The effects of constructive language instruction and cooperative learning on the quality of artwork at the middle level

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The Effects of Constructive Language Instruction and Cooperative Learning on the Quality of Artwork at the Middle Level

Laura Allison Thompson

A thesis submitted to the Graduate Faculty of JAMES MADISON UNIVERSITY In Partial Fulfillment of the Requirements for the degree of Master of Arts in Art Education

School of Art, Design, and Art History

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Dedication

I dedicate this thesis to my amazingly supportive husband, Aaron, whose counsel, patience, and encouragement sustained me throughout this arduous, yet deeply fulfilling, process.
Acknowledgements

I would like to thank my committee chair, Dr. Karin Tollefson-Hall, for her encouragement, support, and reassuring words throughout my research. I would also like to thank Dr. Mary Beth Cancienne for providing much needed guidance through the development of my research questions and data collection processes. Lastly, thank you to Dr. Katherine Schwartz, for participating in my graduate studies and serving on my committee. I have grown immensely as both scholar and art educator during this experience, and for that I express my sincere appreciation to family, friends, colleagues, and art educators whom made this thesis possible.
Table of Contents

Dedication ...................................................................................................................... ii
Acknowledgements ........................................................................................................ iii
List of Tables ................................................................................................................... vi
List of Figures .................................................................................................................. viii
Abstract .......................................................................................................................... ix

I. Introduction .................................................................................................................... 1
   A. Background of the Study ............................................................................................. 1
   B. Statement of the Problem ............................................................................................ 5
   C. Statement of Need ........................................................................................................ 6
   D. Research Questions ..................................................................................................... 7
   E. Assumptions ................................................................................................................ 7
   F. Limitations ................................................................................................................... 7
   G. Definition of Terms .................................................................................................... 8
   H. Procedural Overview ................................................................................................. 9

II. Review of the Literature ............................................................................................... 12
   A. Learning Theories and Practice in the Middle School Art Room ................................. 12
   B. Cooperative Learning in the Middle School Classroom ............................................. 14
   C. Cooperative Learning in the Art Classroom ............................................................... 18
   D. The Importance of Dialogue in Education ................................................................. 25
   E. Explicit Instruction in Constructive Language .......................................................... 30
   F. Dialogue in the Art Classroom .................................................................................. 32
   G. Assessing the Quality of Middle School Artwork ..................................................... 34

III. Methodology .............................................................................................................. 38
   A. Design ....................................................................................................................... 38
   B. Research Questions ................................................................................................... 39
   C. Sample ....................................................................................................................... 39
   D. Context of Study ....................................................................................................... 39
   E. Preparation of the Assignment ................................................................................   40
   F. Role of the Researcher .............................................................................................. 40
   G. Procedure ................................................................................................................ 40
   H. Instrumentation ....................................................................................................... 44
   I. Data Analysis ............................................................................................................ 44
IV. Results and Interpretations

A. Numerical Data
B. Pre- and Post-Intervention Surveys
C. Quality of Art Rubric Scores
D. Individual Student Observations: Symbolic Self-Portraits
E. Group Observations: Constructive Language Videos
F. Group Observations: Theme Team Collaborative Paintings
G. Individual Artist Statements

V. Conclusions and Recommendations

A. Research Question 1
B. Research Question 2
C. Recommendations for Further Studies

VI. Appendices

A. Parental Consent Form
B. Student Assent Form
C. Cooperative Learning Survey
D. Quality of Art Rubric
E. Symbolic Self-Portrait Lesson Plan
F. Symbolic Self-Portrait Worksheet Packet
G. Constructive Language Video Lesson Plan
H. Constructive Language Video Worksheet
I. Constructive Language Video Assessment
J. Theme Teams Lesson Plan
K. Asset Inventory
L. Theme Teams Worksheet Packet
M. Unity Checkpoints
N. Student Interaction Data Collection Form
O. Group Interaction Data Collection Form
P. Individual Student Scores Chart
List of Tables

Table 1: Cooperative Learning Survey Scores .......................................................... 47
Table 2: Survey Question 1 Response Chart .............................................................. 49
Table 3: Survey Question 2 Response Chart .............................................................. 50
Table 4: Survey Question 3 Response Chart .............................................................. 51
Table 5: Survey Question 4 Response Chart .............................................................. 52
Table 6: Survey Question 5 Response Chart .............................................................. 53
Table 7: Survey Question 6 Response Chart .............................................................. 54
Table 8: Survey Question 7 Response Chart .............................................................. 56
Table 9: Student Rubric Self-Evaluation Total Scores Chart ....................................... 58
Table 10: Teacher Rubric Evaluation Total Scores Chart ............................................ 61
Table 11: Comparative Student/Teacher Score Chart for Criteria 1 ......................... 63
Table 12: Criteria 1 Levels 1-4 .................................................................................. 64
Table 13: Comparative Student/Teacher Score Chart for Criteria 2 ......................... 66
Table 14: Criteria 2 Levels 1-4 .................................................................................. 67
Table 15: Comparative Student/Teacher Score Chart for Criteria 3 ......................... 69
Table 16: Criteria 3 Levels 1-4 .................................................................................. 70
Table 17: Comparative Student/Teacher Score Chart for Criteria 4 ......................... 72
Table 18: Criteria 4 Levels 1-4 .................................................................................. 73
Table 19: Comparative Student/Teacher Score Chart for Criteria 5 ......................... 75
Table 20: Criteria 5 Levels 1-4 .................................................................................. 76
Table 21: Das Skittles Group Scores Chart ................................................................. 87
Table 22: Purple Chinese Carrots Group Scores Chart .............................................. 90
<table>
<thead>
<tr>
<th>Table Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 23</td>
<td>Arterrifics Group Scores Chart</td>
<td>93</td>
</tr>
<tr>
<td>Table 24</td>
<td>Orbiting Around Oreos Group Scores Chart</td>
<td>96</td>
</tr>
<tr>
<td>Table 25</td>
<td>Real Slim Shady Group Scores Chart</td>
<td>98</td>
</tr>
<tr>
<td>Table 26</td>
<td>EDSGR Group Scores Chart</td>
<td>100</td>
</tr>
<tr>
<td>Table 27</td>
<td>McMakms Group Scores Chart</td>
<td>103</td>
</tr>
<tr>
<td>Table 28</td>
<td>Chocolate Starbursts Group Scores Chart</td>
<td>106</td>
</tr>
<tr>
<td>Table 29</td>
<td>Volleyball + Soccer = Pizza Group Scores Chart</td>
<td>108</td>
</tr>
<tr>
<td>Table 30</td>
<td>Comparative Artist Statement Samples</td>
<td>109</td>
</tr>
</tbody>
</table>
List of Figures

Figure 1: Das Skittles Self-Portrait and Theme Team Painting Comparison.......................... 86
Figure 2: Purple Chinese Carrots Self-Portrait and Theme Team Painting Comparison .......... 89
Figure 3: Arterrifics Self-Portrait and Theme Team Painting Comparison .......................... 92
Figure 4: Orbiting Around Oreos Self-Portrait and Theme Team Painting Comparison .......... 95
Figure 5: Real Slim Shady and Theme Team Painting Comparison........................................ 97
Figure 6: EDSGR Self-Portrait and Theme Team Painting Comparison ............................... 99
Figure 7: McMakms Self-Portrait and Theme Team Painting Comparison............................. 102
Figure 8: Chocolate Starbursts Self-Portrait and Theme Team Painting Comparison .......... 105
Figure 9: Volleyball + Soccer = Pizza Self-Portrait and Theme Team Painting Comparison .... 107
Abstract

This study investigates the effects of explicit instruction in constructive language and cooperative learning activities on the quality of art work produced by seventh grade art students. Data collection included pre- and post-intervention cooperative learning surveys, student and teacher rubric evaluations, artist statements, teacher observations of student interactions, and photographs of artwork. Rubrics included five criteria: 1) idea formation and development, 2) problem-solving, 3) openness to suggestions, 4) depth of theme, and 5) perseverance. Students completed a self-portrait project individually to provide baseline data and samples with which to compare collaborative works after two interventions. During the interventions, students learned to differentiate constructive and unhelpful language in the art room, had opportunity to practice turning unhelpful comments into constructive ones, and created a group video illustrating the difference. Students were then grouped into Theme Teams to create a collaborative artwork comprised of one painting per teammate that conveyed individual components of a general theme chosen by the group. Comparisons were made between scores from surveys, student rubric self-evaluations, teacher evaluations, and student and group interaction data.

Results conclude that explicit instruction in construction language can be effective for students at a certain level of maturity and development, but that it is not detrimental to those who are not yet at that level, and therefore should be implemented early in the school year or semester and reinforced throughout the course of the class. The immediate effect it has on cooperative learning varies by student and among student groups. In this study, 52% of students scored themselves higher on their Theme Team painting than their self-portraits, while teacher scores were 74% higher, indicating an increase in the quality of art for a
majority of students. Correlations between group interactions and the rubric scores were observed in some cases.

Although there are distinct differences between individual and collaborative artworks, the incorporation of both types of projects into the middle school art curriculum, supported by explicit instruction in constructive language, affords students opportunities to explore themselves, and how they themselves fit into larger contexts.
Chapter 1

Introduction

Background of the Study

The middle school art room has the potential to be a breeding ground for ideas, imagination, and creativity. Although middle school aged students are typically very social beings, they may not be well-equipped to build and maintain constructive relationships. From my experience as a middle level art teacher for ten years, I had observed that collaborative art projects are often unsuccessful when cooperative learning groups or pairs are assigned, and if students had the opportunity to choose partners, the room was often further segregated into cliques by level of popularity, and almost never by interests, abilities, or common goals. These same issues posed a problem when students were working independently on a project. I believed that teachers could teach students the skills necessary to help build and maintain constructive relationships, and that collaborative art projects would be more successful and produce higher quality art work as a result.

Even in cases when I felt I had grouped students well, by assignment or choice, organization and delegation was difficult within the group, and some students didn’t have the appropriate vocabulary for collaboration. If I were to provide students with the right kinds of activities, structure, and etiquette, cooperative learning in middle school art could positively impact the whole school, and even the community.

