

Benefits and Challenges of Collaboration and Autonomy
in a High School Beginning Art Class

by

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ABSTRACT

Benefits and Challenges of Collaboration and Autonomy in a High School Beginning Art Class

In the twenty-first century students are used to communicating. Using social media they often collaborate with peers. Despite this students may prefer to work independently rather than collaborating with fellow students in art class. Also, collaboration has become more common with twenty-first century artists. This study addresses the possible disconnect between the popular culture of today's art students' preference for the traditional independent autonomous practices in the art classroom, and the collaborative practice of many contemporary artists.

The purpose of this study is to investigate how working collaboratively or working autonomously affects the artworks and oral and written responses about their artwork of high school beginning art students.

I used a mix of quantitative and qualitative methods to gather data. Data for this study are the artworks made by the participants, idea starter sheets, participant written reflections, their oral answers to interview questions, and my observations of the classes.

The participants in this study are students from four intact classrooms of high school beginning art.

This study produced multiple findings, such as: The artworks revealed differences between collaborative classes and autonomous classes. Additionally, no differences were revealed from the written and oral responses made by the participants in the two classes. I conclude that, when given the opportunity to collaborate or work autonomously, high school beginning art students in this study made different artworks but made no different oral and written responses.

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CHAPTER 1

INTRODUCTION

Many artists work autonomously on their own in their own studios, away from all the noise and cacophony of daily life. They are loners, drawing inspiration from somewhere deep within them. An artist alone claims the victory or defeat of his or her own works of art. That is how the myth goes “artist as hero”. But, are they really alone, especially in the twenty-first century? Furthermore, do they really desire to be cloistered working on their craft? I venture to guess, no, except for a few anomalies. Human beings are social creatures. We thrive on interaction among others of our species. A person’s creativity is stimulated not only in solitude but also from many things such as involvement in a conversation, a walk down a crowded city street, watching a movie, or listening to music. Artists work in different artworlds, for example a student artist working in an academic art world, or an artist who makes a living in the artworld of commerce. Both these art realms influence the artworks these artists make. Collaboration is working with others to make something. Artists working in specific artworlds can collaborate with others, such as instructors or gallery owners to help them produce the artwork that works best for their artworld.

My study is centered on the question: How does collaboration or working autonomously affect the artworks of students in a beginning high school art class? Are there differences in student artwork when they work by themselves, or in an atmosphere where they can talk, receive guidance, and advice from their peers. And, are there differences in what they say and write about their artworks and the experiences making it in a Collaborative or Autonomous environment? My query arose from my tenure as a

student teacher in a middle school. My mentor teacher, Ms. Carroll and I preferred different types of classroom atmospheres. She liked a quiet room, so students could concentrate on the task at hand. I, on the other hand, didn't mind a little interaction among students. Our discussions led to an informal experiment that we conducted over two days with four classes in fifty-minute periods, alternating with a talking period, and a silent period. At the beginning of each class, Ms. Carroll read my scripted instructions telling the students to draw realistically a seashell that was set before them.

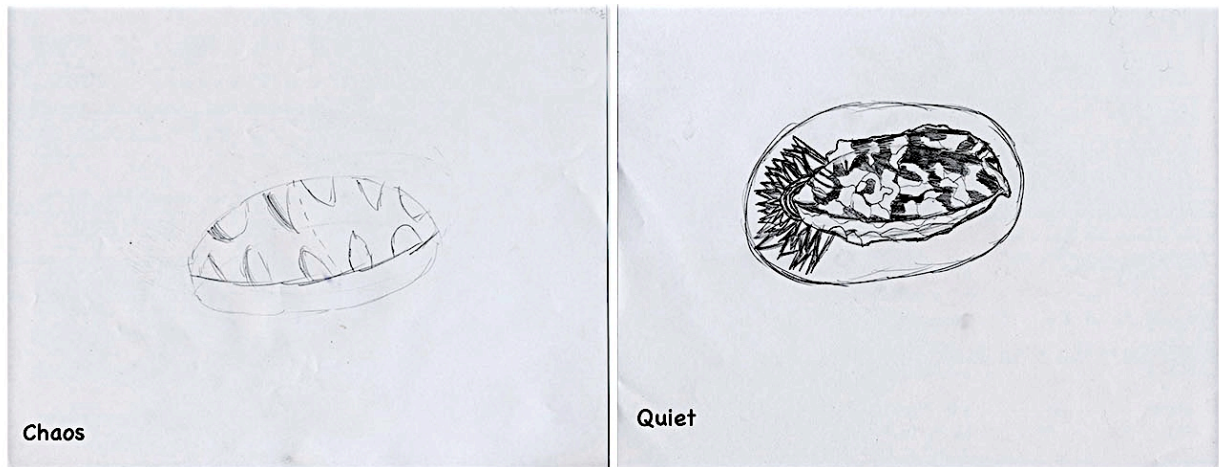


Figure 1. Seventh grade drawings

Next, Ms. Carroll and I compared the drawings in two ways: individual student drawings from each day and each class from each day. We found some clear differences, such as a more thorough and detailed drawing on the quiet day. We both agreed that in this situation working quietly was best when drawing realistically from observation.

For some situations, a silent classroom is a productive classroom. The silence gives students the opportunity to concentrate and focus on thinking, learning, and the assigned task. Unstructured talking can be a distraction. Noise can get in the way of

others' learning. Make Your Day is a popular school wide discipline plan that has this motto: "No one has the right to interfere with the learning or safety of others" (Make your day, 2013). I wondered, how relevant silence is to the studio art classroom? Do students benefit from peer to peer conversations when tackling a creative problem? Do students benefit from talking with each other when creating a new image? After all, many students in high school today live in a social media world. They use Facebook, Instagram, and Vine to share opinions and images. They gain approval by the number of "likes" they receive. I wonder, because of their online presence, whether it is natural for these students to benefit from peer collaboration? The purpose of my study was to find out whether there are any differences in the artworks and thinking made in a collaborative environment compared to a quiet, autonomous environment.

CHAPTER 2

SURVEY OF LITERATURE

Theoretical Framework

In this study I use sociocultural theory to frame the research. Sociocultural theory is a psychology theory “that looks at the important contributions that society makes to individual development. This theory stresses the interaction between developing people and the culture that they live in” (Cherry, n.d.). Vygotsky was a Russian psychologist noted for his social and cultural research. His theory states that learning does not happen without social involvement. Today’s high social awareness, due to the Internet, and web sites like Facebook, Twitter, Instagram, and the like, make Vygotsky’s theory relevant on a new level. Many people learn about current events, news, and information from these crowd sourced online spaces. The Internet not only has an effect our society, but also affects the culture of the locations and communities in which we are raised. The Internet can have an influence on who we are and the images we make. Stokrocki studied the effects of social culturalism in the drawings of Brazilian school children. Stokrocki had the classroom teacher ask a group of Sao Paulo fifth grade school students to illustrate the question “What do you like to do?” Stokrocki wanted to find out what the drawings showed about the students’ “interests and abilities” (2000, p. 14). She found that these fifth grade student drawings were influenced by their culture. For example, the World Cup Soccer Tournament was occurring in Sao Paulo Brazil that year. Several drawings were of soccer players in accurate uniforms. Stokrocki also found “about 25% of students copied from each other” (2000, p.16). I am curious to discover whether the culture surrounding my participants will become apparent, as it did in Stokrocki’s study.

I am using Vygotsky's theory to frame my study. His sociocultural theory says that learning occurs during social involvement. My study will examine Vygotsky's theory of learning in a social situation by comparing the artworks and thinking of one set of students working in a social atmosphere with another set working in a nonsocial, quiet atmosphere.

Young or inexperienced artists can work with a more experienced mentor artist to learn about making art to improve their art making skills. The common name for this type of relationship is apprenticeship. Apprenticeship is a good example of collaboration. Historically, apprentices studied with a master to learn a trade, like art. In these collaborations, both parties benefited. For example, young Leonardo DaVinci was apprenticed to Verrachio. DaVinci learned how to do the mundane tasks of artmaking, such as mixing pigments to make the paint. This helped Verrachio because it freed him to do other tasks. There are many examples of artists and artisans taking on apprentices (SparkNotes Editors, 2005) for example, Michelangelo was apprenticed to Ghirlandiain (Liebert, 1987, p.59), Bruegel was apprenticed to Peter Croecke van Aelst ("Pieter breugel the," n.d.), and Rubens was apprenticed to Tobias Verhaeght ("Peter Paul Rubens," n.d.). Apprenticing is a socially and culturally accepted way of teaching and learning. Vygotsky's social learning theory can explain this type of apprenticeship. The master artist is the "more knowledgeable other (MKO)" (McLeod, 2007). The apprentices are working in the "zone of proximal development" (ZPD), (McLeod, 2007). The participants in my study are beginning art students at a high school level. In Washington High School's Art 1-2 classes, student ages can range from 14 to 18 years old, setting up the possibility of an apprenticeship-like situation among students who

collaborate. Their artworks may show a difference due to the communication among the students who are possibly MKOs and the students possibly in the ZPD.

Definition of Collaboration

The Incredibles is one of my favorite movies. It is collaboration between Disney and Pixar. Pixar Animation Studio is a digital animation company that highly values collaboration within its walls. Randy Nelson is the former Dean of Pixar University. In a speech about learning and working in a collaborative age, he gave the following description and explanation of the value of collaboration, “Collaboration for Pixar means amplification. The amplification you get by connecting up a bunch of human beings who are listening to each other, interested in each other, bring separate depth to the problem, bring breadth that gives them interest in the entire solution, allows them to communicate on multiple different levels, verbally, in writing, in feeling, in acting, in pictures...” (Nelson, 2008). In this speech, Nelson proposed that with collaboration you build up all involved, each individual amplifies the group. Collaboration is more than cooperation. A basic definition of collaborate from *The New Oxford American Dictionary* is: “work jointly on an activity, especially to produce or create something.” From the same dictionary, cooperate is defined as: “act jointly; work toward the same end”. Cooperation and collaboration are different. One needs to cooperate to collaborate, but not all cooperation results in the creation of something new.

In this study, collaboration means participants talking with their peers. This is an accessible and simple form of collaboration that high school students can easily relate to. Talking to each other is a way for participants to communicate suggestions and thoughts that contribute to their art making and thinking.

Collaboration in General Education

Collaboration occurs in many forms. Teachers can collaborate with other teachers; student peers with student peers; students with teacher; students with administrators, community members, family, and librarians, etc. Collaboration has been shown to be effective at several levels of the educational system. The word “collaboration” occurs 14 times in the *Common Core Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects*. For example in one of the speaking and listening standards for students in grades nine through 10:

1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively (2014, p. 50).

There are many examples in educational research focused on collaboration. Hume (1998) did a study on collaborating with her students. Hume was teaching in a mixed sixth and seventh grade gifted classroom and used whole class discussions to build knowledge. One year, early in the school year, a student expressed his concern and dislike of all this talking. To address this concern, Hume had this student and several other volunteer students do research on the whole class discussions. Hume transcribed the class discussions, and then the team of student co-researchers analyzed the transcripts. Hume and her students met monthly, prepared with transcripts already marked, categorized, and supported by personal evidence. They had meaningful, insightful conversations. Ultimately the student and teacher research group learned that whole class

discussions did contribute to knowledge building. Written in the student voices, here are a couple of examples of things they determined; “talk about subjects or do units of interest to most and observe for level of involvement; split into small groups so people have a chance to argue...” (Hume, 1998). This level of student and teacher collaboration greatly contributed to the learning and knowledge of these students. Their research was a gain for the entire class. Discussion is a useful tool in a classroom. In a studio art classroom, class discussion can help build interest in an artmaking project. Students can develop a deeper sense of ownership of their ideas and artworks when they are given the opportunity to contribute to the decision making aspects of forming an idea and art making methods.

Briese (2009) conducted a study on student to student collaboration. She studied fifth grade math students who were solving word problems in small groups. She found that: “Student attitudes of themselves as successful mathematical problem solvers improved by 33%, as did their confidence in the ability to solve them” (Briese, 2009, p. 3). Briese concluded that, “Having students work collaboratively to solve word problems can be beneficial to student problem solving abilities and/or confidence in mathematics. It is also one way for students to share and discuss methods for problem solving, and give English learners more opportunities for speaking practice” (Briese, 2009, p. 4). Creative problem solving, speaking, and listening are important to a studio art classroom. Students often need feedback to get a boost to the creative process. Class conversations, constructive critiques, and more intimate peer conversations can help students figure out new strategies for art making or the art making problem assigned by the instructor.

Collaboration in the Art World

Collaboration between an accomplished artist and a less experienced artist can be beneficial to both. Mica Hendricks collaborates with her four year old daughter. The result is an artwork that features each artist's work in a whimsical image. Both artists contributed equally to the creation, and made something that neither could do just on her own. Hendricks commented in her Blog about the initial experience "It was such a beautiful combination of my style and hers. And she LOVED being a part of it. She never hesitated in her intent. She wasn't tentative.



