideas and earning more points. They are also able to see where their strengths and weaknesses lie by viewing their graded rubric (Williams, Jaramillo, & Pesko, 2015). In my study, the rubric was the fundamental element in student responses improving and becoming more substantial in their thoughts on art criticism.

### **Limitations**

There were a few limitations about this study to be cited. I wish I had more time allotted to undertake the study and gather more data. Instead of conducting the study in a total of eight weeks, I could have gathered much more data in a semester or entire school year. Unfortunately, I was only given eight weeks to complete the action research process. It would have been interesting to observe if online commenting affects the way students respond to whole class

discussions after going through the rubric commenting process online. While I will still do this activity with my students and compare results for myself, it is not something I had time to do for the project and write up in the research analysis.

Although it is entirely out of my control, class absences were a problem that led to the omission of some participants in the initial commenting process. Students were not able to make up the comment assignment before we moved onto the second comment with a rubric. Therefore, I did not have their initial comments as control examples. There were also many students who had to make up the comments for homework, since they were absent in class and missed the assignment. The problem herein was that students had already viewed their online peer comments about their photography work, so the homework comments may go unnoticed.

Videotaping the students was something I wanted to include to get more data, and I could not do it. I wanted to video the students responding so that I can review anything I may have missed while they were responding. With a class size of twenty, there was no way to observe everything that was going on. I would have loved to be able to review the process on video to see what I had missed in my initial observations. The problem with videotaping was that I didn't want to hold up my research approval process because I wanted to take videos of my students. I was concerned that having the video component in my research would delay the approval. Getting approval to do my action research project had to be approved by an IRB (Institutional Review Board), as well as my school district's board of education. I started late to get IRB approval which delayed my research start date. Then I found out I could not simply get principal approval like my fellow graduate cohorts had- my district required board of education approval. By the time I found this out, I had missed the board meeting date for the month, and had to delay the research start date another month!

In dealing with technology, there are always going to be limitations. Some of my special education students had a difficult time remembering how to log onto Seesaw, as well as struggling to remember their passwords. I ended up keeping a file of their passwords so we didn't have to keep repeating the struggle. One of our internet browsers did not support Seesaw, and I had to keep reminding frustrated students which browser they can use. Seesaw is actually a very user-friendly site to use for uploading photos and commenting, but we did run into some trouble with the commenting process. When students checked their response against the rubric and realized they wanted to change their answer, they quickly found out they could not edit a response. For some students who are overly concerned with their grades, the initially panicked and called me over to their computer. I solved this problem by telling them to retype their answer correctly, and I would simply delete their first response when I viewed and approved responses. I plan to contact Seesaw and have them look into fixing it so that students can edit responses.

### **Implications**

The research shows that using a rubric with online art criticism improves student responses. Online commenting is a process that is getting more common in today's classroom (Pi-Sui, 2016), and it has been my experience that teachers need resources to use technology to improve higher order thinking skills. This action research project can be used as a resource by showing educators how using a rubric during an online commenting process can guide students in making thoughtful, educated responses. The rubric itself is an invaluable tool for teachers, and it's one that can be modified to almost any subject and grade level.

Another important factor in this research is the discussion of the continued importance of art criticism in present-day art classes. I believe art criticism is a vehicle for students to use higher order thinking skills which is emphasized repeatedly in education today (Williams,

Jaramillo, & Pesko, 2015). Students should be able to evaluate images they see throughout their lives (Spalter & van Dam, 2008), and know there is a process they can rely on to do so through art criticism (Subramaniam, Hanafi & Putih, 2016). Students should also be able to discuss art that they make by verbalizing their learning process (Risatti, 1987). I challenge my students to reflect upon what they have learned and apply that knowledge to the work of their classmates by writing about similarities and differences in the work. I feel that they should also be able to make insightful comments by using the art vocabulary they have initially learned in the beginning of the course, and repeat the vocabulary until it is apparent that they know and understand what they are talking about. Communication is more important now than ever before, and art criticism allows students to communicate their ideas and knowledge to others (Barrett, 2004)..