I had taught lessons requiring cooperative learning in my classroom for several years, and too often I saw groups with members whom were unwilling to compromise, leaderless groups, a member of the group who felt like no one would listen, or groups of friends who managed to accomplish very little in the time allotted. Once in a while I experienced the incredible energy of a successful collaboration group and enjoyed the amazing art that was
born out of the combination of strengths and skills. I found myself asking, “Why did this work for them? What did they do what other groups did not?” and “How can I get every group to have this kind of success?”

Throughout my college art experiences, I valued and sought out critique from my classmates and peers. These interactions had a tremendous impact on my art making, as well as my understanding of the art work of others. I often look fondly back at this period in my life as my most creative and productive time as an artist, and I want to instill these values in my own students to foster their artistic growth. By doing so at a young and impressionable stage in their lives, perhaps they can become more thoughtful, innovative, and self-reflective artists as adults.

In my middle school art classroom, I disclose many details of my own artistic growth, sharing projects I completed in middle school as well as art I am currently making. Sharing my processes and frustrations, successes and failures shows them that being an artist is a never-ending pursuit. This also helps gain credibility with my students, because it is important for them to see me as an expert (with flaws, aesthetic preferences, and quirks) so that they can develop artistic goals of their own that they feel are within their reach. Valuing students’ perspectives and ideas is one of the guiding principles of constructivist learning theory (Schunk, 2012). I express curiosity in their areas of interest, ask them for advice or clarification, and truly value their individual styles and experiences. In this way, I hope to increase their esteem by reversing roles and becoming a novice to their expertise. When students feel respected by their instructor, they are more likely to appreciate each other’s views as well.

John Dewey (1916) outlines the importance of social interactions and problem solving by explaining that ideas can’t be simply “given” like facts, they must be formed
through interactions between people and experiences. Collaboration entails the sharing of information and ideas, and leads to questions, discussions, and possibilities in ways that inner speech cannot. My idea plus your idea does not merely equal two ideas, but together they provide the basis for brand new discoveries that can grow exponentially. This concept is why artists view art frequently, and tend to have many artist friends. Our collaboration provides optimum growing conditions for our seeds of thought.

My teaching philosophy exemplifies the Calchasian leadership style, in which the follower is considered as teacher to the leader, resulting in a "community of practice" (Grint, 2010). In the book, *Leadership: A Very Short Introduction*, Keith Grint (2010) explains that this leadership approach "assumes that engagement in social practice is the fundamental process by which we learn, thus learning is a collective or social activity not an individual activity" (p. 62). He also asserts that "a community of practice does not arise simply from physical proximity...unless there is 'mutual engagement' of participants" (p. 63). An effective leader learns how to lead by observing his or her followers. I have honed my pedagogy by reflecting on my experience with each class I teach, and adjusting my techniques to fit the needs of the particular group. More than ever before, I now understand that collaboration among students does not happen automatically, and such relationships must be fostered, nurtured, and modeled for those social skills to develop appropriately.

Although I led collaborative art projects before, I had never provided specific guidelines for appropriate communication techniques and dialogue, nor had I been truly successful in conveying the importance of collaboration. Because of the range of developmental stages, some students are not readily equipped with the social skills to successfully communicate with someone they don't know and/or about whom they harbor preconceived judgments. Expecting students to use constructive language when they haven’t
been taught what it is or how to use it is unrealistic. Just like any other skill, it must be a guided activity followed by practice. It is critical that students learn how to communicate effectively with each other if they are to work successfully in groups. By providing students with a clear goal of the cooperative learning activities they will be engaging in and tools to help them be successful, students should be more prepared for mediating within their groups, more mindful of the language they use, and more receptive to critique and suggestions. I believed that as a result of doing this, constructive dialogue would persist through subsequent projects, and that the quality of student work would continue to improve.

The entire school culture could be improved through this kind of guided collaboration. It is critical for students to understand that everyone has valuable experiences, thoughts and opinions to offer, and that it is important that they learn to appreciate them, even when they differ from their own. It is an important life skill to be able to work with others in a respectful way, to listen, give and receive constructive criticism, and communicate effectively. Specifically in the art classroom, being able to share creative solutions and techniques, and "bouncing" ideas around a group of people leads to art work that is more expressive, thoughtful, and unique.

Besides the fact that my art curriculum is not hindered by strict pacing guides or standardized testing, I believe that the art classroom provides an ideal environment for collaboration for several reasons. Art is a social activity, and ideas are enhanced greatly when shared and discussed. My curriculum provides multi-sensory, hands-on art making experiences that allow for natural differentiation encompassing several learning styles and therefore are capable of engaging each student. The overall climate of the classroom is influenced not only by the content I present and the media students use, but also by the
ways I encourage them to solve problems. I have flexibility to change the structure of my class, because the true test of knowledge in art isn’t multiple choice or true and false answers that can be “taken” or “given” easily. A wonderfully advantageous aspect of art is that everyone’s answers are supposed to be different, and even work that is imitated or copied still must be done by hand and so, even by default, learning occurs (Zurmuehlen, 1990). Lastly, art is an individual expression to which there are no “right” or “wrong” answers. Everyone stands on equal ground regardless of skills or ability, because everyone has life experience to draw from and the ability to express that experience through art. I believe art that is created through the sharing of that information can be more powerful and reach a broader audience because it takes into consideration multiple perspectives.

**Statement of Problem**

Having begun my teaching career in a school ranging from pre-kindergarten through seventh grade, I had noticed that, when children enter adolescence, they begin to develop an awareness of the intricacies of life, explore new facets of themselves, deal with major changes in their physicality, apply higher levels of thinking to their education, and start to realize that a much larger world exists beyond the boundaries within which they have lived. With the pressing issue of self-discovery in the forefront of the minds of many of my students, and an advance in technical skill at this stage of development, came new possibilities of visual expression.

This stage of development is also a time when children begin to challenge conventions, which can manifest in different ways, both good and bad. My studies in art history had taught me that most ground-breaking movements in art were a result of collaboration among artists, and more often than not, they were in opposition to the “status
Because of the diversity of concepts and styles art offers, I feel that it is the perfect arena for middle level students to productively direct their energy.

Over the past ten years, I observed many middle school students make negative comments about their own artwork, and even the artwork of others. In order to change the ways students communicate about art with each other, we must equip them with constructive language, and then provide them with opportunities to practice using it (Payne, 2010). Cooperative learning activities play a key role in this process. Not only do they facilitate the deepening of concepts and produce more meaningful works, but they require social interaction in order to do so. If I was successful in teaching them how to use constructive language in art, perhaps they would use it in life as well.

**Statement of Need**

Since teaching in a middle school setting, I have struggled to create a classroom community where student collaboration and cooperative learning flourishes. Although the class culture seems to improve over the course of the semester and collaboration seems to be more evident, the drastic improvements in the quality of both their dialogue and their artwork are contradicted by the decrease in motivation and productivity as the semester draws to a close. If I could facilitate this dynamic through the implementation of constructive language techniques and collaborative activities earlier in the semester, I believed the quality of their artwork would improve greatly, and more quickly.

It was my hope that other art teachers would be able to apply the same types of cooperative learning activities to their curricula that would result in higher quality artworks by students within a collaborative art room community.
Purpose of the Study

The purpose of this study was to investigate the effects of constructive language instruction and cooperative learning activities on the quality of art work produced by students in a seventh grade art class community.

Research questions

1. How does explicit instruction in constructive language usage affect cooperative learning in a seventh grade art class?

2. How does cooperative learning affect the quality of student art work in a seventh grade art class?

Assumptions

Assumptions I made in this study include: 1) Students in this study chose to take art as an elective, and therefore have some interest in learning about and making art; 2) Students would be interested and invested in the process of collaborative art-making; 3) Students could speak English and/or Spanish well enough to communicate with other English- or Spanish-speakers; 4) Responses would be as authentic as students were capable of expressing in writing; 5) Students had received prior art instruction in a school setting; 6) Students would be in attendance regularly to participate in collaborative art activities.

Limitations

The limitations of this study include: 1) two seventh grade elective art classes in an urban public middle school on the east coast; 2) 36 days of 45-minute art class periods; 3) the wide range of social, emotional, and physical maturity displayed by students at this age, possibly affecting the willingness to actively participate in the collaboration activities, and depth with which they respond to surveys and in artist statements; 4) Various languages spoken and levels of fluency, possible impeding communication between students; 5)
Written assignments possibly not accurately expressing the student’s thoughts due to varying writing abilities; 6) Educational resources found through the JMU Carrier Library, and online.

**Definition of Terms**

- **Art Room Community** – the atmosphere among students in the same art class that inhibits or fosters creative artistic expression
- **Calchasian Leadership style** – rooted in the belief that learning is a collective activity and that all members of an organization have assets to contribute, therefore leadership may be distributed throughout the “community of practice”
- **Community of Practice** – groups of people who gather their various knowledge and talents into a shared social practice
- **Collaborative art activity** – art-based activity that is structured in small groups or pairs of students with a common goal
- **Constructive Language/Dialogue** – positive, proactive, encouraging language
- **Constructivist Learning Theory** – theory that new knowledge is constructed through involvement in hands-on and project-based activities when connected to previous knowledge
- **Cooperative Learning** – an approach to education in which students participate in activities structured to facilitate social interactions and enhance learning
- **Cooperative Learning Group** – group of 3-4 seventh grade students assigned to work together for a common goal
• School/class culture – the atmosphere created within a school or particular class of which all members are a part and to which they all contribute

• Social Cognitive Theory – theory that learning occurs through observations of and social interactions with others

• Unhelpful Language – negative, inconsiderate, or hurtful language

Procedural Overview

Students began the semester by discussing art class rules and expectations, becoming oriented in the classroom, and getting to know my teaching style. This research began three weeks after second semester begins, allowing time for students to add and drop classes. Students completed one project individually to provide base line data and samples with which to compare collaborative works.

After completing the individual assignment, students participated in two collaborative art activities, all of which are described here:

**Symbolic Self-Portraits.** After viewing work by Frida Kahlo, students discussed symbolism in her work, and also in everyday life. Students wrote a short story that revealed information about themselves, practiced using correct facial proportions, then created a realistically rendered pencil self-portrait, using a grayscale photograph as reference that also incorporated symbols inspired by their short story.