Figure 2. Hendricks, Pretty is on the Inside

She was insistent and confident that she would, of course, improve any illustration I might have done. And the thing is, she DID" (Hendricks, 2013). Hendricks and her

daughter's discovery of the benefits of working collaboratively led to many images and artworks.

Andy Warhol and Jean-Michel Basquiat collaborated on a series of large format paintings and installations in the early 1980s. "Together, Andy and Jean-Michel created large paintings, generally painting over each other's work to produce diptych collages that represented their opposing styles" (Stonebrook, 2012). Warhol felt that the younger artist, Basquiat, brought new life to his work. Basquiat gained notoriety from working with Warhol. "It was like some crazy-art world marriage and they were the odd couple. The relationship was symbiotic. Jean-Michel thought he needed Andy's fame, and Andy thought he needed Jean-Michel's new blood. Jean-Michel gave Andy a rebellious image again." (Bockris, 2003, pp. 461-462). Keith Haring collaborated with high school students in Chicago to paint a mural. Haring drew his familiar outlines of shapes and figures, and students painted the shapes with various colors and patterns (TheMotionDevotion, 2012). The result is an artwork work that "amplifies" as Nelson would put it, each of the art makers. The students get the opportunity to work with and show with a well established artist.

Collaboration in Art Education

Art education is not limited to the visual arts; it also includes music, theater, and dance. The disciplines of music and theater use collaboration extensively. To play a harmonious piece of music in a school band or orchestra students collaborate. Theater students work collaboratively to build sets, sew costumes, and put on a theatrical performance. Visual art teachers use collaboration to work with other educators and foster collaborative situations for students to work with peers. Greenwell, an art teacher

in Tennessee, and Watson, an art teacher in North Carolina, collaborated with each other to teach an art lesson to their respective classes. “By using an online platform and a common big idea, we were able to create a meaningful collaboration in which students worked together at every stage of the project, from concept development to critique” (Greenwell, Watson, 2013, p. 18). Greenwell and Watson’s art classes met during a Skype session. Skype is an online video messaging platform. It allows two way conversations with live video, giving both sides of the conversation the opportunity to look at each other and show examples. Because of time constraints, Watson’s art class was advanced, and Greenwell’s was an introduction to art class. This produced “the benefit of allowing the older students to act as mentors for the younger ones” (Greenwell, Watson, 2013, p. 18). This type of mentoring is an example of Vygotsky’s “more knowledgeable other,” the advanced students, and the introduction to art students in the “zone of proximal development.” Once the students agree on the big idea, which was about beauty and aesthetics, they began making artworks. Throughout the process and at the end with a finished artwork, students posted photos to Pinterest and had to “respond to three other students’ artworks” (Greenwell, Watson, 2013, p. 18). Pinterest is an online photo sharing website that can be password protected. This gave only the students and teachers in the two classes, access to post photos and comment on their dedicated Pinterest board. Collaborating across the Internet benefited both the students and the teachers in this case. Watson and Greenwell found that “a connection with an innovative colleague can be an inspiration, the jump start of an idea for a new unit, or the source of a fresh take on an old concept” (Greenwell, Watson, 2013, p. 18). Students benefited from meeting like minded students in another state, from the mentoring on both the giving and

receiving side, and from the ability to share their thoughts and read others' thoughts.

Marcus and Fuglestad are two art teachers who employ collaborative games to engage students in understanding art concepts. Marcus is an elementary art teacher in Brooklyn, New York. She uses a pass around game as an opening lesson for a unit on making clay sculpture. The game begins with a lump of clay for each student. "For the first turn, each student has about five minutes to complete a simple abstract shape" (Marcus, 2013, p. 31). After the five minute time is announced, students pass their shapes to the right. With their new abstract shape of clay, students get another five minutes to add elements to the sculpture. These two steps are repeated as long as time allows. Marcus leaves enough time at the end of class allowing students to see the collaborated sculptures and respond to them. Fuglestad, an art teacher in New York State, used a collaborative game to teach rotational symmetry. Fuglestad "received a district grant for Legos" (Fuglestad, 2013, p. 36). She used Legos as the medium to teach her students the concept of rotational symmetry. Fuglestad had students work in small groups. She guided their collaboration by turning their excitement about Legos into a game with a clear set of rules. By taking turns, and following the directions, students were able to purposely collaborate to make the assigned rotational symmetry artwork. Many art educators have seen that students will turn to each other for advice and opinions about the solutions to an artmaking problem. Students draw inspiration from many sources. Thomas and Chan investigated the problem that university student artists want and need to be autonomous while working in a social environment that includes peers, instructors, and other influences that can all decrease or eliminate autonomy. The participants in their study were eleven third-year and fourth-year university art students in Australia; each were

painting or drawing majors and were working toward their BFA. Thomas and Chan (2013) gathered findings through a series of interviews conducted over a three year period, most commonly two or three interviews. They identified six spheres of creative activity and cultural knowledge where university students collaborate to influence their art. They are:

1. Creativity as an attribute of the self/personality
2. The place of creativity
3. Ways to use friends in the course to shore up identity, hedge against social isolation, and compete for creative assets.
4. Reasons for taking on what a teacher proposes in the belief it is in the student's best interest.
5. Results of the teacher's influence and the accrual of creative benefits.
6. Kinds of assertions that privilege the student's creative autonomy (Thomas & Chan, 2013, p. 264)

I studied collaboration with young adolescents in the southwestern United States. These spheres of creative activity and cultural knowledge have different relevance from what they may have to young adults in Australia. At a young adolescent age, high school students are still trying to form a sense of self, or identity. In their art making they may try out new identities. In my study, the place of creativity will be in their established art classroom setting, so the conversations with their friends could be a big influence on their artwork. Since my study had a much more limited time period than Thomas and Chan's, students did what I proposed. That is, they used their friends to help solve the assigned

creative art making problem. The autonomous participants did not have the benefit of speaking to their friends to help complete the task.

Collaboration exists in many facets of daily life. Educators, artists, and businesses use collaborative methods for teaching, art making, and networking. Collaboration has been shown to benefit people and organizations. Using Vygotsky's sociocultural theory to frame my study, I hope to discover whether or not collaboration in high school beginning art classes is also beneficial.

CHAPTER 3

METHODOLOGY

My methodology employed mixed quantitative and qualitative methods and was designed to identify any differences in the artworks and thinking of young adolescents who participated in a collaborative or autonomous art making activity.

My research questions are:

How does collaboration or working autonomously affect high school beginning art students' responses during and about their art making?

Sub question 1: Are there any differences in the artworks made by high school beginning art students who are allowed to collaborate and the artworks made by students working alone?

Sub question 2: Are there any differences revealed in the oral and written responses of high school beginning art students who collaborate and high school beginning art students who work autonomously?

The treatment and art making portion of the study ran for two class periods with four intact classes taught by Bell-Zinn and Carroll at Washington High School in Art 1-2 classes. Carroll taught two of the Art 1-2 classes and two were taught by Bell-Zinn. One class taught by each teacher was collaborative and one class taught by each teacher was autonomous. Figure 3 is a diagram of the study. Group A represents the collaborative participants in both teachers' classes, and Group B represents the Autonomous participants, also in both teachers' classes. Both groups received identical supplies including an Idea Sheet and art making materials (Appendix A, p. 44).

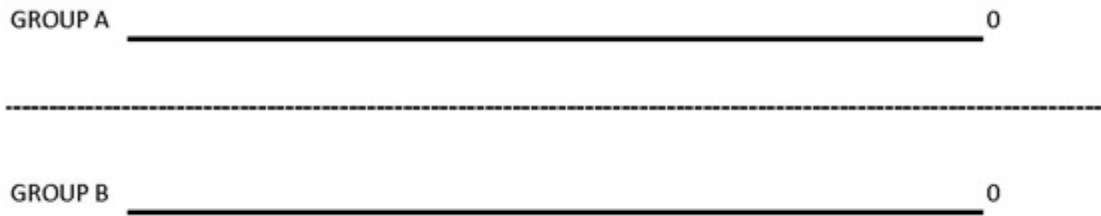


Figure 3. Research diagram

The treatment for this study employed an Idea Sheet (Appendix B, p. 46). The Idea Sheet is two sided. The front has a list of statements about idea formation, and the back has an area for notes and sketches. This document was used as an educational tool to assist in the thinking of the participants. Furthermore, it was intended to give talking points to the collaborative group. Each participant in both the Collaborative classes and the Autonomous classes made their own, individual artwork. The Collaborative classes were given instructions at the beginning of the study each day, and given reminders during the art making time to collaborate, but were not divided into small groups. For instance participants in the Collaborative classes were instructed to give advice about one another's artwork or art making methods and to limit their conversations to the present art project. Autonomous classes were instructed and reminded to remain silent on both of the study days. Below are the procedures in brief. Appendix C, p. 49 has the entire script that Carroll and Bell-Zinn used.

1. On the first day, both groups reviewed the Idea Sheet and art making materials for 10 minutes. Before the 10 minutes, the teachers instructed the Collaborative participants to talk to each other about their ideas and art materials using the Idea Sheet as a guide

to their conversation. The Autonomous participants were asked to silently consider the Idea Sheet and art materials.

1. The teachers instructed both the Collaborative classes and the Autonomous classes to take notes about their thoughts, ideas, and revelations on the Idea Sheet. Both of the whole class groups worked on their artwork for the remainder of the first class period.
2. At the beginning of the second class period, the teachers reminded the participants in the Collaborative classes to collaborate or in the Autonomous classes to contemplate silently. The teachers also reminded both of the whole class groups to take notes on what they thought, or learned, or decided to change, etc., about their artwork.
3. Participants were stopped after 30 minutes of working on their collages. At this time, the teachers distributed the Reflection Handout (Appendix D, p. 60). Participants were instructed to complete the handout and then finish their collage for the remainder of the class period.
4. Both the Collaborative classes and the Autonomous classes turned in the artwork, Idea Sheet, and Reflection Handout at the end of class on both the first and the second day.

Data Collection

Data were collected for three days. Data for this study are the artworks made by the participants, the Reflection written responses, answers to interview questions, my observations of the classes. An unintended additional data collection tool was the front of the Idea Sheet. All data are confidential, identified by a number system.

Data Analysis

The quantitative portion of my study uses averages to identify the differences between the Collaborative classes and the Autonomous classes. To do this I created a list of possible different art making choices that two or more artworks can have (Appendix E, p. 62). The list does not indicate whether an artwork is good or bad. It describes things like size and shape. I looked at each artwork individually and checked off items on the list that applied to the work. For example, if the artwork was 9" x 12", I put a check mark in the corresponding column. When every artwork from every participant was analyzed I added up the check marks in each column. I then found the average of that sum against the number of participants from each of the four classes. I used these averages to compare the differences of the two Collaborative classes with the two Autonomous classes, see a sample page in Appendix F, p 65.

I used the Idea Sheet and the Reflection written responses to collect both quantitative and qualitative data. The front of the Idea Sheet was meant to help participants think about and/or talk about how they get their ideas. There are thirteen statements about idea formation, and one blank space to fill in a personal idea formation thought. Participants circled one or more of these statements and some wrote in thoughts. I found the average of how many statements all Collaborative participants circled and compared it to the average number circled for all Autonomous participants. I also found the average of how many participants completed the Idea Sheet and the Reflection, and how many didn't complete the Idea Handout and Reflection in each class. On the Idea Handout, and the Reflection are areas where participants can write out responses to questions. I used a color coding system to highlight similar words and phrases to identify

trends in participant thinking. For example using the color pink, I highlighted every time the words ‘easy’ or ‘simple’ appeared. Appendix F, p. 58 has an example page of highlighted words. These words gave me a sense of why participants choose their ideas.

The qualitative portion of my study uses a scripted interview of selected students. Carroll and Bell-Zinn selected interview participants. I instructed them to choose students who were high, low, and average academically. The teachers gave me the list of interview participants in advance so I could pull their artworks. I wanted students to have them during the interview. I interviewed the selected participants individually on the third day. The interview was recorded outside of the classroom for privacy and less background noise. I interviewed a total of twenty participants from both the Collaborative and the Autonomous classes, (Appendix G, Interview Questions, p. 67). Afterwards I transcribed the recorded interviews. I used the transcripts to look for key words that occurred often. I used a color code system to highlight different sets of words and phrases. See Appendix H, p. 70 for a sample page. For example, I used a green marker for the words “add more details.” The frequent words and phrases told me what my interviewees were thinking as groups. The qualitative data along with the quantitative data allowed me to draw conclusions about my research question and sub questions.