There are many ways in which this study can be replicated and expanded. One expansion that I mentioned previously would be to see if whole class discussions improve after the action research project was complete. This is an activity that I will pursue in my future lesson plans, but not one that I had time to include in this study. I suspect that whole class discussions would be enhanced due to the success of online commenting, but I will have to pursue this activity to find out if my hypothesis is correct. Another way to broaden the scope of online commenting would be to add video and audio commenting. Seesaw has this capability, but commenting with video and audio is not something I considered until after the project was completed. I would be excited to see my students use these features to add comments for their peer work. I think it would really add to the authenticity of their learning, and make the commenting process much more personal! An additional avenue to explore would be the self-critique. I have not yet had students comment on their own work--only the work of their classmates'. I would be curious to see if they would be more or less critical of their own work as opposed to criticizing others. Educators of different

grade levels and subjects can replicate my research to improve student commenting using an altered version of my rubric. They can edit the rubric based on their needs for subject matter and grade level and compare their student comments to my research. A study can also be done in rubric writing with the students to get them involved in the process of their education (Skillings & Ferrell, 2000).

### **Conclusion**

My research established that the use of rubrics does affect student response quality in online art criticism. Connections between my study and the literature were corroborated. Art criticism was shown to promote higher order thinking skills in the contemporary high school art classroom. Technology was used as a tool to improve curriculum by involving all students to participate in the discussions, and students enjoyed this method of class participation. Using a rubric for online commenting with students was the key factor to improving their thinking and writing skills. While this study could have been improved in various ways, the data strongly suggests that the research project was successful in demonstrating the importance of using rubrics to strengthen student responses. Finally, future research can be pursued to experiment with different commenting techniques, as well as variations on my rubric to be used in different subjects and grade levels.

## Appendix A

### SUBJECT CONSENT FORM

#### The Relationship Between the Use of Rubrics and Student Response Quality in Online Art Critiques

Your son or daughter is being asked to participate in a research study in their Digital Photography class. The teacher, Kirsten Smith, is currently pursuing a Master's degree in Educational Technology. The purpose of the research is to obtain data for the research project which is listed above. The project will have students engage in online art criticism of their classmates' photographs, and the teacher will be examining the relationship between the use of rubrics and student response quality during these online activities of art criticism. The expected duration of this research will be January through the end of March.

The reason your son or daughter is being asked to participate in this research is because they are a current student in one of three of the teacher's Digital Photography classes. Data gathering will be conducted in all three classes with 58 students participating in the study.

Participation in this study does not differ greatly from their regular classwork.

1. Students will be instructed to start an online account in an educational digital portfolio site, called Seesaw.
2. Students will upload their completed photography assignments to the Seesaw site. This site will allow students to make a portfolio of their work, as well as view and comment on the work of their classmates.
3. Students will be asked to comment on three photos of their choosing. All comments cannot be viewed by others until the teacher approves the comments.
4. After comments have been approved, the students will be encouraged to check for comments made about their photography work.
5. Students will repeat commenting process again with the next class projects, but at the subsequent times they comment, they will be given a rubric which describes how they will be graded based on their responses.
6. During these activities, the teacher may record written observations on student response activity and reactions to comments, and record their response time.
7. The students may be asked for their input to create a class rubric pertaining to a specific project.
8. These response activities will take place at the end of each photography project, which will be once every 2 to 3 weeks.
9. At the end of the research study, the students will be asked to fill out a questionnaire about the online art critique process.

There is very little risk involved for the participants in this research project. All student comments will be approved by the teacher for appropriateness- only positive or constructive criticism comments about student work will be approved and viewed. Inappropriate or negative comments will be deleted before students can view them. However, participation may involve some discomfort for students who do not like to write, have difficulty in writing, and/or have difficulty receiving constructive criticism.

Benefits to the participants include strengthening of writing skills, critical thinking skills, and getting critical feedback from their peers in a controlled environment.

All information in the study records will be kept confidential. Data will be stored securely and will be made available only to persons conducting the study unless participants specifically give permission in writing to do otherwise. No reference will be made in oral or written reports that could link participants to the study. The teacher will be the only person who can identify student responses and will have access to any records. All data will be published in the research report, but students will remain anonymous. All records will be stored onto a flash drive, which will be locked in the teacher's file cabinet at the end of the study.