**Constructive Language Role Play.** Students learned to distinguish unhelpful and constructive language in the art room. After reading example phrases, students groups of 3-4 worked together to create a scripted video production illustrating the difference between unhelpful and constructive language in the art room, which was shown to the whole class at the close of the lesson.
**Theme Teams.** Working in teams, students created a unified body of paintings that addressed a common theme. After viewing groups of artworks addressing common themes, teams mutually agreed upon a theme for their individual paintings to address. With their teammates’ help, each student developed a concept for their painting that conveyed an aspect of the theme. Students consulted with their teams throughout the entire process to ensure cohesiveness/unity among the paintings. (i.e. painting style, recurring elements, colors, media, techniques, etc.) When paintings were completed, each student filled out an artist statement worksheet, then worked as a group to combine their individual statement into a cohesive document explaining the meaning of each of the works and how they related to the theme, using correct grammar and punctuation, as well as descriptive language.

Throughout this process students planned projects with worksheets that I collected at the end of the study. Student artworks were photographed, and presentations and interactions throughout the study were observed and documented in writing. These activities took place during second semester, over approximately 36 school days, from February to April. Observations were made through the course of these activities, and data was analyzed once the collaboration activities were completed.

After students returned parental consent forms and signed student assent forms (Appendices A and B), they completed the same survey on their perceptions of cooperative learning in art class (Appendix C) as they did after the collaborative art activities were implemented. These were analyzed to determine if there were any changes in their perceptions of cooperative learning groups over the course of the study. Students also wrote artist statements for their individual projects that were compared with the artist statements they crafted for the Theme Team assignment. These were analyzed for changes in depth of thought involved in the making of the artwork. The same rubric was used to assess the
quality of the individual projects and the collaborative projects, and both were completed by
the student and the teacher (Appendix D). The rubric used a four-point scale to measure the
following categories: Idea Formation and Development, Problem-Solving, Openness to
Suggestion, Depth of Theme, and Perseverance. Scores from each project were compared
directly to determine whether there was any correlation between collaboration and the
quality of artwork, accounting for both students’ perception and teacher’s assessment.
Chapter 2

Review of the Literature

This chapter explains the social and cognitive needs of middle school art students in the classroom based on learning theories, the reciprocal dynamic of cooperative learning groups and the development of social skills. It also offers research-based best practices for cooperative learning in a middle school setting, the benefits of collaboration in art, and effective ways to assess the quality of student art.

The review of literature underlying this study is divided into seven sections: 1) learning theories and practice in the middle school art room, 2) cooperative learning in the middle school classroom, 3) cooperative learning in the art classroom, 4) the importance of dialogue in education, 5) explicit instruction in constructive language, 6) the importance of dialogue in the art classroom, and 7) assessing the quality of middle school artwork.

Learning Theories and Practice in the Middle School Art Room

Constructivist theory posits that people create their own knowledge through experience (Schunk, 2012). The art classroom provides many of the modes of knowledge creation suggested by constructivist theorists such as hands-on, experiential, and project-based learning. I have noticed in both my education in public schools and throughout my career as a teacher that these teaching methods are employed often at the elementary level, but, however contrary to developmental psychology, teachers tend to incorporate fewer constructivist learning methods as students progress through their K-12 education. By seventh grade, students are subject to lecture style classes in many cases, focused on teacher-talk and individual achievement. In comparison to the elementary school, Johnson,
Johnson, & Roseth (2010) state that “middle schools tend to offer students fewer opportunities for interaction and cooperation with peers” (p. 2).

Art is, at its very basic level, a social subject. Middle school students thrive in classrooms where they are able to immerse themselves in a hands-on activity while talking with each other about it. Social learning theory suggests that learning occurs primarily through social interactions and dialogue pertaining to experiences, from childhood through adulthood. People learn by observing others complete tasks, and practicing what they observed, which is yet another advantage of the basic structure of the art class (Schunk 2012).

Techniques are demonstrated by the teacher, and then practiced by students, at which point the process of demonstrating and doing can be carried on by students. By teaching others, students construct more knowledge of a technique, as well as gain more experience in the social realm. This theory has roots in constructivism, but specifies the critical role of dialogue in the learning process. Both theories, however, “assert that humans acquire and extend knowledge through interaction with one another” (Igel & Urquhart, 2012). Vygotsky’s Zone of Proximal Development (ZPD) makes yet another case supporting collaborative activities, as “he contends that children are capable of performing at higher intellectual levels when asked to work in collaborative situation than when asked to work alone” (as cited in Hagaman, 1990, p. 153). I have experienced this multiple times in my classroom; the discussion and dialogue among students often reveals new information about and attributes of an artwork I had shown a dozen times before and with which I am very familiar. Looking at art from multiple perspectives is the most thorough way to understand it.
Social constructivist theory, then, elegantly combines these theories. According to Jean Piaget’s stages of cognitive development, students in the middle level are emerging from the concrete and entering the formal stage (Schunk, 2012). With this evolution comes the ability to think more abstractly, which, if guided properly, can result in a rich dialogue in the art classroom. Social constructivist theory has many implications for art education. As students view art, discuss meaning, analyze process, synthesize new ideas, and create their own art, whether individually or in groups, they are constructing knowledge through social interactions and conveying their ideas to others visually. However, with this desire to express one’s self, opine, and make sense of the world, comes the responsibility one must have or develop to communicate respectfully and listen more than speak. Therefore, the art room becomes an ideal environment to practice these skills.

**Cooperative Learning in the Middle School Classroom**

When discussing group work, it is important to distinguish between collaborative learning and cooperative learning. While collaboration generally refers to working within a group setting, cooperative learning is “highly structured with certain elements,” ensuring a smoother and fairer experience for students (Igel & Urquhart, 2012, p. 17). Adult and adolescent learners often form what Jean Lave and Etienne Wenger (1991) dubbed communities of practice (as cited in Freedman et al, 2013). Informal learning groups such as these allow members to build knowledge within a social context. In fact, humans have depended on collaborative social contexts for survival and evolution for thousands of years, and it is likely that living in those small, homogeneous, interdependent groups has conditioned humans to mentally and emotionally thrive in those contexts (Blatt-Gross, 2010). In early societies, members were interdependent. Various roles were assumed for the
success of the group. We see this in our communities, both locally and globally today. This is critical because a major component of cooperative learning is its basis on Social Interdependence Theory. In this theory, individual goals are dependent upon the performance of others in the group (Johnson, Johnson, & Roseth, 2010).

Since the 1970s, Johnson and Johnson have been promoting cooperative learning structures in schools. Their article, Circles of Learning, Cooperation in the Classroom (1984) provides solid evidence of the effectiveness of cooperative learning. In reviewing 122 studies conducted between 1924 and 1981, they found that “cooperative learning experiences tend to promote higher achievement than do competitive and individualistic learning experiences. These results hold for all age levels, for all subject areas, and for tasks involving concept attainment, verbal problem solving, categorization, spatial problem solving, retention and memory, motor performance, and guessing-judging-predicting” (p. 15).

Other studies have confirmed the effectiveness of cooperative learning. In 2012, Igel & Urquhart synthesized “20 recently published, high-quality studies on the effects of cooperative learning” and “researchers found that well-designed cooperative instruction had a consistently positive effect, accounting for an average 17-percentile-point gain in student learning” (p. 17). Another study of most effective teaching strategies in diversely populated middle schools revealed that cooperative learning is among the four most employed methods, the others being use of visuals, peer tutoring, and alternative assessment (Allison & Rehm, 2007). Since art education historically relies upon the heavy use of visuals and alternative modes of assessment, incorporating cooperative learning skills into the curriculum provides the missing piece to maximizing learning for an increasingly diverse population by offering “unique opportunities for positive social interaction and interpersonal communication between students from different backgrounds” (p.16).
Just as placing a student in a school classroom does not ensure learning will occur, simply putting students in groups does not either. Holt (1993) warns teachers “not to assume students know how to work cooperatively,” and to teach the necessary skills. Johnson, Johnson and Roseth (2010) list four basic elements that constitute cooperative learning: positive interdependence, face-to-face interaction, individual accountability, and interpersonal and small-group skills. It is critical that teachers consider these necessary elements and put in place structures to guide students through the process. Igel and Urquhart (2012) assert that there are three main requirements for teachers to be successful in implementing cooperative learning: they must (1) teach students group processing and interpersonal skills, (2) establish goals structures, and (3) create a system that promotes individual accountability. Other measures teachers can take to ensure success are keeping group size small, ideally two to four students, and assigning roles for each member (Holt, 1993; Johnson, Johnson, & Roseth, 2010).

The benefits of cooperative learning are numerous. As mentioned previously, social learning theorist Lev Vygotsky contended that children learn at higher levels of thinking in cooperative groups than when working independently (at cited in Hagaman, 1990). Larry Holt (1993) adds that it “promotes high level thinking that is most clearly seen in conceptual learning and problem solving tasks” (p.8). Not only are children capable of higher achievement, but they are more motivated to achieve at higher levels when in cooperative learning environments rather than in competitive learning environments (Johnson, Johnson, & Roseth, 2010).

Cooper and Sjostrom (2006) suggest that in collaborative art, working within a group “creates educational value all by itself. It requires skills in conversation, negotiation,
problem-solving, and listening” (p.65). By working cooperatively, students learn how to work more cooperatively. This kind of “positive interdependence results in promotive interaction in which students encourage and assist each other’s efforts to learn, share resources and ideas with each other, and value and respect each other’s contributions” (Johnson, Johnson, & Roseth, 2010, p. 4). As cooperative learning occurs more often, a “classroom community” forms, and even though “the emphasis does not fall upon the development of socialization skills or the provision of therapeutic experiences through discussion activities…such skill and experiences often are secondary products of involvement in the process’ (Hagaman, 1990, p.151).

Although it takes some guidance to establish this “classroom community,” there is little effort required to get middle school students talking. Most preadolescents enjoy talking to each other. Drotner (2008) states that “students are motivated by the need to communicate regularly with others, to be entertained, and to address personal problems and interests (as cited in Freedman et al, 2013, p.106). Johnson, Johnson and Roseth (2010) insist that middle schools especially “need to be concerned about ensuring all students are socially integrated into constructive peer groups” and that “through the use of cooperative learning, middle schools may promote social as well as academic integration, ensuring that most if not all students develop friends and are accepted by their peers” (p. 5).