CHAPTER 4

FINDINGS

Classroom Observations

My study was conducted at Washington High School in the Glendale Union High School District. The school is located in northwest Phoenix in a working class neighborhood. Fifty-six percent of the students are Hispanic, 24% are White, 10% are Black, 6% are Asian, and 4% are Native American (NCES, 2011). My study had 104 participants in four classes, two taught by Bell-Zinn and two taught by Carroll. The participants' ages ranged from 14 years old to 18 years old. The highest percentage of participants is 14 years old and 15 years old. See Table 2, Age Ranges (Appendix I, p. 72) for a chart showing percentages broken down for each class.

When I first walked into the two classrooms where my study took place, I noticed differences. Washington High School still uses several buildings built in 1956. Both Bell-Zinn and Carroll have classrooms in these old buildings. The classrooms have large windows spanning across one entire side of the room. Three quarters of windows are blacked out from the bottom up, leaving only one pane of glass across the top. Both classrooms have only one solid, heavy door. These are the only similarities between the two classrooms. Carroll's seating is arranged with desks grouped together as a table. Six tables and one group of three desks are set in diagonals. Carroll's room does not have any posters, or decorations. Posted on the bulletin board are examples of current assignments and the classroom rules. Carroll has strict control over the supplies and tools in her classroom. Students need to ask permission to use tools or supplies, and Carroll hands out the requested items. In contrast, Bell-Zinn's classroom is colorful. Student

artwork is hung on the walls and in the windows. AP student work leans against the board. Bell-Zinn also displayed her own artwork in the classroom. Some of the ceiling tiles have Disney characters painted on them, like Shrek, and Aladdin. Bell-Zinn explained that these tiles are intended for the school daycare ceiling. From my view, every surface of the room was decorated. The desks are arranged around the perimeter of the room forming a large rectangle. There are two openings in opposite corners of the rectangle for access to the middle. The center of the room has two tables set end to end. One table has paper and miscellaneous supplies stacked high on it, and there is small area for the student aid to work. The other table in the center is where the Art 3-4 and the AP students work. Their classes are combined with the Art 1-2 classes in Bell-Zinn's classroom. While I did my study, the Art 3-4 and the AP students worked on independent projects. Bell-Zinn's students know where all the supplies and tools are stored, and they are free to use them without permission.

Students in these classes are learning specific skills. At the time my study took place shading was the important skill. Lessons and assignments emphasize creating a range of values, form, and contrasts. Students are given very little or no creative freedom or opportunity to collaborate in the assignments. My study is a change in the Washington High School Art 1-2 students' art making routine. I asked these students to create an artwork with only the materials that they were given. This limitation was a problem for many students as they wanted to use rulers or other supplies not included in what I gave them. The only other parameter I gave them was to remain silent in the Autonomous classes and to collaborate in the Collaborative classes.

Artworks

Size

Artworks by participants in the Collaborative and Autonomous classes varied in several ways. Table 1 shows side by side percentages of the differences.

Table 1:

Artwork Differences

		Collaborative	Autonomous
Size of Artwork	9" x 12"	78%	90%
	Bigger than 9" x 12"	13%	4%
	Smaller than 9"x12"	17%	6%
Subject/ Theme	Abstract	35%	22%
	Realistic	65%	78%
Method of making artwork	Collage had only torn edges	0	0
	Collage had only cut edges		
	A mix of torn and cut edges		
Amount of Drawing on the collage	No visible drawing	67%	62%
	Drawing as a sketching or layout tool	4%	12%
	Drawing important to the image	28%	26%
Format	Horizontal	67%	48%
	Vertical	19%	34%
	Other shape	15%	18%
	Used Big Pieces of paper only	7%	8%

		Collaborative	Autonomous
Size of Pieces to Make the artwork	Used Small Pieces of paper only	6%	4%
	Used Medium Pieces of paper only	11%	10%
	Used Medium + Big pieces of paper	19%	18%
	Used Medium +Small pieces of paper	20%	30%
	Used small, medium, and big pieces of paper	37%	32%
2D, 3D, 3D Elements	2D	65%	92%
	3D	7%	0
	3D Elements	28%	8%

The most noticeable differences were in the sizes of artworks that the two sets of participants made. There was more variety of sizes and shapes in the Collaborative classes. Ninety percent of students in the Autonomous classes made artworks 9” x 12”, the standard size of the construction paper in the packet received. Seventy eight percent of Collaborative participants made collages 9” x 12”. Figure 4 is an example of two collages made by Autonomous participants.

The collage on the left is from Carroll's class and the collage on the right is from Bell-Zinn's class.

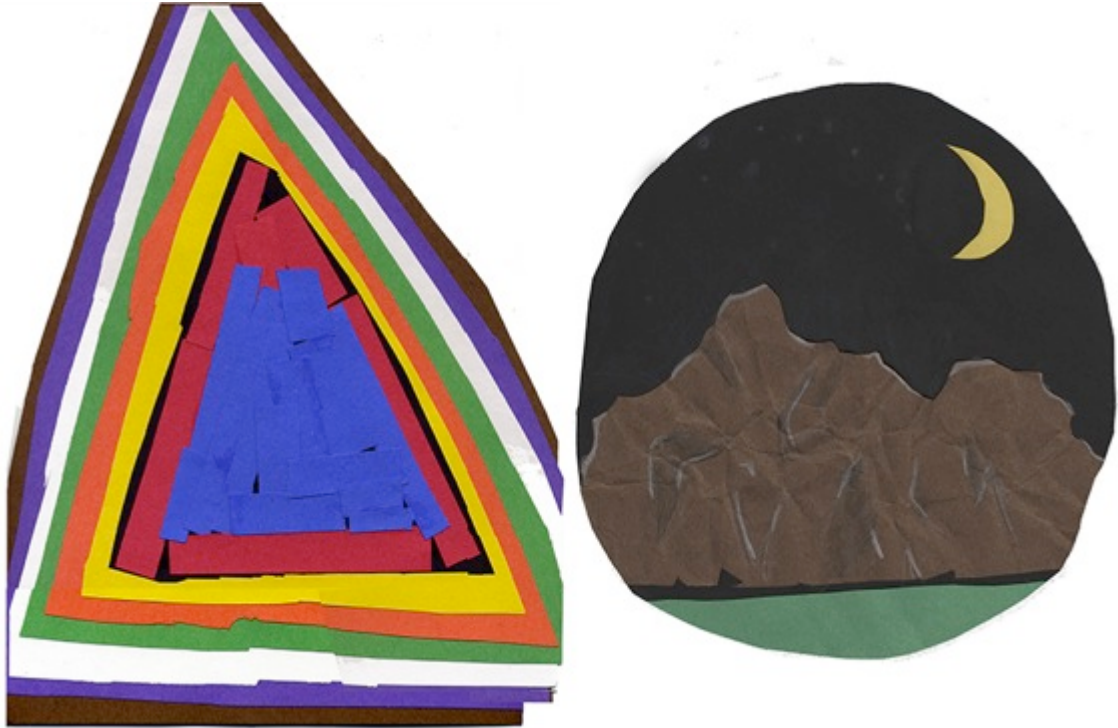


Figure 4. Small collages by Autonomous participants

Both of these Autonomous participants made artworks that are smaller than 9" x 12" and both vary from a rectangular shape.

Thirteen percent of participants in the Collaborative classes made artworks bigger than 9" x 12". Only 4% of participants in the Autonomous classes made artworks bigger than 9" x 12". Seventeen percent of participants in the Collaborative classes made smaller artworks than 9" x 12". Six percent of Autonomous classes made smaller artworks than 9" x 12". Figure five is an example of an artwork made by a Collaborative participant in Carroll's class.



Figure 5. A large artwork by a participant in a Collaborative class

This is the biggest collage in Carroll's classes. It is 21.5" by 12" and has three dimensional (3D) elements. Figure six is an example of an artwork by a Collaborative participant in Bell-Zinn's classroom. The collage is the biggest artwork of all the artworks made during this study. It is 22.5" by 12, and has 3D elements.

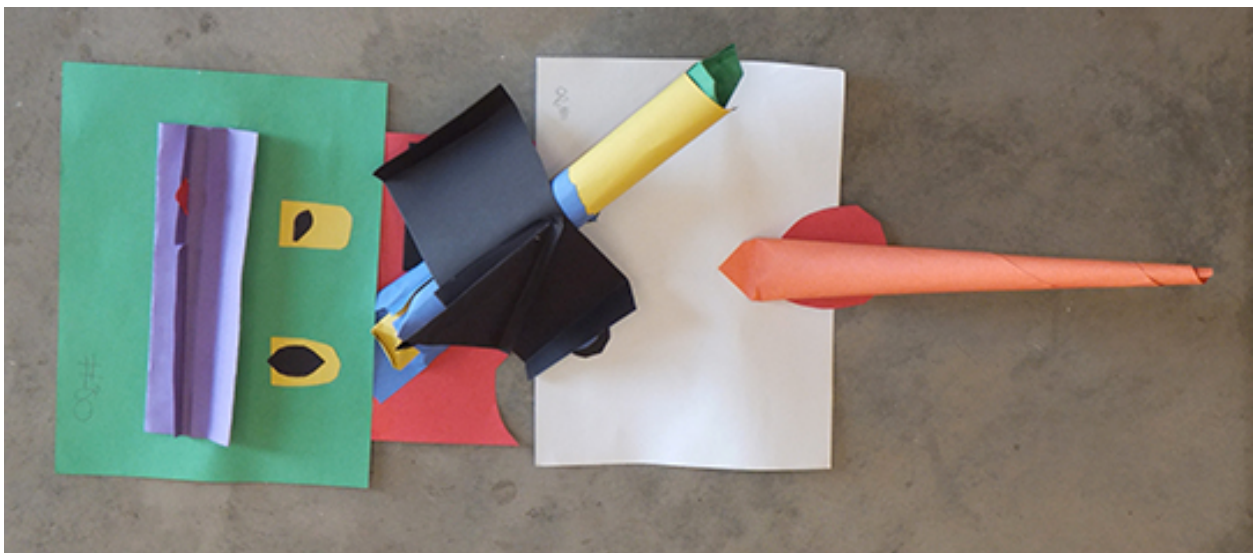


Figure 6. A large artwork by a participant in a Collaborative class

Dimension

Ninety two percent of Autonomous participants made entirely two dimensional artworks. Sixty five percent of Collaborative participants made entirely two dimensional artworks. Seven percent of Collaborative participants made three dimensional artworks. No Autonomous participants made three dimensional artworks.



Figure 7. A 3D object made in Bell-Zinn's Collaborative class

Twenty eight percent of artworks made by Collaborative students made artworks with 3D elements like accordion folds. Only 8% of artworks made by Autonomous students made artworks with 3D elements like accordion folds.

Theme/Subject

Seventy eight percent of Autonomous participants made collages with a realistic theme or subject. Sixty five percent of participants in the collaborative classes made artworks with a realistic theme or subject. Thirty five percent of Collaborative

participants made artworks with an abstract theme. Twenty two percent of participants in the Autonomous classes made artworks with an abstract theme.

Additional Drawing

Sixty seven percent of Collaborative participants had no visible drawing or pencil marks on their artwork. Sixty two percent of Autonomous participants had no visible drawing or pencil marks on their artwork. Twelve percent of Autonomous participants used pencil to sketch or layout their artwork. Only 4% of Collaborative participants used pencil to sketch or layout their artwork. Twenty eight percent of the Collaborative participants used additional drawing to make details, words, and letters on their collage. Twenty six percent of Autonomous participants used additional drawing to make details, words, and letters on their collage.

Format or Shape

Sixty six percent of collaborative participants made horizontal collages. Forty eight percent of Autonomous participants made horizontal collages. Thirty four percent of Autonomous participants made vertical collages. Nineteen percent of Collaborative participants made vertical collages. Eighteen percent of Autonomous participants made artworks that were another shape than rectangle. Fifteen percent of Collaborative participants made artworks that were another shape than rectangle.

Size of Collage Pieces

I looked at the sizes of pieces of paper used by participants to make their collages. I broke it down into big pieces, small pieces, medium pieces, a combination of small and medium, big and medium, and all three sizes together. What I found is that eight percent of Autonomous participants and 7% of Collaborative participants used only big pieces of

paper. Six percent of Collaborative participants and 4% of Autonomous participants used only small pieces of paper. Eleven percent of Collaborative participants and 10% of Autonomous participants used only medium pieces of paper. Nineteen percent of Collaborative participants and 18% of Autonomous participants used a combination of medium and big pieces of paper in their collage. Twenty percent of Collaborative participants and 30% of Autonomous participants used medium and small pieces of paper in their collage. And finally, 37% of Collaborative participants and 32% of Autonomous participants used a combination of all small, medium, and big pieces of paper in their collage.

Method

Paper can be torn or cut to make an artwork such as a collage. I called this the “method” of making artwork for this study. I found that 94% of the Collaborative classes and 98% of the Autonomous classes used only cut pieces of paper to make their artwork. Zero participants in either of the classes used only torn pieces of paper. Six% of the Collaborative classes and 4% of the Autonomous classes used a mix of torn and cut pieces to make their collage. To see side by side percentages of artwork differences see Table 1, p. 22.