Participation of your son or daughter for this study is voluntary- refusal to participate in the study will involve no penalty to the student. However, the online art criticism comments will be part of the student's classwork responsibilities, whether or not they participate in the study. Therefore, the student will be graded on their responses, but their responses will not be included in the study if they do not wish to participate. Participants may discontinue participation in the study at any time without penalty, but refusal to do an assignment will earn them the grade of a zero for that assignment. If the participant withdraws from the study, the participant's data will be deleted from the study.

You can obtain further information from the study investigator, Kirsten Smith, at 856-589-8500, ext.7127. If you have questions concerning your rights as a research subject, you may contact the IRB administrator at [irb@usciences.edu](mailto:irb@usciences.edu) or 215-596-7490.

If you wish your son / daughter to participate in this study, please read and sign below.

I have been informed of the reasons for this study. I have had the study explained to me. I have had an opportunity to ask questions and have had them answered. I have read this consent form, have initialed each page, and have received a signed copy. I agree to participate in this study voluntarily.

_____ Student Name	_____ Student Signature	_____ Date
_____ Parent Name	_____ Parent Signature	_____ Date

### **Investigator's Affidavit**

I have carefully explained to the subject the nature of the above project. I hereby certify that to the best of my knowledge the person who is signing this consent form understands clearly the nature, demands, benefits, and risks involved in his/her participation and his/her signature is legally valid. A medical problem or language or educational barrier has not precluded this understanding.

_____ Signature of Investigator	_____ Date
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## Appendix B

**CRITIQUE COMMENTING RUBRIC**

POINTS	CONSTRUCTION	UNDERSTANDING/ EVALUATION	ELEMENTS & PRINCIPLES	NUMBER OF COMMENTS
<b>0</b>	*Student makes comments that are inappropriate or unacceptable. Comments are not related to the post or are of a personal nature.			
<b>1</b>	Poor spelling and grammatical errors throughout. Didn't use sentences. Written in informal/texting language.	Simple comments which lack insight, depth, or are superficial. Does not express opinions clearly. Shows little understanding.	At least one comment discusses an element and/or principle used in the image.	1 comment made
<b>2</b>	Some poor spelling and grammatical errors. Mainly formal responses containing a few abbreviations or text style language. Only one sentence used.	Simple comments which show some insight and depth. Comments are short and sometimes irrelevant. Criticism is not always appropriate.	At least one comment discusses the quality of the composition.	2 comments made
<b>3</b>	A few spelling and grammatical errors. Comment contains 2 sentences. All formal responses used.	The comments show insight, depth, and are connected to what we are learning in class. Constructive criticism is expressed in an appropriate style.	The comments discuss the use of elements and/or principles working together to create a composition.	3 comments made
<b>4</b>	Spelling and grammatical errors are rare. Comment contains 2 or more sentences.	The comments show insight, depth, and evaluation. Comments reflect what we are learning in the current unit, and/or what we have learned from other units. Constructive criticism is expressed in an appropriate style.	The comments discuss the use of elements and principles working together to create a composition.	

*\*If you made 3 comments, but any are unacceptable, the unacceptable comments do not count toward your total number of comments!*

**Grade: \_\_\_\_\_ / 15**



## Appendix C- Student Questionnaire

**Name:**

**Period:**

Please answer the questions below based on your experience in this class using Seesaw to comment on your classmates' photography work. Check off the box you feel answers the question best.

No.	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	It was easy to upload photos to Seesaw.					
2	It was easy to scroll through the photographs and add comments.					
3	I enjoyed viewing the photography work of others in my class.					
4	I enjoyed commenting on the photography work of others in my class.					
5	I enjoyed seeing what others wrote about my photographs.					
6	The rubrics helped me to know what to write about in each photograph.					
7	The rubrics helped me add more details to my comments.					
8	The rubrics helped me to think more critically about photography when I commented.					
9	I felt comfortable in the process of commenting on the work of others online.					
10	I prefer doing online art critiques rather than discussing photography as a class discussion.					

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