Cooperative learning is also a critical piece of the diversity puzzle. As students populations become more diverse, there is a greater need for students to embrace multiple perspectives, including students of different cultures and abilities (Stokrocki, 1990). Cooperative learning activities “offer unique opportunities for positive social interaction and interpersonal communication between students from different backgrounds in diverse
classrooms” (Allison & Rehm, 2007, p.16). When students feel comfortable sharing their views and experiences, they teach and encourage others to consider the context and values of others’ opinions (Hagaman, 1990).

**Cooperative Learning in the Art Classroom**

Cooperative learning is closely related to collaboration, with the exception that it incorporates instruction in interpersonal skills, goal-setting, and mechanisms for individual student accountability. For adolescents, this explicit instruction is critical for successful collaborations. In the art classroom, students can synthesize information into visual artifacts born out of successful collaborations.

Art is not only a subject that can utilize social interaction to foster student growth and learning, but also a place in which social skills can be learned and honed. This interplay between visual expression initiating dialogue and interpreting dialogue through visual means can be amplified through the use of directed collaborative activities in the art room. According to Cooper and Sjostrom (2006), “Collaborative art projects are powerful educational experiences because art itself is a means of finding out about the world, a means of investigation and of discovery” (p. 25). When students learn about each other, they can begin to understand that there are many perspectives of the world that can be considered. This interaction with peers, talking about all of the various experiences and how others interpret and express symbols and ideas visually and through other creative outlets allows them to deepen their understanding of artists, their work, and their processes. In a case study of highly artistic students, Victoria Visconti (2012) expressed that in addition to engagement in a structured visual arts program, they required a social setting. Highly artistic students valued the opportunity to work in a “studio-style atmosphere that allowed talking and
listening to music were important for the participants’ creativity to flourish” (Visconti, 2012, p. 51). Although there are limited resources specifically citing cooperative learning in formal art education, research has been done in related subjects that can be transferred. Among these are philosophy, in particular aesthetics, visual culture learning communities (VCLCs), “social and emotional learning” (SEL), and creativity.

In her paper *The Community of Inquiry: An Approach to Collaborative Learning*, Hagaman (1990) examines “the Philosophy for Children program in critical thinking as a possible source in determining educationally and philosophically sound approaches to dealing with the issues of aesthetics in art education. A major point of focus is the program’s emphasis on what is called the “community of inquiry” and its use in collaborative pedagogical methods based upon theories of sociocognitive learning” (p. 150). In it she states,

> Vygotsky holds that when one establishes the right kind of environment, that is, one of structured teacher guidance and collaboration with peers, students are able to produce something together, which they could not have produced alone, such as significant inquiry into issues of aesthetics. (p. 153)

In this approach, students are taught and expected to follow three guidelines: use of criteria to evaluate ideas, willingness to listen to others and admit flaws in their initial opinion when appropriate, and embracing the importance of context. Each of these components can and should be fostered in the art room to encourage deeper and more meaningful conversations in regards to art viewing as well as art making. The role of the teacher in such situations is to facilitate these discussions in a way that challenges students to think critically
about the topic, and help them build on each other’s arguments in a constructive and
beneficial way.

In a study of VCLCs, informal group structures established by young adults and
adolescents with common artistic interests, Freedman et al (2013) argues that

the characteristic qualities of VCLCs that motivate and facilitate learning
among their adolescent and young adult members are often at odds with
formal art education. This research suggests that auto-didactic learning,
cooperative learning, and peer initiated learning should be common practices
in K-12 and undergraduate classrooms. (p.113)

Citing research by Johnson and Johnson (2009) as it applied to other academic
subjects, she and her colleagues posit that the study suggests that cooperative learning can
also strengthen learning through art. For artists in these groups, “a process-oriented, on-
going discussion of ideas, initial plan, drafts, and works-in-progress is essential for fostering
creative solutions” (p. 114). One important factor among VCLCs is common interests.
Although this can be hard to achieve in an art classroom comprised of students ranging in
skill, art experience, and preferred media, there is one general commonality; it is an elective
subject at the middle school level, therefore art is a common interest that the majority of
students at this level share. This study also recognizes the desire for students to work
independently, and suggests allowing groups to work together during brainstorming, but
then completing individual parts or projects that relate to one another (Freedman et al,
2013). This allows ideas to be shared and elaborated upon, but retains the autonomy
preferred by many creative persons.
“Social and emotional learning” (SEL) provides another important component of art education. Research has demonstrated its significance in “preparing our children both for academic success, and more broadly, life effectiveness” (CASEL 2003, p. 7, as cited in Russell & Hutzel, 2007). SEL includes five competencies: self-awareness, self-management, social-awareness, relationship skills, and responsible decision making (CASEL, 2003). Although all of the competencies are important for students’ success, in cooperative art learning, two of the most beneficial are Social-Awareness and Relationship Skills. Social-Awareness encompasses appreciation and empathy for multiple perspectives and diversity, which are necessary to meaningful interpretation and expression. When students display sensitivity to and tolerance of their differences, their peers are more likely to share ideas and take risks. By promoting these ideas in the art room, students will glean greater understanding of the art of others, and be able to communicate more successfully through their own artwork.

The relationship skills category entails essential skills for collaboration activities: communicating clearly, listening actively, cooperating, resisting inappropriate social pressure, negotiating conflict constructively, and seeking and offering help when needed. (CASEL, 2003). Utilizing this framework within a collaborative art setting will set the stage for constructive dialogue through which students can enhance their own ideas and techniques as well as those of their classmates. In order to successfully teach these concepts, CASEL programs incorporate explicit skills instruction in the classroom setting and provide ample opportunity for students to practice.

In other settings, therapists have used collaborative arts activities to foster social skills in group sessions. In one case study, a group of 10 court-referred boys, ages 12-15
were first “educated on basic social skills such as taking turns, sharing ideas and materials, cooperating, and following directions” before they are instructed to participate in several collaborative arts activities (Lenz, Holman and Dominguez, 2010, p. 148). The group collectively conceived and created a mural, role-played, and critiqued art using problem-solving. The authors state that expressive activities such as these seem to “enhance [clients’] experiences of catharsis and connection” (2010, p. 152). Relating to others in a respectful and productive way increases one’s ability to empathize and understand multiple perspectives. The collaboration in this case was also effective in providing a forum for adolescent boys to connect with each other through their similar experiences and create something together validating their collective voice and emphasizing the importance of teamwork. The counselor also led discussion about how the social skills they utilized can be applied successfully other areas of their lives. The dialogue that was facilitated between peers aided in their understanding of the larger theme, and encouraged them to reflect upon their ideas and accomplishments.

From a scientific perspective, the relatively recent discovery of mirror neurons and their role in empathy have also strengthened the case for social interaction in art. In a 2009 article, Carolyn Jeffers made the case that the art classroom provides an ideal environment to develop empathic skills. Mirror neurons function to enable not only vicarious learning, but vicarious feeling. In art, the feeling you get when you view a painting that moves you emotively can be experienced by another through observation and firing of these neurons. Adding respectful discourse to these emotions can provide insight into another’s aesthetic experience and “an openness to others and their ideas, or what can be called empathy” (Jeffers, 2009, p. 19). If students are able to empathize with one another and have similar
experiences viewing the art of others, there is more likelihood that they will be able to successfully collaborate on art. As Dutton (2009) states, “art often acts as a surrogate experience, which, one could argue, is key to developing the mutual motives that result in collaboration’ (as cited in Blatt-Gross, 2010, p. 362).

Hagaman (2007) suggests that for students to have a true “Vygotskian” learning experience, both teacher and peer collaboration need to be more fully realized. Opening the gates between teacher and students allows the teacher to have more insight into student interests, which will allow them to “harness the energies of their students” (Stokrocki, 1990, p. 113). As Freedman et al (2013) reveals, students with similar interests are more motivated to work together on group projects and that by grouping students based on common interests, collaborative artmaking is possible in the classroom too. Such situations foster a climate of openness and sharing that is structured both in terms of pedagogy and aesthetics helps students teach and learn from each other. Peer learning occurs through peer critique as well as mentoring and nurturing. The art of teaching is to establish the delicate balance among these forces as part of the studio environment. (Freedman et al, 2013, p. 114)

In terms of creativity, cooperative learning is closely related to the cliché “two heads are better than one.” Corcoran & Sim (2009) conducted a study in which cooperative learning was used to facilitate creative thinking in a high school art class. Although the study focused on the reflection of the teacher in regards to the implementation of cooperative learning, the findings included that “cooperative learning offers a more positive environment in which students can motivate and challenge each other to learn … that learning in
cooperative groups, rather than individually, enabled low achieving students to develop ideas and solve problems more creatively,” and that “in groups with diverse confidence levels…the cooperative learning experience strongly influenced the creative thinking of individuals” (p. 57). Within a more generalized setting, “Csikszentmihalyi (1988) argued that a ‘congenial’ environment within the social system of a classroom is essential for learning creativity” (p.52).

As students in middle school develop new skills and techniques in the art room, their repertoire of subject matter is ever expanding. Students begin to have a deeper understanding of the connectedness of the world around them, recognize injustices and incongruities, and, by navigating through these ideas, form opinions, beliefs, and concepts of self. These young artists often have more fluency in visual means of expression than articulate language. In her article addressing the implications art education has on social and emotional development, Blatt-Gross (2010) states, “unlike language, to which certain parts of reality remain inaccessible, art can convey the ineffable” (p. 361). Artistic expression in the formative years facilitates formation of identity, which is limited to experience and context. Social interaction broadens both components, stimulates new ones, and is reciprocated by art processes and meaning-making. Collaboration is even more effective when is peer-initiated, as opposed to teacher-imposed (Freedman et al, 2013). Social, emotional, and artistic learning are codependent entities, each thriving on each other while simultaneously enhancing the experiences of them all.