Interviews

I interviewed 20 participants, 12 were from the Collaborative classes and eight were from the Autonomous classes. I asked all students interviewed these questions: “What is successful about your artwork? What is unsuccessful?”, “How would you change your artwork?”, and “Was the Idea Sheet helpful?” After I transcribed the audio

recordings, I used a color coding system to identify themes and common statements the participants made.

I asked the question, “What do you think is successful?” The Collaborative classes and the Autonomous classes answered this question similarly. They pointed out specific areas they thought were successful, such as “I really like the butterflies” or “I like the flower in the middle. I like the different petals.” Six out of the 20 interviewed answered this question with “I don’t know” or “I guess”. Participants in both Autonomous and Collaborative classes cited the use of color, their idea, or their creativity as successful.

Students in the Collaborative classes and the Autonomous classes answered the question “What do you think is unsuccessful?” differently. Eight out of 12 of the Collaborative students stated they did not have enough time for this project as a reason for the unsuccessfulness. One participant said, “I think I should have took [sic] a little more time and made it perfect and nice.” Only three out of eight of the Autonomous participants mentioned time as a reason for the unsuccessfulness of their artwork. They pointed out areas on their collages that were unsuccessful, for instance “The sand” and “I think the door ‘cus [sic] it’s not even.”

“How would you change you artwork to make it more successful?” Eleven out the 20 from both the Autonomous and Collaborative classes said they would add more colors, shapes, and designs.

“Was the Idea Sheet helpful in forming your idea?” Five out of the eight Autonomous participants interviewed said the Idea Sheet was helpful. Participants said, “It told me how to think outside the box and be original.” and “It was helpful, I think, just

for the fact that I got to think about it before I got the paper.” Nine out of 12 Collaborative participants interviewed also agreed that the Idea Sheet was helpful in forming their ideas. Participants said, “The points really helped me.”, “I was able to write down what I was going to do.”, and “Yeah, it was [helpful] because I got to make a sketch.”

I asked the Autonomous participants “You were instructed to remain silent and not ask advice from anyone for this project. How do you think being silent influenced what you did?” Participants made these statements, “It helped me because like, no one was bothering me and I could just do it myself” and “No one distracted me.” Four out of eight autonomous interviewees felt working alone “made me think more independently” and “It was all me and all original.”

I also asked the Autonomous participants, “Do you think your collage would have been different if you had been allowed to ask for advice from someone about your idea, or art making process?” Most interviewees, six out of eight, felt that, yes, their artwork would have been different, but not necessarily better. One participant stated “I feel like it would have been less complete because I would have gotten distracted.” Another stated, “They [the other] would think something different instead of how I looked at it.”

The Collaborative classes were asked to respond to: “You were able to seek advice about your ideas and art making. Explain how you think this influenced what you did”. Five out of 12 Collaborative participants said that being able to talk and ask advice had no influence on their artmaking. One interviewee said, “Yeah, I didn’t get much suggestions from others. It didn’t influence me at all.” The rest of the Collaborative interviewees said they got suggestions from others. They received help in idea formation, for what to do next, and for confirmation that their idea was good. An

example of one response is “I thought about tearing the earth in half, but I didn’t really thought [think] if I wanted to use that idea. But, then I talked with my peers and they decided it would be a good idea.” Another participant wanted to draw musical notes but wasn’t sure what a note looked like. She found a musician in the class who showed her how to make the note. Later that student told me that knowing how to make the notes made her artwork more successful.

Reflection

The Reflection (Appendix D, p. 54) has one question that asks participants whether they preferred to work in a group environment or by themselves. Fifty-nine percent of the participants prefer to work alone regardless of whether they were in a Collaborative class or an Autonomous class.

When I analyzed the Reflection essays written responses using a color coding system certain themes emerged. Many participants in my study choose to make artworks from their own imagination, and themes of things they liked. They were inspired by the variety of colors they were given to use. Several students choose to make something because it was simple or easy. See Appendix K, p. 74 for an example of a coded Reflection.

Idea Sheet

The statements on the front side of the Idea Sheet provided an unexpected data collection tool. Statements about idea formation vary from more open ended to more closed. For example the statement “I experiment with the materials, or with lines shapes and colors. “ is more open ended. The artist has to make decisions and choices with this art making characteristic. Other statements are more closed or specific like “I find a

visual reference (an object, book, magazine, photograph, smartphone) and make my art look as similar to it as possible.” This is a more closed statement because the student artist is making exactly what they see. The student artist is not making aesthetic choices about their subject. I found that participants in the Collaborative classes tended to select open statements more often than the Autonomous classes.

CHAPTER 5

CONCLUSIONS

Research Question:

How does collaboration or working autonomously affect high school beginning art students' responses during and about their art making?

Sub question 1: Are there any differences in the artworks made by high school beginning art students who are allowed to collaborate and the artworks made by students working alone?

Sub question 2: Are there any differences revealed in the oral and written responses of high school beginning art students who collaborate and high school beginning art students who work autonomously?

Differences in artworks

Participants in my study were instructed to make a collage using nine pieces of different color construction paper. For consistency, participants were restricted to only the supplies they were given to make their artwork.

At the beginning of the study, participants were given instructions for the art making task. Instructions did not include how to make a collage for instance cutting or tearing the paper. I wanted to find out how the students decided to use the supplies they were given and whether there were differences between the Collaborative classes and the Autonomous classes. More participants in the Collaborative classes made artworks larger than 9" by 12", the size of the standard size of construction paper. The Collaborative classes had more artworks with three dimensional elements, like accordion folds and

curls; see Figure 7 for an example. No one in the Autonomous classes made entirely 3D objects.

Participants received a pencil in their supply packet at the beginning of the study. I did not give participants any limitations for using the pencil. I wanted to see how participants decided to use the pencil, for instance as a layout tool for lightly sketching their design, or as an important element to the design of their artwork. No participants in the Collaborative classes made artworks with pencil marks used for *laying out* or *sketching* in the design and elements of their collages. Instead, drawing was used as an *integral part* of the collage for details and words, which the Collaborative classes did more than the Autonomous classes. The Autonomous participants used their pencil more often as a layout tool or for sketching. Cutting and gluing small details takes more time than simply drawing them. The Collaborative classes may have drawn more details and sketched less because of the time involved in collaborating. I think the collaborative classes may have had to make a choice whether to first draw the composition, elements, and shapes or simply cut and compose their collage spontaneously because time was an issue.

The Collaborative classes made horizontal artworks more often than the Autonomous classes. This finding is inconclusive and may have to do with participants copying each other whether consciously or unconsciously. The Autonomous participants made artworks in a vertical format more than the Collaborative participants. Like the collaborative participants may be due to copying, this finding is also inconclusive.

I looked at the sizes of the pieces of paper used by participants to make their collages. I broke it down into big pieces, small pieces, medium pieces, a combination of

small and medium, big and medium, and all three sizes together. The findings for of the size categories are inconclusive. Working collaboratively or autonomously made little or no difference in the sizes of pieces of paper students choose to make artworks.

Discussion

Like Stokrocki's (2000) study of Brazilian fifth grade students, I found that participants in my study copied each other. Figure 8 shows similar artworks by two Collaborative participants. These two participants sat next to each other and exchanged ideas and art making methods.

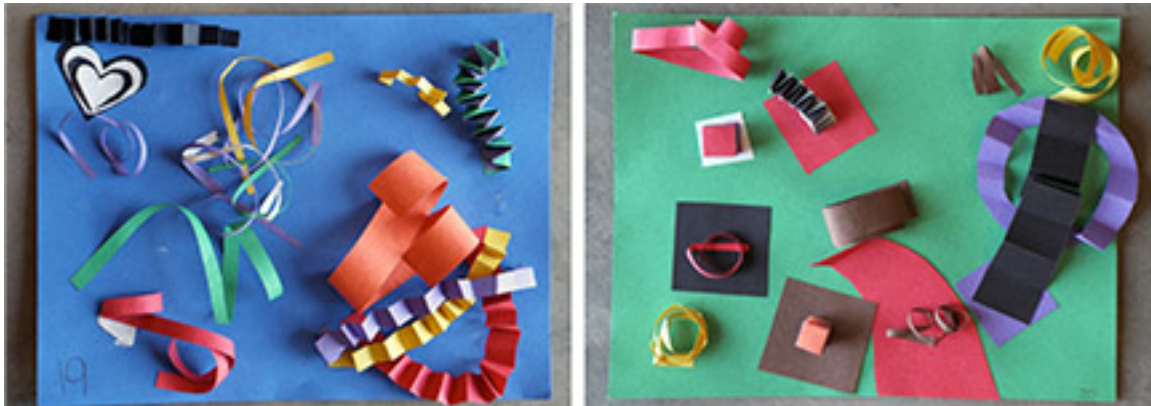


Figure 8. Similar Artworks

Several participants in both the Collaborative classes and the Autonomous classes made artworks with simple schema like trees, houses, and shapes. To see examples of artworks by participants in this study refer to Appendices L through O starting of page 66.

Differences in Responses

Reflection

The Reflection handout is identical for both the Collaborative and Autonomous classes. It has a question about the participants' preferences to work alone, or in a group. It also asks participants to list steps in making their artworks and to describe their artwork

and the reasons they made it. And finally, the Reflection asked participants to discuss reasons for choosing their ideas.

Both groups of participants stated in the written portion of the Reflection that they are inspired by music and liked to work while listening to music on their personal head phones. The participants in this study who said they prefer to work alone gave several reasons. They don't like to work in groups because it takes away from their individuality. Some feel that another student may negatively influence them, or make what the other wanted instead of their own idea. One participant stated, "My artwork would be worse" when asked how his artwork might be different if he got the chance to collaborate. Working with others can be a distraction, affecting how their artwork comes out. The most common response I found written in the Reflections is that participants made images of things that they liked, loved, felt passionate about, or their favorite thing.

Discussion

I was surprised to find that over half of all the participants in my study preferred to work alone rather than in a group. There are a couple of possible explanations of this finding. The first reason is students' desire to keep their artworks and ideas original. Originality may be something that is important in art class. The second explanation for the preference to work alone may be the lack of knowledge and practice of collaboration and working in groups in art classes. Participants in my study demonstrated a need for training and practice of collaborative methods in art class. Participants may need to learn to collaborate without the risk of losing originality, an important aspect of art making to participants in my study.

Interviews

In the interviews both the Autonomous and Collaborative participants attributed the success of their artwork to their use of color, their originality, and their creativity.

The Collaborative interviewees mentioned the lack of time as an issue influencing the success of their artwork. Time was not a concern for the Autonomous interviewees. Time may have been an issue for the Collaborative participants because they had one more task to do than the Autonomous participants. The extra step of collaborating involves interacting with peers, which is more time consuming.

When asked about the Idea Sheet, both the Autonomous and the Collaborative interviewees mentioned that it was helpful in forming their ideas. The interviewees also mentioned that being able to write out and sketch their idea was helpful. I think that this tool with designated places to write out ideas and plan their compositions gave participants a vehicle to solidify their thoughts and a place to test out compositions.

I asked both the Autonomous and the Collaborative interviewees slightly different questions about the influence on their artwork from working in collaborating groups and working alone. The consensus was for a preference to work alone. More than half of the collaborative interviewees said that working collaboratively had no influence to their artworks. The autonomous interviewees said that working alone was helpful and they thought there would be a negative influence on their artworks if they had to work collaboratively.

Idea Sheet

The Idea Sheet is a two sided handout. On side one, the front, there is a list of statements about idea formation. On side two, the back, there is an area for students to write out their ideas and an area for sketches.

Discussion

Originally the idea sheet was meant as an instructional tool, but it became a data collection tool when I asked about it in the interviews. I learned that participants in my study liked using the Idea Sheet as a starting point for idea formation and then art making. Students said that it gave them ideas because of the suggestions on the front of the Idea Sheet. Being able to write out ideas and make thumbnail sketches on the back of the Idea Sheet seemed to relieve the anxiety of facing a blank slate for some participants.

Summary

In summary, I found differences in the artworks made by high school beginning art students who are allowed to collaborate and the artworks made by students working alone. I found that collaboration or working autonomously has no affect on high school beginning art students' oral and written responses during and about their art making. I conclude that, when given the opportunity to collaborate or work autonomously, high school beginning art students in this study made different artworks but did not give different written and oral responses.

CHAPTER 6

IMPLICATIONS

Emerging Questions.

Students who prefer working in groups tend to use more letters and symbols, which raises the questions: What are some reasons and implications for art educators to use collaborative groups for art education? When is it more appropriate for art students to work autonomously?

Originality was a big concern for students in my study, which raises such questions as: How can art educators help students protect their originality while they work collaboratively? Also, I wonder when does originality benefit or not a benefit art making? Art making skills like shading and composition can be taught separately from originality. Is originality a skill that can be taught and nurtured?