It is important to provide and encourage positive examples of social interaction for middle school students, and to understand that this does not come naturally to all students.
Conflict in the form of mock fighting, subversive tactics, debates over student/teacher expectations, and other challenges to authority, seems to be a natural part of junior high teaching. Management and motivation by means of interactive role-playing and art appreciation, teamwork, and cooperative planning with students appear to be effective methods of countering such problems. Teenagers work better with peer recognition and support. (Stokrocki, 1990, p. 113)

As Larry Holt (1993) explains, “students are not magically going to work together successfully in a classroom without giving attention to the development of cooperative and collaborative skills” (p. 28).

The Importance of Dialogue in Education

Dialogue in education is not a new concept. Many psychologists and educators have advocated for the use of productive dialogue in the classroom. Vygotsky’s socio-cognitive theory (1979) laid the foundation for the plethora of research that has been done in this area.

In Neil Mercer’s article, *Talk and the Development of Reason and Understanding* (2008), he refers to the work of Lev Vygotsky and the subsequent works of James Wertsch and Douglas Barnes to convey the importance of peer-dialogue to the cognitive process of pupils. For his research testing Vygotsky’s claims about the effects of dialogue on the developments of children’s learning, he adopts the label Barnes used, *exploratory talk*, for the “adventurous, collaborative talk heard when children are thinking aloud” (Mercer, 2008, p.93). His studies have concluded that “involvement in dialogue of a certain quality has a profound effect on the nature of children’s thinking” (Mercer, 2008, p. 99). In one particular study he did within
In a science classroom, Mercer not only found that talk helped scaffold scientific comprehension for students, but also that they could be taught how to use talk more effectively to learn about science. His work is cited by other researchers, Howell, Thomas and Ardasheva (2011) stating that “Mercer (1997) suggests that the quality of education within a school is related to how effectively talk is used in classrooms” (p. 48). They posit proper education requires discussion and dialogue, frankly declaring “talk is essential to learning” (p. 49).

In the realm of art education, dialogue plays a related yet more enlightening role. Burton (2000) defines dialogue as “an open-ended communication, investigation or inquiry, between teachers and learners, and among learners” and reasons that “teaching through dialogue presupposes a free and continuous interchange of ideas directed towards reflection, discovery, and new understanding” (p. 343). Peter London suggests engaging students in “a dialogue that creates deeper levels of understanding, empathy, and mutual enlightenment” (as cited in Zander, 2004, p. 50). Not only does dialogue engage students in critical thinking, but it promotes the expression of emotions and experiences, leading to more self-awareness and empathy among students. The interpersonal skills are built in classrooms in which trust is built through formation and adherence to mutually agreed upon guidelines.

A case study investigating the effects of an instructional strategy called Accountable Talk (AT) with eighth grade students in a social studies class found that giving students rules to follow in how and what they communicate to each other “helped build a community in the classroom” and gave them “a sense of belonging to the group which contributed to the social acceptance within the classroom” (Howell, Thomas, and Ardasheva, 2011, p. 56).
Students not only gained valuable social skills after the implementation of AT, but reported increase levels of understanding of the class content. As Zander (2004) clarifies, ”the dialogical relationship involves not just teaching strategies but a personal philosophy towards teaching that values relationships and the commitment of time to developing an environment in which these relationships can be established” (p.49). In other words, to foster successful classroom discussions, teachers too must “walk the talk,” so to speak.

Millett and Tapper (2011) use the term “collaborative philosophical inquiry” (CPI) to describe the method they endorse to teach philosophy to children, which encourages dialogue, questioning, and friendly debate among students. Through the process, “concepts are clarified, meanings are explored and…a shared understanding is achieved” (p. 547). The authors explain that in order for discussions to be productive and effective, certain rules must be established. These could include directives such as: listen to others, build on other’s ideas, respect all ideas, acknowledge that there can be many answers to a single problem, and think deeply. These guidelines and practices are easily transferred to the art room, where the topics of art criticism and aesthetics are often rooted in philosophy. CPI allows for flexibility in the art curriculum based on class conversations, which is a luxury most other subject classes may not have under the regimen of pacing guides and standardized test scheduling.

The promotion of dialogical relationships must begin with teachers. It is their responsibility to “create an environment in which there are rules, the allocation of time, and the social structures to support dialogue” (Zander, 2004). Left to their own devices, middle school students will talk, but it is unlikely that the topic will be educational, nor the volume tolerable. Parameters must be upheld by the teacher in order for dialogue to be organized
and civil. Many experts agree that skills such as teamwork, constructive communication and conflict-resolution must be taught explicitly if students are expected to use them (Burton, 2000; Gillies and Haynes, 2010; Holt, 1993; Johnson, Johnson, & Roseth, 2010). Zander (2004) expands upon this idea declaring that learning how to manage participation and behavior is a necessary life skill.

The benefits of cooperative learning go far beyond the classroom. When students are taught how to communicate clearly and respectfully, not only can they better establish themselves socially, but they are more likely to learn the content in the discussion (Gillies & Haynes, 2010).

Mercer et al. (2004) found that children who were taught to talk and reason together as they participated in inquiry science activities demonstrated significantly better knowledge and understanding of scientific concepts and relevant parts of the science curriculum than students who had not participated in such training. The authors concluded that students can be taught to talk and reason together and apply those skills to the study of science. Furthermore, they found that talk-based activities such as occurs during cooperative group work can be useful in scaffolding the development of reasoning and scientific understanding. (Gillies & Haynes, 2010, p. 350).

Dialogue provides scaffolding for students at various levels of understanding as well. Students can see more clearly “how ideas are constructed, related to each other in sequence, and build in complexity to larger ideas” (Burton, 2000, p. 344). Through the intellectual and social interaction within the inclusive cooperative community, “learning becomes a
continuous reconstruction of experience and leads to the development of dispositions and capacities (Millet & Tapper, 2011). Gaining understanding of content while listening to the perspectives of others encourages critical thinking skills, which Lipman (1984) argues are most effectively developed through philosophical discussion (as cited in Hagaman, 1990). By taking into account the unique experiences and ideas of others, students are challenged to provide reasons for their judgments, extending beyond opinions, and examining evidence to support their arguments (Hagaman, 1990). Once the conversation turns away from opining, and toward reasoned argumentation, “students can begin learning how to appropriately give and receive constructive criticism by focusing on the quality of another individual’s work rather than on personal characteristics of the individual and by identifying, in equal measure, the strengths and weaknesses of the work” (Igel & Urquhart, 2012, p. 18). Howell, Thomas and Ardasheva (2011) suggest that through this exchange of ideas and information, students are able develop an awareness of the context from which they formulate their views, which allows them to better understand the perspectives of others. Their study also found that “providing students with opportunities to engage in diverse perspectives created a forum where openness to and respect of these perspectives were not only supported, but expected within the classroom community” and that students actually began seeking other perspectives in order to more fully grasp concepts (pg. 61).

With the ability to interact more effectively within their groups, collaboration becomes self-moderated, with group members evaluating and directing the group’s efforts, describing feelings to each other, and promoting each other’s success; other life skills that are increasingly valuable in our world (Holt, 1993; Johnson, Johnson, & Roseth, 2010).
Explicit Instruction in Constructive Language

There is a marked difference between teacher-students dialogue and student-student dialogue in the art room (Hafeli, 2000). Whereas teachers tended to clarify assignments and techniques and extend ideas, peers share discoveries in media, discussed their ideas and intentions, appraised their work and made value judgments (p. 131). In the middle school classroom, many of these interactions and comments, though often made in jest, are derogatory. Middle school students are very social beings, but many of their social interactions are negative, self-deprecating, or exclusive. Taking into account common preadolescent conflicts, such as “mock fighting, subversive tactics, debates over student/teacher expectations, and other challenges to authority,” Stokrocki (1990) maintains that such acts can be managed effectively through the use of directed role-play and cooperative learning activities (p. 113). It is therefore important to provide students with guidance on appropriate ways to communicate with their peers, as well as adults. Research confirms that middle school students can achieve more when working in collaborative environments, but that structure within that environment is the critical keystone, including assigning roles to keep students accountable, and guiding appropriate interactions (Holt, 1993). “Students are not magically going to work together successfully in a classroom without giving attention to the development of cooperative and collaborative skills” (p. 28). Johnson et al. (2010) goes even further, stating that cooperative learning skills need “to be taught just as purposefully and precisely as academic skills (p. 9). Students may know how to interact appropriately with teachers, but have considerably less skill when it comes to their peers.

Specific directives are helpful when establishing an environment that fosters productive dialogue (Zander, 2004; Johnson, Johnson, & Roseth, 2010; Millet & Tapper,
Such directives should include: listening and responding to the differing opinions of others, refraining from condescending or derogatory comments, giving only positive feedback, and learning when to withdraw from the discussion they may feel very passionate. Managing one’s own participation and behavior is a life skill that has many uses beyond the classroom walls, and can be learned more quickly through explicit instruction (Zander, 2004).

One specific skill that can be taught is learning to use “I” statements in order to avoid generalizations and feelings of exclusion. “It should be clear that dialogue is not about winning or making a point, but about listening, sharing, and exploring different points of view” (Zander, 2004, p. 52). Another method to help prevent derogatory language is to equip students with alternative vocabulary for language that can be hurtful. In an effort to stop students from using the words “gay” and “retarded” to describe others actions and artwork, Payne (2010) taught them the word “gauche,” giving them a more appropriate word to replace ones that can be damaging. It is not enough just to tell students what not to do. They need to be taught what they should do instead. When students are taught to respect others and work in cooperative groups, they become more socially skilled than their peers whom merely learn to work individualistically; there is a reciprocal relationship between social skills and high achievement (Johnson, Johnson, & Roseth, 2010).

Collaborative Philosophical Inquiry (CPI) and Accountable Talk (AT) are two programs that use explicit instruction in constructive language. Both are meant to deepen learning through discussion, and both require respectful interaction to be effective. Once used among students in a whole group scenario, the skills acquired may then be honed even further in cooperative learning groups. The communication and social skills taught in CPI
and AT allow students working in small groups to more clearly describe actions, opinions, and ideas of their fellow group members which help guide the work of the group and contribute to mastery of content for all members, what Johnson et al. (2010) describes as “group processing.” By learning ways in which they can tactfully state concerns or arguments, middle school students are able to turn negative comments and complaints into positive encouragement, thereby increasing commitment to learning and a sense of belonging in their peer class (Holt, 2000; Johnson, Johnson & Roseth, 2010). Not only did a strong majority of students agree that AT created a welcoming and inclusive classroom community, but they indicated that they learned more about the content from the discussions that helped clarify the textbook readings (Howell, Thomas, & Ardesheva, 2011).

**Dialogue in the Art Classroom**

It is clear that discussion and dialogue are critical in the general middle school classroom, but Zander (2004) explains why it has clear implications specifically in the realm of art education. In art there are two participants: the artist and the viewer. Studies have found that peer dialogue in the art classroom typically includes sharing discoveries, discussing ideas, seeking feedback, learning how to use tools and materials, clarifying procedures, appraising work, and communicating preferences and values (Taunton, 1987 as cited in Hafeli, 2000; Hafeli, 1997; Kakas, 1991; Thompson, 1990). Often in a middle school art room, the artists and the viewers don’t engage in true dialogue about the artwork, aside from superficial remarks. If students are guided to ask questions about the art of others, and listen to others’ perspectives of their art, all students will benefit as art makers and appreciators (Zander, 2004).
Art’s function as visual communication makes it an important tool in problem-solving through inquiry (Glenn, 1986).

When teachers facilitate artmaking and student discussions about artwork in ways which enable young people to openly express what they see and believe, and what it means, students learn from each other about art and how it relates to individual life experiences, and that engage in activities which stimulate higher order thinking. (Lampert, 2006, p. 50)

Similar to philosophy, characteristics of art include the “the quest for meaning, conversation as dialogue, asking open questions, and value-laden thinking” (Millet & Tapper, 2012). Art critic Terry Barrett (1997) also encourages the use of open-ended questions with students in order to open up dialogical channels in order to broaden students’ interpretations of art. This method “not only opens children to new ways of thinking – it empowers their understanding, their sense of agency, and gives them insights into how knowledge is constructed and expressed in and through visual images (Burton, 2000, p. 343).

Payne (2010) argues that art education should go beyond teaching the elements and principles, and should prepare students for their role as productive members of society after school. Part of this responsibility lies in teaching students how to talk to others in ways that encourage and enlighten them. “A good dialogue will allow an interweaving of personal sensory, affective, and cognitive responses as youngsters reflect on their experiences and, through imaginative reconstruction, give them a voice in and through visual materials” (Burton, 2000, p. 344). Art helps us establish and maintain social relationships because it conveys the human experience, which we all have in common (Blatt-Gross, 2010). Through effective communication in the art classroom, students will be able to use art as a tool for
communication, collaborate more effectively, and by using higher level thinking, produce
better quality art.

Assessing the Quality of Middle School Artwork

In an era of standardized testing, assessment in art education has been discussed and
debated. Most would agree that the multiple choice approach is not sufficient to measure
one’s artistic capacity. Leaders in art education agree that measuring a student’s growth over
time using criteria similar to those used by professional artists is perhaps the best way to
assess visual art. To do this, rubrics specifically defining the expected learning outcomes are
most effective.

Although there is an overwhelming tendency for standardized testing to be used as a
means of measuring what students know in general education, many arts educators advocate
for alternatives to “bubble tests” that don’t encompass the breadth of learning the arts offer.
Charles Dorn (2003) argues that such tests “rarely provide adequate estimates of what
students learn” in studio-based instruction (p. 351).

Some alternative assessment solutions that are being currently employed include
student self-assessment, naturalistic observation, and portfolios (Marzano, Pickering &
McTighe, 1993). These forms of assessment are intended to measure authentic learning. In
their book, Assessing Student Outcomes, Marzano, Pickering and McTighe (1993) advocate the
need for authentic performance assessments in all subjects. They recommend these measure
the Five Dimensions of Learning, a framework for effective instruction developed by
Marzano in 1992. These dimensions are: 1) Positive Attitudes and Perceptions about
Learning, 2) Acquiring and Integrating Knowledge, 3) Extending and Refining Knowledge,
4) Using Knowledge Meaningfully, and 5) Productive Habits of Mind. In applying these standards to art, authentic learning “implies purposeful, meaningful application of relevant information,” and is less concerned with the acquisition of facts and information (Dorn, Madeja, & Sabol, 2004, p.100). Using authentic assessments ensures that tasks students are doing are significant to their learning.

Dorn, Madeja and Sabol (2004) suggest that teachers creating authentic assessments follow three specific guidelines: 1) the assessments reflect the artistic intent of the activity, 2) that the function of assessment should not be to create a flawless scoring guide, and 3) that the main focus of it should be on the student’s artistic development. Marzano, Pickering, and McTighe (1993) even specify using a 4-point scale when designing assessment, in which each tier defines a different performance level for intended learning outcomes. The best way to do this is a rubric.

McCollister (2002) defines a rubric as a “chart or matrix that describes varying levels of competency or success” (p. 46). Rubrics are adaptable to all subjects, but are especially useful in art education because they can be used to evaluate both process and/or product (Dorn, Madeja, & Sabol, 2004). Dorn (2003) declares that teachers of the arts are even capable of creating rubrics the effectively measure the expressive nature of student work. “The use of a rubric that is rich in description allows the teacher to disclose a great body of information to a large number of students, answer many questions, and demystify learning at hand” (McCollister, 2002, p. 48). Having clear guidelines to follow offers students ownership over their learning because they know what the purpose of the activity is and the different levels prompt students to be reflective in their self-assessment.
McCollister (2002) argues that not only do good rubrics measure quality, not quantity, of work, but they can be employed at many stages of a project. Teachers designing authentic assessment rubrics are compelled to consider exactly what the learning outcomes are and characterize appropriate levels for each, which can then clarify assignments for students at the beginning of a lesson. Rubrics can also be used as an intervention tool during the process to encourage dialogue between teacher and student or peer to. Such dialogue can increase personal responsibility, accuracy of self-assessment, comprehension, and attention to key objectives.

When designing a rubric, you must consider what learning outcomes are for your lesson (McCollister, 2002). The number of outcomes should be modest, and each thoroughly described (Popham, 2008). Dorn, Madeja and Sabol (2004) advise there be a tight match between the demands of the performance and the criteria used in scoring, it should, as much as possible, specify observable aspects of the performance or product to be looked for and scored, it should be written in ordinary language so that assessment results can be understood. (p. 103)

Lastly, McCollister (2002) recommends making rubrics flexible so that they can be modified as needed. Rubrics created by following these guidelines will successfully measure student growth within the defined areas.
Summary

Dialogue is a critical component in education, but for middle school aged students, it is important to provide them with clear examples of what is appropriate and constructive. Students achieve at higher levels when they discuss educational topics, and it is the teacher’s job to help them navigate group discussions and create a safe environment in which students feel comfortable sharing their ideas and opinions. By offering explicit instruction in interpersonal skills, teachers can equip students with the language necessary to construct meaningful dialogue.

In the art classroom, acquiring these skills enables students to successfully collaborate with their peers, during which they learn the importance of perspective-taking, empathy, and problem-solving. By working with others, sharing ideas, and offering suggestions to improve the group’s work as a whole, students not only hone social skills, but learn about how others process information, how experiences and context affect meaning. Through the process of collaboration, new ideas develop and student understanding of concepts increases, resulting in more thoughtful, better quality artwork.

In measuring the quality of artwork, a rubric using a 4-point scale should be employed in which outcomes are clearly defined and tiered by specific and observable characteristics. The rubric I designed includes five categories of learning outcomes: 1) Idea Formation and Development, 2) Problem-Solving, 3) Openness to Suggestions, 4) Depth of Theme, and 5) Perseverance. Each outcome has 4 levels written common language appropriate for seventh grade students. The outcomes encompass many intended aspects of the learning process including brainstorming, constructive criticism, expression, and completion.
Design

This action research study consisted of a six-week long curriculum including three art activities to investigate the effects of constructive language instruction and directed collaboration activities on quality of art work among students in a seventh grade art class community. Providing students with constructive language to interact with their classmates was hoped to increase their willingness to work together to share ideas and problem-solve, their ability offer and seek artistic advice, and their tendency to incorporate others’ feedback into their artwork. The desired effect was to foster a classroom community in which students are motivated to work together to solve problems, equipped with the language to help themselves and encourage others, and willing to embrace ideas and suggestion that will improve the quality of their artwork.

Many methods of data collection were documented in this study including observations, student projects, artist statements, rubrics, and self-evaluations. Data was collected before, during, and after two collaboration activities were implemented over a six-week period. Data gathered after the research activities were completed was analyzed to determine whether there was an increase in use of constructive language during collaboration, and whether that correlates to a change in the quality of the student artwork.
Research questions

1. How does explicit instruction in constructive language usage affect cooperative learning in a seventh grade art class?
2. How does cooperative learning affect the quality of student art work in a seventh grade art class?

Sample

The subjects in this study were two classes of seventh grade art students in an urban school on the east coast. Of the 17 students in the first class, 6 were boys and 11 were girls. Of the 22 students in the second class, 5 were boys and 17 were girls. All of the students were between the ages of 11 and 13.

Context of Study

This study took place at a public middle school in a district in which 40 languages were spoken. There was a large population of immigrants in the city limits, yet the surrounding county was rural and much less diverse. The prominent languages spoken in the district were English, Spanish, Arabic, Kurdish and Russian. For this study, the school will be referred to as Hilltop Middle School, or HMS.

Total enrollment at HMS was 821. There were 221 students in the seventh grade, and 36% participated in art as an elective. The racial demographics of the school were: 42% Hispanic, 42% White, 10% Black, 5% Asian, and less than 1% American Indian (including Native Alaskan/Hawaiian). 66% of students were eligible for free or reduced lunches.

Art was an elective subject at HMS and therefore most students in this study had chosen to take art. Regardless, the level of skill, experience, and interest still varied greatly among this group.
Preparation of the Assignment

At the beginning of the semester, seventh grade art students were familiarized with classroom rules and procedures, location of art materials, and expectations for behaviors and tasks. Once IRB approval was received, the research project was explained to the students, and consent and assent forms were distributed to parents and students (Appendix A and B). Research began once these were returned.

In order to implement the intervention, several documents were required. These included surveys, lesson plans for all three lessons, worksheets, graphic organizers, rubrics, and data collection forms (Appendices C-M). All students in the classes received the same instruction and participated in the collaborative activities. Students who chose not to participate in the study received equal attention from the teacher and participation in the study was not connected to student grades in any form.