I witnessed that the teaching style and atmosphere of the two different teachers seemed to have a considerable effect on the outcome of this study. One teacher identifies herself as a practicing artist who educates. The other identifies herself as an art educator. Their identities revealed differences in their classrooms and teaching styles, which raises the questions: Does teaching style have any effect on the outcomes of student artist works? Do artists as teachers produce more students with portfolios that are successfully accepted into university art programs?

My study used four intact classrooms as the Autonomous and Collaborative groups. These were large groups of 20 to 30 students. These classes have a range of personalities and abilities. I wonder how and whether students' artworks would change if they were placed in small purposeful groups. A purposeful group is one that the teacher

puts together for various reasons, for example, a group containing all gifted and talented students, or a mixture of high performing and low performing or English language learners. Does working in smaller groups help a shy student's art making? Is it better to group similar students together? How do different groupings affect student artwork?

This study gave participants basic instructions to collaborate. They were told to talk to each other, give advice, and encouragement. What outcomes in art making would be different if collaboration was a guided activity?

Implications for Practice

Having a tool like the Idea Sheet or a similar idea-planning handout can be helpful to students in art class. It can be part of a sketchbook or an art workbook. Some students may be more comfortable with writing an idea down as opposed to making an image idea. The Idea Sheet can help to reach different styles of student thinking and learning.

Art teachers can educate about and train their students in collaboration. Many games and exercises are designed to encourage collaboration. Not all these games are art related, but they could be used as warm up exercises before students commence idea formation and art making.

There are many careers that use art making skills, like graphic design. Art teachers can assess student preference for working alone or in groups collaborating. Lesson planning may be enhanced once they know which direction students in each of their classes' leans.

Implications for Research

My observations in this study showed that the participants would benefit from more knowledge about collaboration and how to collaborate. Further research into implementing collaborative training and exercises for art education situations is needed.

Further research could be explored on the importance of originality in art class and whether this is cultural or an expectation of the instructor. Also research could be done about whether some art assignments are better to be copied or not original and when is it optimal to be original in art class.

I found it interesting how many students had some kind of smart phone or electronic device in their possession. Several students asked permission to use their smart phone to look up a reference image for their collage. My study did not account for this, and students were prohibited from using their devices to assist in art making. They were, however, given permission to listen to music with their various devices during the study. Based on this, research into the roles of new technology for Autonomous work and Collaborative work in an art class would be interesting.

More research could be done comparing the teaching styles of teaching artists and the teaching styles of art educators and the resulting artworks made in those art classes.

My study involved one intact classroom as a collaborative group. Future research could be done with small collaborative groups and different groupings of students.

Closing

As a contemporary artist I have experience working collaboratively. I found the atmosphere of working with other contemporary artists helpful and enjoyable. I benefitted from working collaboratively, and my art was better because of the input and

guidance I received. Increasingly other contemporary artists are working collaboratively.

Collaboration in some areas of art education can be an asset to art educators and art students. My study sheds light on issues that art educators can consider as they plan lessons that include collaboration into their classes.

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APPENDIX A
ART MAKING SUPPLIES

Each participant will receive the following in a sealed, zip lock bag:

1. Nine sheets of construction paper, one each of red, orange, yellow, green, blue, purple, brown, black, and white.
2. A pair of scissors
3. A glue stick
4. Idea Handout (Appendix A)
5. Pencil
6. Eraser
7. Ruled note paper
8. A 3x5 index card

[Insert text of appendix here. Do not repeat appendix title.]

APPENDIX B

IDEA SHEET

Idea Sheet

How do you get ideas for your art?

Directions: Circle the number or numbers that most closely fits with how you form your ideas. For #14, you can write your own thoughts about idea formation.

1. I focus on things I feel passionate about.
2. I find a visual reference (an object, book, magazine, photograph, smartphone) and make my art look as similar to it as possible.
3. I like to make my art look realistic, like a photograph.
4. I like someone (parent, friend, teacher) to give me inspiration to get started.
5. I react to my environment (home, school, outdoors, etc.).
6. I react to current events (birthdays, politics, weather, etc.).
7. I like to be original, to think outside the box
8. I like to show or make my favorite things (horses, cars, doodles, patterns, people, cartoons, etc.).
9. I get my ideas from my dreams (day dreams, sleeping).
10. I get my ideas from my own past and experiences.
11. I try to make my artwork look like artwork that I like.
12. I think about my ability to make or draw something.
13. I experiment with the materials, or with lines, shapes, colors, forms, etc.
14. _____

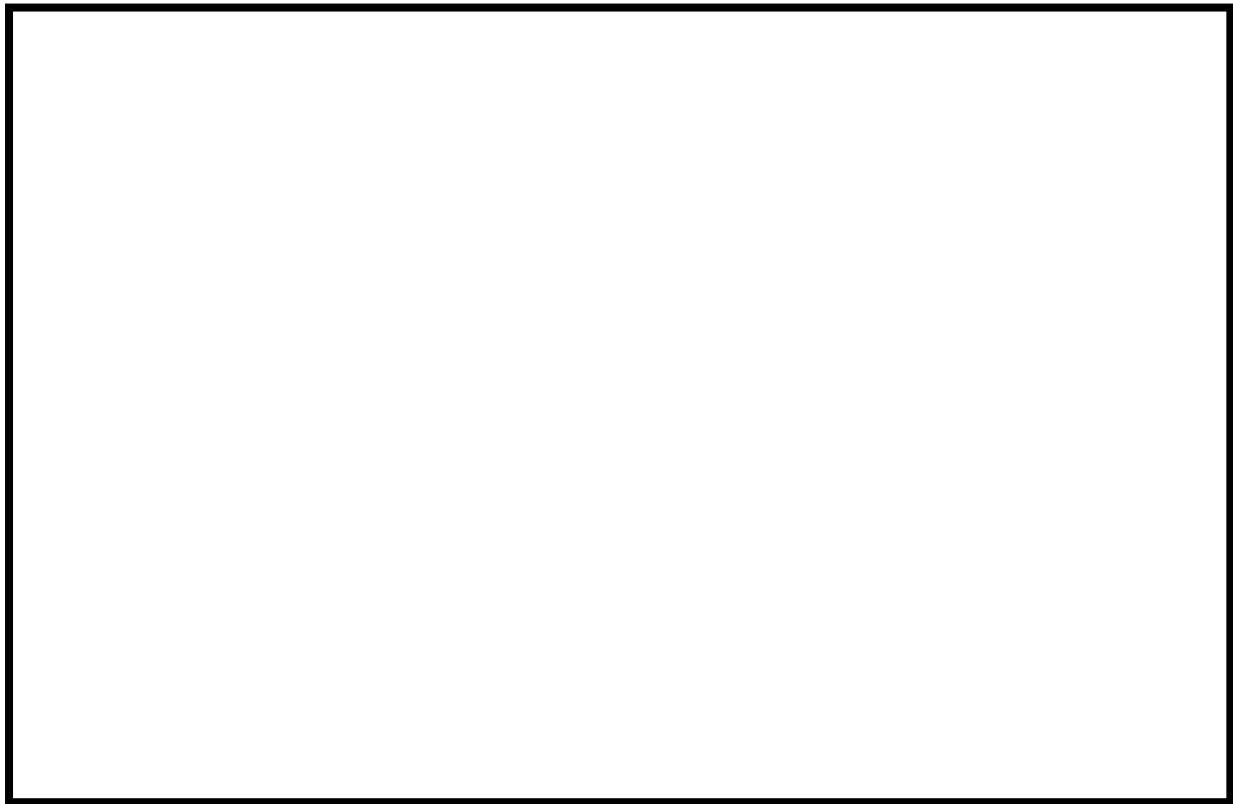
(Erickson, 2003)¹.

¹Mary Erickson and Faith Clover identified the Viewpoints in this activity drawing on the work of Michael J. Parsons. It has been revised in consultation with Laura Hales in conjunction with the Visions program at the Scottsdale Museum of Contemporary Art.

To Collaborate or Not: The High School Beginning Artist's Dilemma.

Use this area to write down ideas for your collage

Use this area for thumbnail sketches for your collage.



APPENDIX C

SCRIPT

Group A Collaborative

1. Begin the class period as usual.

2. Introduction:

- We have a guest today. Her name is Patricia Bomberg-Roth.

Hello, I am a Graduate student at ASU. I am working on my Master of Art Education. I am interested in finding out more about what Art 1-2 students think about art making. I am inviting your participation, which will involve creating an artwork, answering written questions, and possibly an interview. This activity will take two class times, or two days. If you are selected for an interview, there will be 10 to 15 minutes of time on a third day. You have the right not to answer any question, and to stop participation at any time. The artwork and written reflection that you will be doing today and tomorrow will be part of my research. I will analyze what you write and make. This will give me a deeper understanding of students in your situation. Sincerity from you is important. Your artwork and writing can help me learn about assisting art teachers create a better studio atmosphere in the future.

3. Consent:

- (Pass out consent forms) Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. You will need to complete all the assignments involved for credit, but your work will not be included in the research. Please read the Student/Parent/Guardian form silently. Sign and date it if you agree to have your artwork and written responses included in this

study. If you are under the age of 18, you must get a signature from a parent or guardian giving permission to participate. If you do not want your artwork or written responses included, please mark an 'X' on your number on the bag. Remember that even if you do not want to participate in the study, you still need to do the work.

4. The Project:

- Today you will be making a collage. A collage is a work of art that is made by attaching pieces of different materials, in your case different colors of construction paper, to a flat surface.
- You will make your collage with the supplies in a packet like this. (Hold up the sample packet.) I am going to pass out the packets and then we will go over them together. Do not open the packet until I tell you to. (Begin the next step after all participants have a packet.)
- Look at your packet. In the upper left hand corner is a number. (Point to the number on your sample packet.) This number will be used instead of your name. Write this number on every sheet where indicated and on the back of the collage that you will make. Inside of the bag is your number on a card. (Open your sample bag and get the sample card out and show the participants.) Open your bag and get that card out. Make sure that the number on the card is the number on your bag. On the line under the number on the card, write your first and last name, and then set the card to the side. Now, take the rest of the supplies out of the bag, (Take all the supplies out of the sample bag. Hold up the items as you name them.) You should have nine pieces of construction paper, one each of red, orange, yellow, green, blue, purple, black, brown, and white. There should be a two sided handout titled "Ideas Sheet". Check

that it is two sided. You should also have a pencil, scissors, and a glue stick. If you do not have everything mentioned raise your hand. (If anyone raises their hand, give them what they are missing.) For this assignment, please only use the supplies you have been given. Now I am going to collect the card with your name and number on it. I will keep this list in case you forget your number tomorrow. (Collect the cards as usual.)

4. Collaboration:

- Before you begin working on you collage I want to talk about collaboration.

Collaboration is working with others to create something. For this assignment you are to collaborate, or work with each other to create your collage. You will still be making your own artwork, but you can talk with each other to give advice, encouragement, or guidance. For example, you notice that Jane's (You can use a name from the class) collage would look better with more texture, so you offer to give a suggestion. "Hey, (Jane), if you put a texture on this area here, it would look better. I made texture by doing this. Then you demonstrate with a scrap how you made the texture." If someone is offering you advice, thank him or her politely. It is your choice to use the advice or not. Please limit your conversations to the present moment, here in the classroom, making a collage. As you are working remember everything you have learned about art making so far this year.

1. Studio Time:

- You will have a total of 50 minutes to make your collage. The first ten minutes I will set a timer for you to do the following: read the Idea Sheet and circle the statements that that fits closely with how you form your ideas. You can circle more than one. Discuss

it with your neighbors and brainstorm ideas and methods to make your collage. On the back of the Idea Sheet is a place to write notes and ideas, and an area to make thumbnail sketches. Take notes on what you are thinking because tomorrow you will be writing a reflection on your artmaking and thinking. If for any reason you feel you cannot participate in this research, come and speak with me now. You still need to do the assignment for credit. Finally, before you begin I want to remind you to please limit your conversations to the present moment, here in the classroom, making a collage. As you are working remember everything you have learned about art making so far this year. You may begin reading and collaborating now. When you hear the timer, you can begin making your collage. (Set the timer for ten minutes.)

1. Conclusion day 1:

- (Five minutes before the end of class stop the students from working.) It is time to stop and listen for instructions. Please make sure your number, not your name is on the Idea Sheet and the back of your artwork. Collect all of your left over paper, even the scraps, your pencil, scissors, and glue stick and put into the bag. If your artwork does not fit into the bag, place it on top of the bag. Seal the bag. (Collect the bags as usual, and place in the box provided.)

Day 2

1. Consent:

- Please write your number on the signed Student/Parent/Guardian Consent form. Pass them in. Pass the form in even if you are not participating. (Collect forms as usual.)