Role of the Researcher

As a participant observer, I implemented the cooperative learning and collaborative art activities as well as documented, wrote journal reflections, and collected data. I continued to manage classroom behaviors, but encouraged students to work together, seek each other for guidance, and value others' suggestions and preferences. For this experience, my intention was to redirect students to seek assistance from their peers instead of myself to facilitate constructive relationships between them.

Procedure

To provide baseline data, students completed a Cooperative Learning Survey (Appendix C) and one individual art project after assent and consent forms were returned, and prior to implementation of collaborative activities. Individual art projects and the art works produced in the collaborative activities were assessed with the same Quality of Art
rubric (Appendix D) and both included an artist statement worksheet to allow for direct comparison.

Students participated in two collaborative art activities designed to provide them with constructive language vocabulary and skills and situations in which to practice. Students received worksheets for each of the constructive language projects, which were collected at the end of both projects. Once all activities were completed, students took the Cooperative Learning Survey again and the results were compared to their initial Cooperative Learning Survey responses. The study included the following independent lesson, and two interventions guided by the teacher that focus on cooperative learning.

**Activity #1 – Symbolic Self-Portraits.** (Appendix E) To prepare for this assignment, the teacher took a photograph of each student’s face and print images out in grayscale. Next, students were given a worksheet packet (Appendix F), viewed works by Frida Kahlo and discussed her use of symbolism, then named symbols they saw in their lives and interpreted meaning. Using their own experiences or imagination, students wrote a one page story that revealed some aspects about who they were to use as inspiration for their self-portraits.

Students learned about facial proportions and practiced using measurements to draw faces, and then began a pencil drawing of their own face using the grayscale photograph as a reference. Students filled in the background of their self-portrait using symbolic imagery derived from their short story. Once the artwork was complete, students reflected on their artwork by filling out the Symbolic Self-Portrait Artist Statement worksheet in their packet and completing a Quality of Art Rubric. Symbolic Self-Portraits were photographed and assessed by the teacher using the same Quality of Art Rubric.
**Activity #2 – Constructive Language Video Activity.** (Appendix G) Students began the unit by discussing the difference between unhelpful and constructive language. On a worksheet provided (Appendix H) students had the opportunity to rephrase unhelpful sentences to make them constructive. Students were then given their first collaborative art activity: In cooperative learning groups of 3 or 4, they created an instructional video that addressed an issue, problem, or difficulty a student might have while creating art, and demonstrated the benefits of constructive language in contrast to unhelpful language. Students had five days to plan and complete the assignment. Cooperative learning groups were established by student choice.

A video assessment worksheet (Appendix I) was filled out by students using a rating scale from 1-5 in 4 categories, in which 1 indicates “not successful”, and 5 is “very successful”. Each student rated each group’s video, and also commented on their experience within their own group. Students earned a general grade of 50 points for participation in both the video production and the assessment.

**Activity #3 – Theme Teams.** (Appendix J) After completing activity #2, the teacher introduced activity #3. Students completed an asset inventory (Appendix K) and were assigned to cooperative learning groups of 3-4 students that provided a range of assets for each group. Students who were not participating in the study were grouped together if possible. Each group chose a team name and was given work sheet packets which included a commitment contract, project outline, graphic organizer for brainstorming, and artist statement worksheet (Appendix L). Students then read the list of team objectives and rewrote them each in their own words to ensure clarity. Students reviewed the activity expectations and signed the commitment contract before beginning the assignment.
To clarify the idea of a “theme” in artwork, students were given a list of themes and an artwork that fit one or more themes listed. Teams discussed which theme or themes were reflected in the artwork and wrote a list of reasons for their choice(s). Next they shared their artwork and reasons for their choices. Teams then worked together to agree upon a topic from the list of possible themes on the worksheet provided that guided their individual artworks and provided unity for their combined body of work. Once the general theme was chosen, groups developed ideas for their individual works that focused on a specific example within the broader theme chosen by the group. Each student developed a painting that expressed an aspect of the theme his or her group had agreed upon. Students worked in close proximity while simultaneously working on their individual paintings and participating in Unity Check Points (Appendix M) during which discussed the physical arrangement/relationship of their works, as well as how they could create unity within the set.

When paintings were completed, each student will filled out a Quality of Art Rubric and an artist statement worksheet, then combined their individual statements into a cohesive document explaining the meaning of each of the works and how they relate to the theme. Artworks were assessed by both the student and teacher using the Quality Assessment Rubric, which was then compared to rubrics from the previously completed individual artworks. Artist statements were also compared. Cooperative Learning Surveys were administered at the culmination of the project. Artworks of students who assented to participate in the study were photographed and student names that appeared were cropped or blurred to ensure student anonymity. Students were able to opt out of having their artwork photographed on the assent form.
Instrumentation

Data collection included planning worksheets, art projects completed prior to the collaborative art activities and those completed after, artist statements, photographs of artwork, rubrics, and observations throughout the process to ensure triangulation. Physical data (forms, worksheets, digital camera) were stored in a locked cabinet my classroom, and digital data (master list of pseudonyms, image files, journal entries) was stored on my password protected home computer and in a privately shared online storage location accessible only to the researchers. Pseudonyms were used to ensure confidentiality during data analysis and in the final published thesis.

Much of the data was collected through observations while students were working in class. Thick descriptions about the context and topics of peer dialogue, tone of conversation, languages spoken, and facial expressions and body language used were included through the use of journaling. By describing the behavior and interactions of my students, I hoped to provide transferability for other middle school art teachers. Data was collected with individual and group interaction forms (Appendices N and O) meant to track use of unhelpful and constructive language over the course of the research and to document the topics students are discussing to investigate whether the use of constructive language influences the amount of discussion of art work and art processes.

Data Analysis

Although the rubrics provided some quantitative data, most data was inductive and qualitative in nature (Lincoln and Guba, 1985). Student self-evaluations and artist statements provided direct written feedback from students about their experiences collaborating with their classmates on their artwork. Observations during the activities
helped determine whether the use of constructive language increased over the course of the study, as well as if patterns in student language about art emerged.

In their article, *But is it rigorous? Trustworthiness and Authenticity in Naturalistic Evaluation*, Lincoln and Guba (1985) outline several techniques a naturalistic researcher can employ to assert the trustworthiness of their data (p. 77). To provide dependability and confirmability, a teacher or administrator at HMS performed audit-checks of the data collected at the middle and end of the study to provide a less biased perspective. Secondly, a colleague participated in peer debriefing to ensure credibility of the research (Lincoln & Guba, 1985). A wide variety of data sources and analysis across all data sets was used to determine patterns in the data and provide triangulation.

In this chapter, the research methodology and design was explained. Student projects were described in detail, and data collection and analysis methods were presented. Logistical information such as the sample population and limitations were included to provide transferability and clarification.
Chapter 4

Results and Interpretations

The purpose of this study was to investigate the relationship between explicit instruction in the use of constructive language, cooperative learning and quality of student artwork. The data collected in this study included pre- and post-intervention student surveys, rubrics, teacher observations throughout the process, artist statements, and photographs of artwork. Data will be discussed first in terms of individual student results, then followed by group results.

Numerical Data

The cooperative learning surveys administered were comprised of seven multiple choice questions with five potential responses using a scale from 1-5, 1 being the lowest or most negative response, and 5 being the highest or more positive response. The first five survey questions investigated students’ experiences working on group projects, both the quantity of group projects with which they had been involved and how they perceived those experiences. The last two questions concerned their willingness to incorporate others’ ideas into their artworks and the importance of dialogue in art. The possible range of scores for the survey was between 7 and 35.

The rubrics designed to measure the quality of the artwork included five criteria, each containing four levels of achievement described in detail. The lowest level for each criteria was 1, and the highest level was 4. The possible range of scores for the rubric was between 5 and 20. A chart that shows the scores for each of the participants, changes from before interventions to after, as well as mean, median, mode and range for each category provided in Appendix P. All names are pseudonyms.
Pre- and Post-Intervention Surveys

Surveys were administered to students before and after the interventions to gather information on their past cooperative (group) learning experiences, as well as their perceptions of the value of collaboration in the creation of artworks. Surveys were analyzed both by total scores, as well as by responses to each question. The following charts illustrate the number of students whose scores increased, decreased, or stay the same, as well as the distribution of the responses to the individual questions.

Table 1

<table>
<thead>
<tr>
<th>Decrease 45% (13 students)</th>
<th>No Change 10% (3 students)</th>
<th>Increase 45% (13 students)</th>
</tr>
</thead>
</table>

Table 1 (cont.)

Individual Scores

- **Pre-Survey**
- **Post-Survey**
For the total score on the survey, three students experienced no change in their survey score, while the other 26 students split down the middle with 13 students’ scores increasing and 13 students decreasing. It is important to note here that students were grouped according to their responses to the asset inventories, and were not given the option to choose teams. If students were rating their theme team experience against a previous experience where they were permitted to choose partners or when they happened to be grouped with friends or acquaintances, this may skew their responses. Their definitions of “successful” group projects may also vary, and therefore may also affect their responses. For instance, having fun with friends may be what one student considers a successful group project, while another may value the academic experience.
**Question 1.** How many times have you worked on long-term group projects in school?  
1-Never 2-Once 3-Twice 4-Three Times 5-4 or more times

<table>
<thead>
<tr>
<th>Name</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
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<tbody>
<tr>
<td>Allie</td>
<td>1</td>
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<td>Carla</td>
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<td>Suzy</td>
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While 18 students correctly identified that the number of long-term group projects they had participated in during this class, or remained the same in cases of reporting participation in 4 or more, Table 3 shows that over one quarter of students reported that, after participating in two long-term collaborative projects, their number of long term group experiences had in fact decreased. This discrepancy may be due to students perhaps not having a clear understanding of “long-term” group projects prior to the interventions and realizing afterwards that they hadn’t had as many experiences as previously believed. Other reasons could be that they did not read the question correctly the first or second time, or they had forgotten, or weren’t sure and just picked an answer.
Question 2. My most recent experience working on a group project was:  