2. Studio time:

- Welcome back, today is the second and last day for you to work on your collage. After you receive your packet, take out your collage. Take a few minutes to analyze your artwork and discuss what is good and bad with your neighbor. Talk about possible changes to improve your work. Share techniques you have used. Help each other make the artworks better. Remember to take a few quick notes of what you are thinking and what you discussed. You have 30 minutes to finish your collage. I will let you know when to stop. You may begin when you get your packet. (Pass out packets as normal.)

1. Reflection:

- This is your five minute warning. You have five minutes left to work on your collage. (Call a three minute warning and a one minute warning.) Please put all of your art making supplies down and look at me. You will spend the rest of the period, about 20 minutes, writing a reflection on your art making and thinking experience from yesterday and today. I have a handout to give you titled “Reflections” that has prompts for you to respond. If you finish before the end of class, you can finish your collage, read or do homework. Please do not disturb anyone during the writing. (Pass out Reflection handout.)

1. Conclusion:

- (Five minutes before the end of class stop the students from working.) It is time to stop and listen for instructions. Please make sure your number, not your name is on the Reflection handout and the back of your artwork. Put the Idea Sheet and the Reflection handout in the bag. Put your collage in the bag. If your artwork does not fit into the bag, place it on top of the bag. Seal the bag. Put the glue and the scissors into these

boxes, (hold up the boxes). You may keep the pencil. (Collect the bags as usual, and place in the box provided.)

Group B Autonomous

1. Begin the class period as usual.

2. Introduction:

- We have a guest today. Her name is Patricia Bomberg-Roth.

Hello, I am a Graduate student at ASU. I am working on my Master of Art Education. I am interested in finding out more about what Art 1-2 students think about art making. I am inviting your participation, which will involve creating an artwork, answering written questions, and possibly an interview. This activity will take two class times, or two days. If you are selected for an interview, there will be 10 to 15 minutes of time on a third day. You have the right not to answer any question, and to stop participation at any time. The artwork and written reflection that you will be doing today and tomorrow will be part of my research. I will analyze what you write and make. This will give me a deeper understanding of students in your situation. Sincerity from you is important. Your artwork and writing can help me learn about assisting art teachers create a better studio atmosphere in the future.

1. Consent:

- (Pass out consent forms) Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no penalty. You will need to complete all the assignments involved for credit, but your work will not be included in the research. Please read the Student/Parent/Guardian form silently.

Sign and date it if you agree to have your artwork and written responses included in this study. If you are under the age of 18, you must get a signature from a parent or guardian giving permission to participate. If you do not want your artwork or written responses included, please mark an 'X' on your number on the bag. Remember that even if you do not want to participate in the study, you still need to do the work.

4. The Project:

- Today you will be making a collage. A collage is a work of art that is made by attaching pieces of different materials, in your case different colors of construction paper, to a flat surface.
- You will make you collage with the supplies in a packet like this. (Hold up the sample packet.) I am going to pass out the packets and then we will go over them together. Do not open the packet until I tell you to. (Begin the next step after all participants have a packet.)
- Look at you packet. In the upper left hand corner is a number. (Point to the number on your sample packet.) This number will be used instead of your name. Write this number on every handout where indicated and on the back of the collage that you will make. Inside of the bag is your number on a card. (Open your sample bag and get the sample card out and show the participants.) Open your bag and get that card out. Make sure that the number on the card is the number on your bag. On the line under the number on the card, write your first and last name, and then set the card to the side. Now, take the rest of the supplies out of the bag, (Take all the supplies out of the sample bag. Hold up the items as you name them.) You should have nine pieces of construction paper, one each of red, orange, yellow, green, blue, purple, black,

brown, and white. There should be a two sided handout titled “Idea Sheet”. Check that it is two sided. You should also have a pencil, scissors, and a glue stick. If you do not have everything mentioned raise your hand. (If anyone raises their hand, give them what they are missing.) For this assignment, please only use the supplies you have been given. Now I am going to collect the card with your name and number on it. I will keep this list in case you forget your number tomorrow. (Collect the cards as usual.)

5. Studio Time:

- You will have a total of 50 minutes to make your collage. The first ten minutes I will set a timer for you to do the following: read the Idea Sheet and circle the statements that fits closely with how you form your ideas. You can circle more than one. On the back of the Idea Sheet is a place to write notes and ideas, and an area to make thumbnail sketches. Take notes on what you are thinking because tomorrow you will be writing a reflection on your artmaking and thinking. If for any reason you feel you cannot participate in this research, come and speak with me now. You still need to do the assignment for credit. As you are working remember everything you have learned about art making so far this year. You may begin reading now. When you hear the timer, you can begin making your collage. (Set the timer for ten minutes.)

6. Conclusion day 1:

- (Five minutes before the end of class stop the students from working.) It is time to stop and listen for instructions. Please make sure your number, not your name is on the Idea Sheet and the back of your artwork. Collect all of your left over paper, even the scraps, your pencil, scissors, and glue stick and put into the bag. If your artwork does not fit

into the bag, place it on top of the bag. Seal the bag. (Collect the bags as usual, and place in the box provided.)

Day 2

1. Consent:

- Please write your number on the signed Student/Parent/Guardian Consent form. Pass them in. Pass the form in even if you are not participating. (Collect forms as usual.)

2. Studio time:

- Welcome back, today is the second and last day for you to work on your collage. After you receive your packet, take out your collage. Take a few minutes to analyze your artwork and think about what is good and bad. Consider possible changes to improve your work. Take a few quick notes of what you are thinking. You have 30 minutes to finish your collage. I will let you know when to stop. You may begin when you get your packet. (Pass out packets as normal.)

3. Reflection:

- This is your five minute warning. You have five minutes left to work on your collage. (Call a three minute warning and a one minute warning.) Please put all of your art making supplies down and look at me. You will spend the rest of the period, about 20 minutes writing a reflection on your art making and thinking experience from yesterday and today. I have a handout to give you titled “Reflections” that has prompts for you to respond. If you finish before the end of class, you can finish your collage, read or do homework. Please do not disturb anyone during the writing. (Pass out Reflection handout.)

7. Conclusion:

- (Five minutes before the end of class stop the students from working.) It is time to stop and listen for instructions. Please make sure your number, not your name is on the Reflection handout and the back of your artwork. Put the Idea Sheet and the Reflection handout in the bag. Put your collage in the bag. If your artwork does not fit into the bag, place it on top of the bag. Seal the bag. Put the glue and the scissors into these boxes, (hold up the boxes). You may keep the pencil. (Collect the bags as usual, and place in the box provided.)

APPENDIX D
REFLECTIONS

Reflections

Answer the following questions. If you run out of space, use the back of this page. If you do, make sure you write the number of the question next to your answer.

1. Circle the atmosphere you prefer making art in:
 - Alone, in silence or listening to music on headphones.
 - In a group, interacting with others.
2. List the steps you took to make this collage. Include your thought processes during art making, and any help, suggestions and/or advice you received from others.
3. Imagine that you are talking to someone who cannot see you or your artwork. Describe your artwork in detail.
4. Imagine that, after you describe your artwork, the person asks you “How did you get your idea for this artwork?
5. Give an explanation of the reason you choose the idea for your artwork?
4. Imagine that, after you describe your artwork, the person asks you "How did you get your idea for this artwork?
5. Give an explanation of the reason you choose the idea for your artwork?

APPENDIX E

ARTWORK DIFFERENCES

Directions: On the chart, place a check mark in the corresponding area. Make notes if necessary, and write in answers where indicated.

I. Size:

- A. Did the participant create an artwork that is the same size as the paper, 9" x 12"?
- B. Did the participant enlarge his/her artwork by connecting two or more pieces together?

II. Theme/subject:

- A. Is the artwork a realistic representation?
- B. Can you name the subject, for instance a landscape, portrait, or object?
- C. Is the artwork abstract or nonobjective?

III. Method:

- A. Are the edges torn?
- B. Are the edges cut?
- C. Is there a mixture of torn and cut edges?

IV. Number of colors used:

- A. How many colors were used; 1,2,3,4,5,6,7,8,9?

V. Additional drawing:

- A. Is there drawing on the artwork, yes or no? If yes,
 - 1. Is the drawing a minimal amount to sketch or layout the design?
 - 2. Is drawing an important in the artwork for example details or words?

VI. Format:

- A. Is the artwork Horizontal?
- B. Is the artwork vertical?

- C. Is the artwork a nontraditional shape other than a square or rectangle?
- VII. Is the artwork 2D, 3D, or does it have 3D elements?
- VIII. Size of pieces of construction paper used to make the collage:
- A. Big pieces
 - B. Small pieces
 - C. Medium pieces
 - D. Big pieces with medium pieces.
 - E. Small pieces with medium pieces
 - F. All three sizes together
- IX. List miscellaneous differences not mention above.

APPENDIX F

SAMPLE ARTWORK DIFFERENCES DATA

APPENDIX G
INTERVIEW QUESTIONS

Collaborative classes and Autonomous classes

I. Tell me about your collage.

A. Why did you choose to do..? (Point to an area on the collage)

B. What were you thinking about when you did..? (Indicate an area on the collage)

II. What do you think is successful about your artwork?

III. What do you think is unsuccessful?

IV. How would you change the artwork to be more successful?

V. Was the Idea Handout helpful in forming your idea for this artwork? Explain why or why not.

VI. Did you have enough time for this project?

Collaborative, interview questions

I. You were able to seek advice about your art making and artwork for this project.

Explain how you think this influenced what you did.

II. Show an example of an area on your artwork that benefited from your collaborating with your peers.

III. Do you think your collage would have been different if you had to remain silent throughout the studio time? If so, explain how it would be different.

Autonomous, interview questions

I. You were instructed to remain silent and not ask advice from anyone for this project.

Explain how you think this influenced what you did.

II. Do you think your collage would have been different if you had been allowed to ask for advice from someone about your idea, or art making process? If so, explain why you think it would be different.

APPENDIX H

SAMPLE CODING OF TRANSCRIPTS

use quote ↓

use quote ↓

Transcriptions, Group A, Collaborative	
#25 Yes	Um, yah it was actually. Because, you know like, I was able to write down what I was going to do, and then I just kind of thought I should probably do that.
#45	Um, kind of, like this one - I like to make art work that I like- and I like artwork that like pops out at you and makes you think about stuff.
#20	Yes, in a way. It gave me ideas of what I should be focused on.
#26 No	Not really, I just didn't have enough time to come up with a solid idea from that.
#16	No, not really.
#41	Yah, kind of. Oh, just um, well I guess um were it says that I get my ideas from past experience, in my past experience I had a treehouse and yah and that where like the steps. And then like right here, um I pictured like a door because um there is this bulletin board I have and right here is just entering to go to you goal. Do you mind telling what your goal is? I want to be a professional soccer player.
#81	Not really anything. I just went with whatever is on my mind,
9	You were able to seek advice about your artmaking and artwork for this project. Explain how you think this influenced what you did
#54	Um, I guess it made me make it more original, rather than trying to get someone else's idea into it. (this participant was in group A, he was instructed to collaborate, he did not.)
#75	I basically got my ideas on my own. So I didn't...
#56	Maybe since I have a really admirable artist who sits by me who could have given me some pointers.
#67	I asked about the notes because I didn't know how they looked
#53	Well, I kind of didn't really ask anyone anything. I kind of just did what I thought would be good, I guess. I just went with my own gut.

Yes 9/10
No 2/10

got own ideas

Collaborated

Key.....

Yes, Idea
Sheet helped

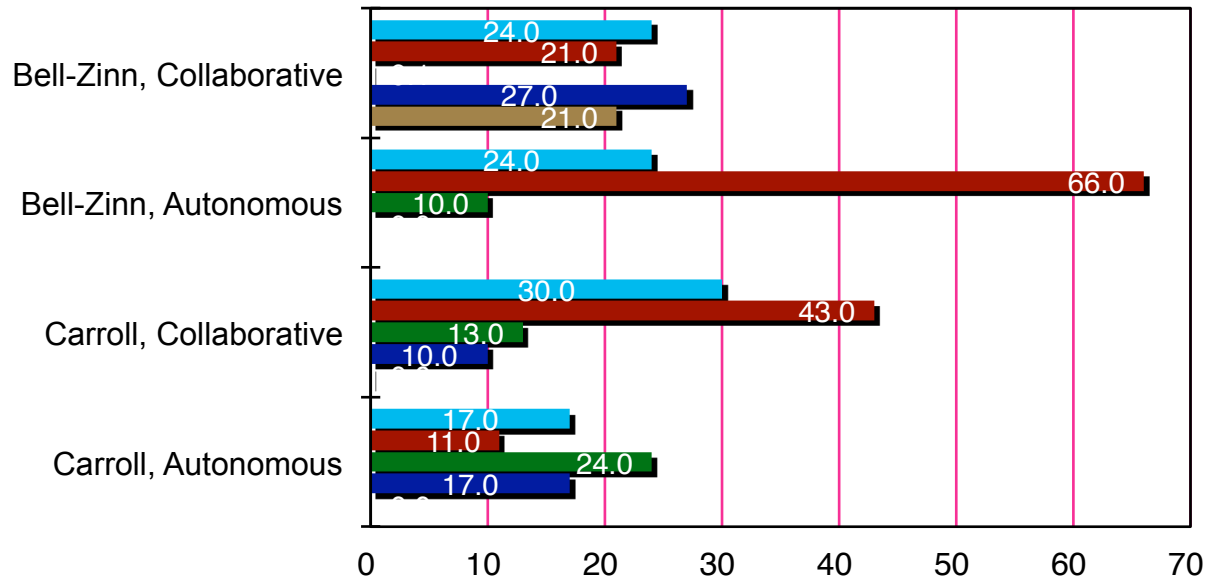
No, Idea
Sheet did not help

Collaborated

Got ideas on my own

APPENDIX I

TABLE 1. AGE RANGES



APPENDIX J

SAMPLE REFLECTION, CODED

Reflections

Group A

Answer the following questions. If you run out of space, use the back of this page. If you do, make sure you write the number of the question next to your answer.

- Circle the atmosphere you prefer making art in:
 - Alone, in silence or listening to music on headphones.
 - In a group, interacting with others.
- List the steps you took to make this collage. Include your thought processes during art making, and any help, suggestions and/or advice you received from others.

First I drew what I was going
to cut out and then cut it

- Imagine that you are talking to someone who cannot see you or your artwork.

Describe your artwork in detail.

My tree is green from the
the top and brown

- Imagine that, after you describe your artwork, the person asks you "How did you get your idea for this artwork?"

I got my idea from my
friends

- Give an explanation of the reason you choose the idea for your artwork?

I just this idea because
its easy

APPENDIX K
IRB APPROVAL

EXEMPTION GRANTED

Mary Erickson
Art, School of 480/965-3629
MARY.ERICKSON@asu.edu

Dear Mary Erickson:

On 2/24/2014 the ASU IRB reviewed the following protocol:

Type of Review: Initial Study

Title: Benefits and Challenges of Collaboration and Autonomy in a High School

Beginning Art Class

Investigator: Mary Erickson

IRB ID: STUDY00000642

Funding: None

Grant Title: None

Grant ID: None

Documents Reviewed:

- student assent/consent, Category: Consent Form;
- parent permission, Category: Consent Form;
- HRP-503a - TEMPLATE PROTOCOLSOCIAL BEHAVIORAL.pdf, Category:

IRB Protocol;

- IRB Interview 's.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);
- Reflections, Group B.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);
- Reflections, Group A.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);
- District email, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc.);
- Idea Sheet, Category: Participant materials (specific directions for them);

- Script/Instructions, Category: Participant materials (specific directions for them);

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (1) Educational settings on 2/24/2014.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

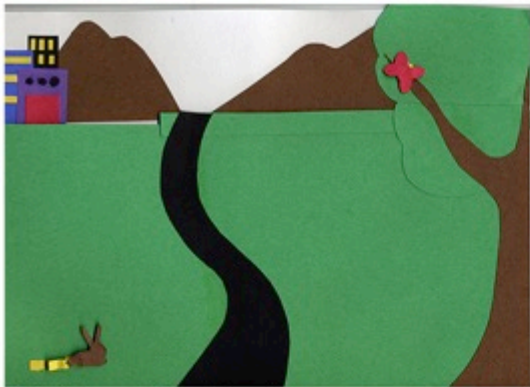
Sincerely,

IRB Administrator

cc: Patricia Bomberg

APPENDIX L

ARTWORKS FROM CARROLL'S COLLABORATIVE CLASS



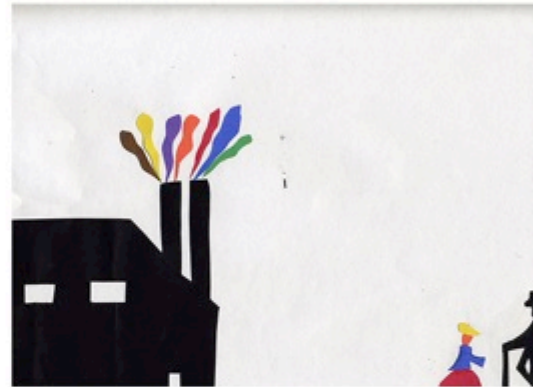
Collaborative, Carroll



Collaborative, Carroll



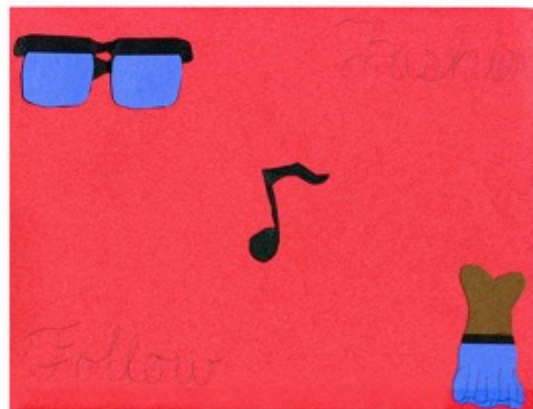
Collaborative, Carroll



Collaborative, Carroll



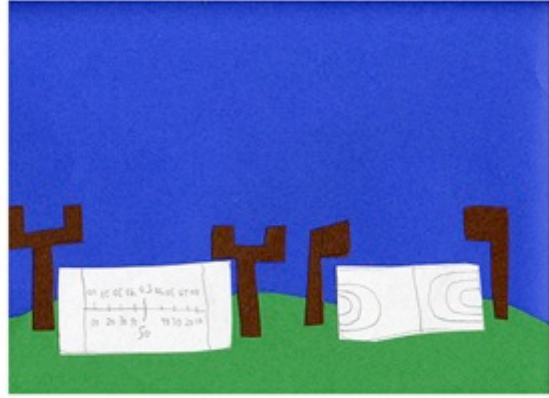
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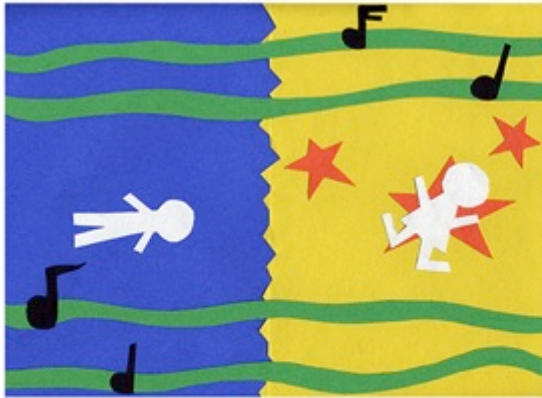
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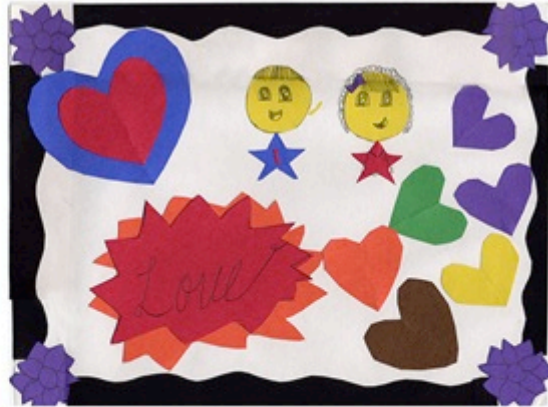
Participant 59



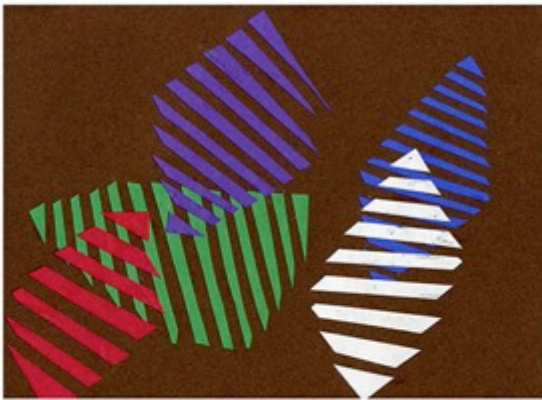
Participant 65



Participant 67



Participant 72



Participant 116



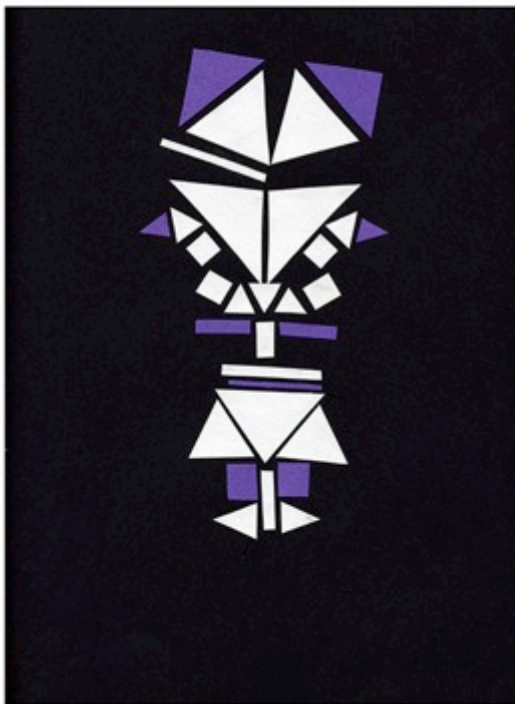
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Participant 66



Participant 75



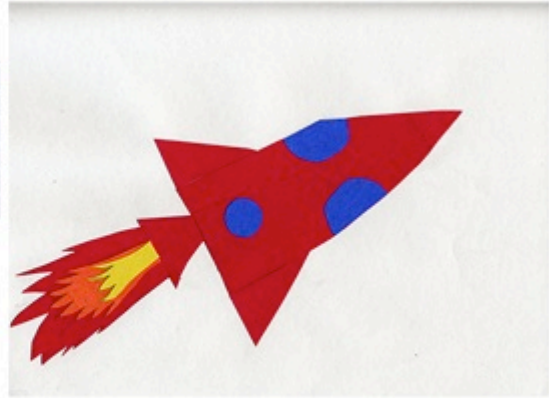
Participant 71



Participant 105



Participant 60



Participant 108



Participant 76



Participant 148



Participant 57



Participant 74

APPENDIX M

ARTWORKS FROM BELL-ZINN'S COLLABORATIVE CLASS



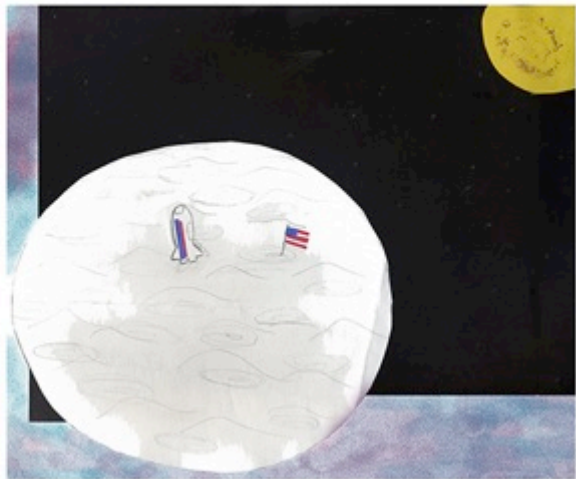
Participant 13



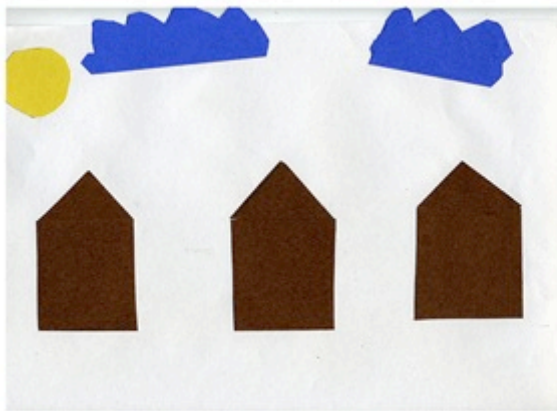
Participant 15



Participant 16



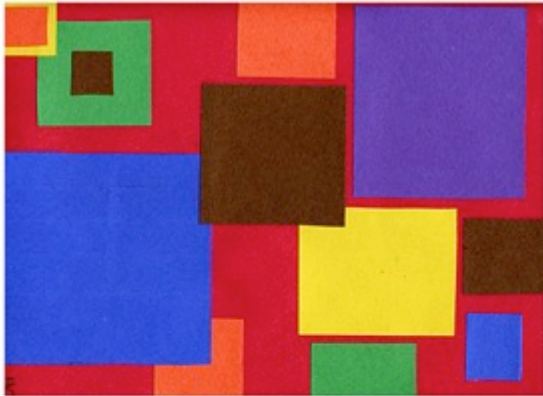
Participant 21



Participant 22



Participant 23



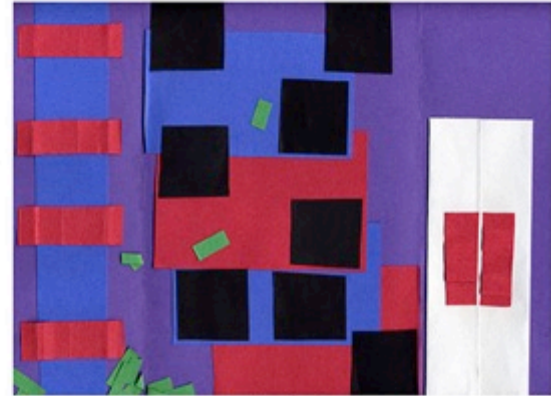
Participant 40



Participant 27



Participant 41, Artwork closed



Participant 41, artwork open



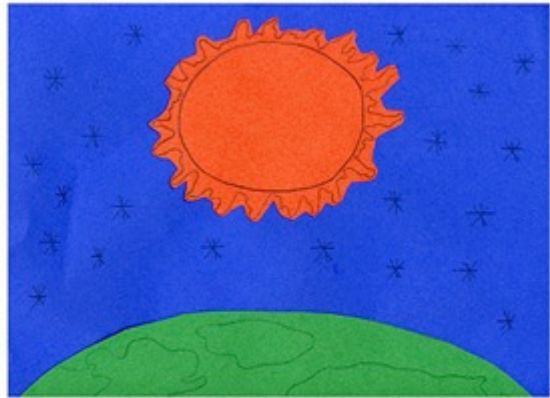
Participant 39



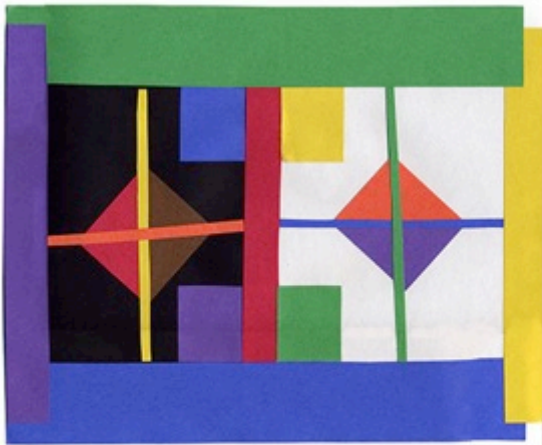
Participant 79



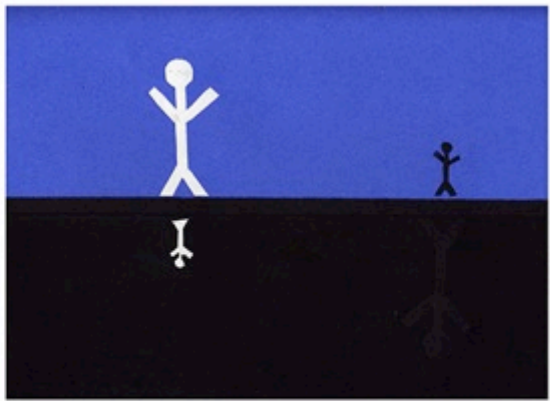
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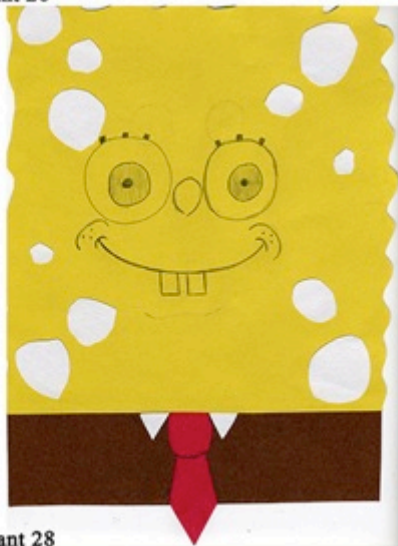
Participant 48



Participant 26



Participant 42



Participant 28



Participant 45



Participant 30



Participant 43



Participant 81



Participant 20



Participant 19

APPENDIX N

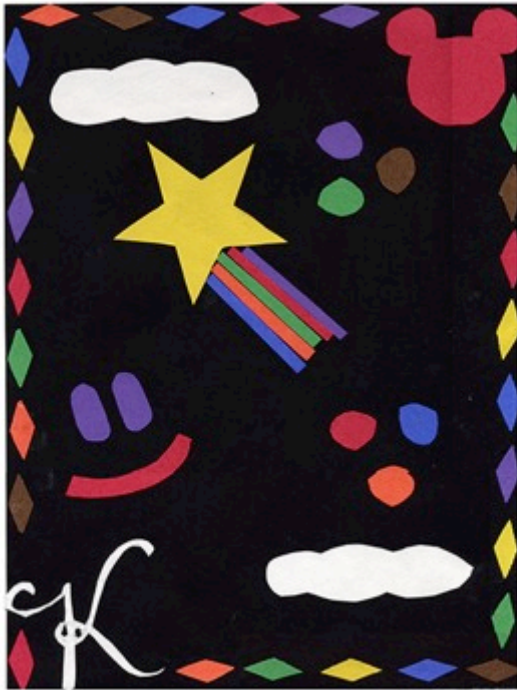
ARTWORKS FROM CARROLL'S AUTONOMOUS CLASS



Participant 118



Participant 121



Participant 133



Participant 134



Participant 147



Participant 123



Participant 139



Participant 120



Participant 122



Participant 136



Participant 138



Participant 150



Participant 135



Participant 137



Participant 145



Participant 146



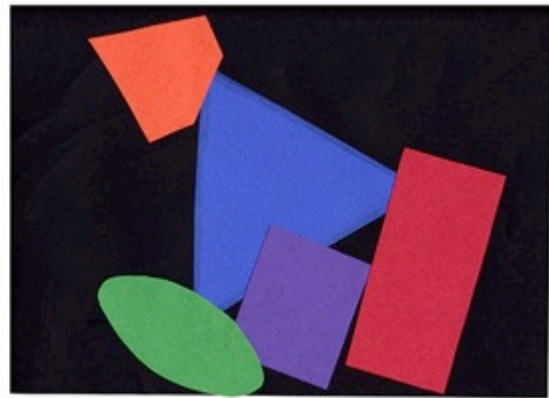
Participant 149



Participant 119



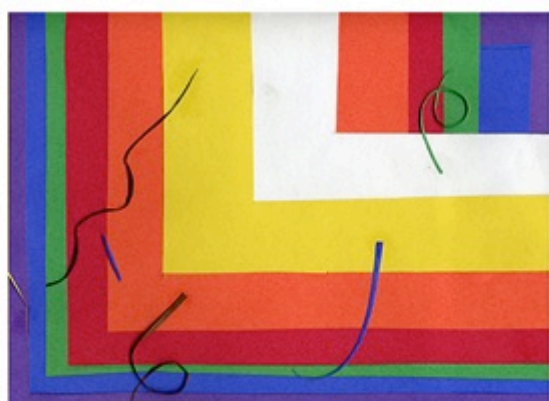
Participant 124



Participant 125



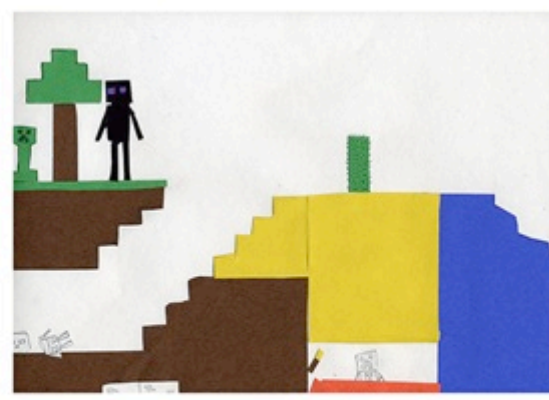
Participant 128



Participant 130



Participant 140



Participant 141



Participant 142



Participant 143

APPENDIX O

ARTWORKS FROM BELL-ZINN'S AUTONOMOUS CLASS



Participant 98



Participant 100



Participant 103



Participant 91



Participant 84



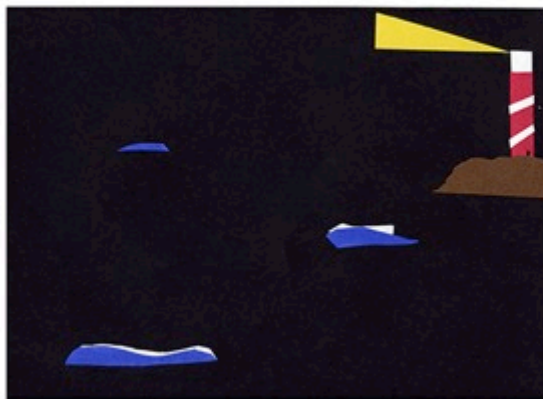
Participant 85



Participant 88



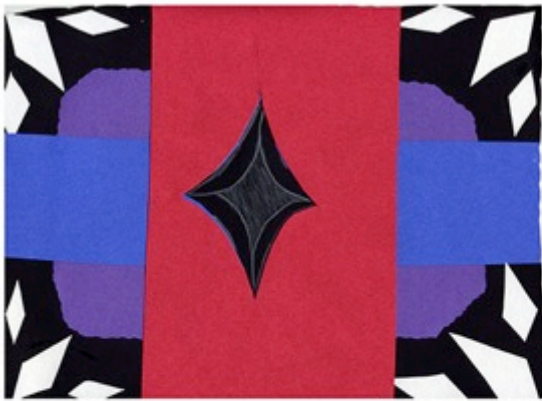
Participant 92



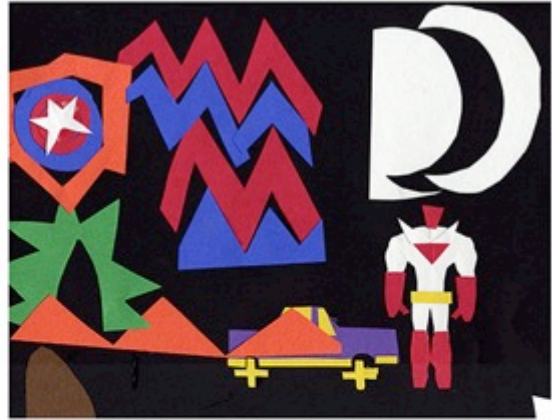
Participant 93



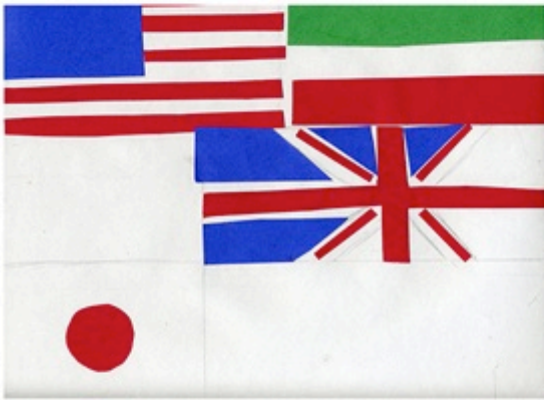
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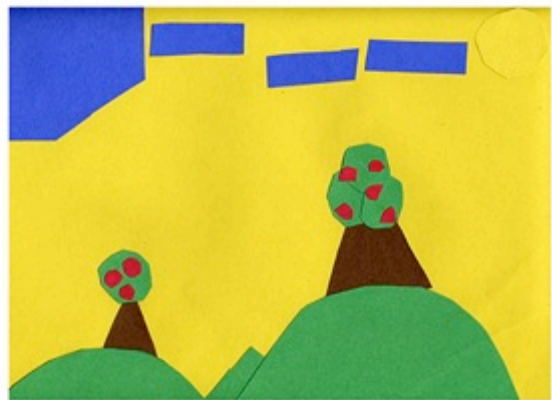
Participant 101



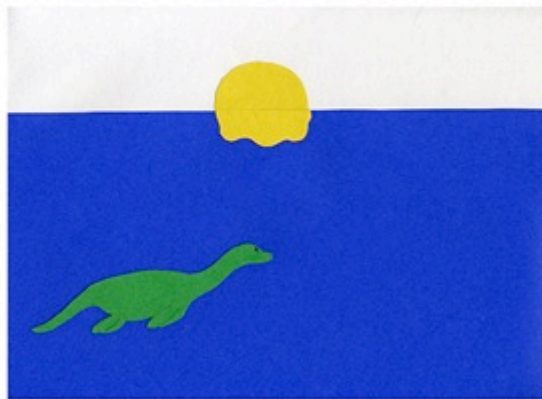
Participant 102



Participant 97



Participant 96



Participant 95



Participant 94



Participant 106