1-Awful  
2-Disappointing  
3-Alright  
4-Good  
5-Awesome

Sixty-two percent of students had similar or better experiences with their Theme Teams as compared to their most recent group project before the interventions, while 38% reported a decrease in satisfaction. Victoria was the only student to report having an “awful” most recent group project experience in the pre-survey. She was one of three students to respond with “disappointing” on the post-survey after the Theme Team Paintings, which was an increase, while Stephen’s and Carla’s responses showed a decrease.
**Question 3.** When I hear the phrase “group project,” I feel:  

1-Angry  

2-Nervous  

3-Neutral  

4-Happy  

5-Excited

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Sixty-nine percent of student had similar or better reactions in anticipation of group projects after the interventions. This score reveals more specifically what their Theme Team experience was like, since it was fresh in their minds. Of the nine students whose scores decreased:

- Carla’s was the most drastic change, dropping 2 points from “neutral” to “angry.”
- Jesus’s dropped one point from “neutral” to “nervous.”
- Sasha’s dropped one point from “excited” to “happy.”
- Six others dropped one point from “happy” to “neutral.”
Question 4. My level of involvement in group projects is typically:  
1. None  
2. Very Little  
3. Some  
4. Active  
5. Fully Engaged

Table 5

Seventy-six percent of students’ levels of engagement remained the same or increased after the interventions. Of the seven students whose scores decreased:

- Jesus’s was the most drastic change, dropping three points from “fully engaged” to “very little.”
- Tyrone’s, who was absent for most of the Theme Team project, and therefore only participated collaboratively in the Constructive Language Videos, dropped two points from “actively engaged” to “some.”
- Becky’s, Grace’s, and Arnie’s dropped one point from “active” to “some.”
- Alex’s and Madeline’s dropped one point from “fully engaged” to “active.”
The two most drastic increases were three point gains by both Carla and Victoria. Carla’s rose from “none” to “active,” and Victoria’s rose from “very little” to “fully engaged.”

**Question 5.** I feel that group project results, in comparison with individual project results, are often: 1-A Failure 2-Less Successful 3-Similar 4-More Successful 5-Way Better!

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
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<tbody>
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<td>Carla</td>
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<td>Arnie</td>
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For 66% of students, perceptions of the group project results remained the same or increased after the interventions. Of the 10 students whose scores decreased:

- Madeline’s changed most drastically, dropping 3 points from “way better!” to “less successful”.
- Sam’s and Jesus’s dropped two points from “more successful” to “less successful.”
- Julian’s dropped two points from “way better!” to “similar.”
Carla’s dropped one point from “similar” to “less successful.”

Becky’s, Whitney’s, Grace’s, and Arnie’s dropped one point from “more successful” to “similar.”

Of the 8 students whose score increased:

Victoria’s rose one point from “a failure” to “less successful.”

Colleen’s rose two points from “less successful” to “more successful.”

Maria’s and Jenna’s rose two points from “similar” to “way better!”

**Question 6.** How likely are you to incorporate other people’s ideas into your own artwork? 1-Highly Unlikely 2-Somewhat Unlikely 3-Not Sure 4-Somewhat Likely 5-Extremely Likely

| Allie | Carla | Suzy | Alex | Victoria | Colleen | Chad | Cara | Sam | Becky | Jenna | Shauna | Katelyn | Stephen | Sarah | Whitney | Julia | Grace | Julian | Maria | Lindsay | Meredith | Jesus | Tyrone | Madeleine | Molly | Ariel | Sasha | Arnie |
|-------|-------|------|------|----------|---------|------|------|-----|-------|-------|--------|---------|---------|-------|--------|-------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3     | 3     | 4    | 2    | 2        | 3       | 3    | 3    | 2   | 3     | 4     | 4      | 3       | 3       | 2     | 2      | 2     | 2    | 3      | 4      | 2      | 2      | 2      | 2      | 2      | 2      | 2      |

**Table 7**

Survey Question 6 Results
Ninety percent of students were as or more likely to incorporate the ideas of others into the artwork after the interventions. No students responded that they were “highly unlikely” to incorporate others’ ideas into their artwork in either the pre- or post-survey.

Of the three students whose scores decreased:

- Madeline’s was the most drastic, dropping two points from “somewhat likely” to “somewhat unlikely.”
- Suzy’s and Julian’s dropped one point from “somewhat likely” to “not sure.”

Of the 15 students whose scores increased, four increased by two or more points:

- Stephen’s was the most drastic, rising three points from “somewhat unlikely” to “extremely likely.”
- Victoria’s and Colleen’s rose two points from “somewhat unlikely” to “somewhat likely.”
- Chad’s rose two points from “not sure” to “extremely likely.”
Question 7. How important do you think it is for an artist to talk about their ideas?

1-Unimportant  2-Somewhat Unimportant  3-Not Sure  4-Somewhat Important  5-Extremely Important

Eighty-three percent of students thought it was as or more important for artists to talk about their ideas after the interventions. Of these, only Victoria remained at “not sure.” No students responded that they thought it was “unimportant” or “somewhat unimportant” for artists to talk about their ideas. Of the five students whose scores decreased:

- Arnie’s was the most drastic, dropping two points from “extremely important” to “not sure.”
- Allie’s dropped by one point from “somewhat important” to “not sure.”
- Colleen’s, Grace’s and Sasha’s dropped one point from “extremely important” to “somewhat important.”
Of the 11 students whose scores increased:

- Julia’s was the most drastic, rising two points from “not sure” to “extremely important.”
- Stephen’s rose one point from “not sure” to “somewhat important.”
- Nine students’ rose one point from “somewhat important” to “extremely important.”

**Quality of Art Rubric Scores**

Both students and the teacher completed identical four-point self-evaluation rubrics after the individual self-portrait project and the collaborative theme team project. Rubrics were then analyzed for changes in total scores, as well as scores for each criteria. The following charts illustrate the number of students whose self-evaluation scores increased, decreased, or stayed the same, as well as the distribution of the scores for the specific criteria.

**Student Rubric Self-Evaluation Scores.** Although there were 29 participants in the study, two are not included in this data set because they did not complete one or both of the student self-evaluation rubrics.
Seventy-four percent of students perceived their quality of artwork to be the same or better after the interventions. Of the seven students whose total self-evaluation scores decreased:

- Carla’s was the most drastic, dropping 9 points, from an 18 on her self-portrait, to a 9 on her theme team painting. Carla led her group well at the beginning of the project, but was particular about how she wanted things done. She had some
frustrations when painting, and ended up painting over the entire background at least twice. Toward the end of the project, she was absent for several days in a row, due to travelling and then sickness. She had to take her painting home to finish it, and may have felt frustrated that she was unable to spend enough time on it. Carla gave herself a one for depth of theme, even though her painting included several layers of depth. It is possible that Carla’s frustration with the project skewed her rubric scores.

- Arnie’s dropped 2 points, from a 17 to a 15. Arnie seemed involved in his group, but may have preferred to be with the other boys in his class.

- Chad and Becky dropped one point from a 16 to a 15. In Chad’s case, I believe he over-scored himself for the self-portrait, and therefore his self-score dropped, while his teacher score increased. In Becky’s case, she seemed concerned about whether her painting was a good fit for the group, and because she was trying to please them, she compromised some of her own ideas.

- Whitney dropped one point from an 18 to a 17. Whitney’s group was extremely quiet, and although she seemed to enjoy painting, she did not seem particularly excited about her subject.

- Molly and Maria dropped one point from a 19 to an 18. In both of these cases, I believe that they preferred drawing to the painting process and were unable to illustrate their paintings with the realism they achieved in their self-portraits. Another issue for Molly is that she was absent during a planning day at the beginning of the lesson, so it is possible that the theme or specific imagery was determined without her input.

Of the 14 students whose total self-evaluation scores increased:
• Meredith’s was the most drastic, rising 10 points, from a 10 to a 20. Herself-portrait score consisted twos in each category, which could mean she did not read each criteria closely, but just picked the twos column to express her disappointment in her self-portrait. However, Meredith’s survey score increased by five points, indicating that her success in her Theme Team and her success in the painting process could have been closely related.

• Allie’s and Cara’s each rose five points, from a 13 to an 18, and from a 12 to a 17, respectively. Cara and Allie received low self- and low teacher scores for their self-portraits because they both scored twos in problem-solving and openness to suggestion, and Cara scored a two on depth of theme for hers as well. Neither seemed willing to make improvements in their self-portraits that required them continue working once they had decided they were finished, and Cara only included one type of symbol, even though three were required.

• Shauna’s rose four points, from a 14 to an 18. Shauna scored her self-portrait much lower than her artwork deserved, but felt very strongly about her Theme Team’s concept and execution.

• Alex’s and Julian’s each rose three points, from a 17 to a 20, and from a 13 to a 16, respectively. I believe that Alex truly agreed that he did better on the group project. Julian’s self-portrait was handed in unfinished, and he earned only twos in problem-solving and depth of theme.

• Of the seven students’ whose scores increased 1-2 points, it is likely that they truly believed they did better on the group project.
**Teacher Rubric Scores.** Although there were 29 participants in the study, one is not included in this data set because he was not able to complete either project due to an extended medical absence.

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<th>Table 10</th>
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<tr>
<td><img src="chart1.png" alt="Pie Chart: Teacher Rubric Evaluation Total Scores" /></td>
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<tr>
<td><img src="chart2.png" alt="Bar Chart: Total Teacher Scores by Student" /></td>
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Based on the teachers rubric score, ninety-three percent of students’ quality of artwork remained the same or improved after the interventions. Of the two students whose total teacher evaluation scores decreased, Carla’s was the most drastic, dropping five points, from an 18 on her self-portrait, to a 13 on her theme team painting. Her decrease was due to lower scores in problem-solving and perseverance. Grace’s dropped three points, from a 17
to a 14, and was attributed to lower scores in idea formation and development, problem-solving, and perseverance. It is unfortunate for her that her team dynamic contributed to these lower scores. Of the 21 students whose total teacher evaluation scores increased:

- Meredith’s was the most drastic, rising 10 points, from an 8 to an 18. Meredith improved greatly in all categories, much of which is attributed to her satisfaction with her group experience and her subject for the Theme Team. During the self-portrait, she seemed to be held back by anxiety about her photograph and her desire to portray herself flawlessly, which she felt incapable of doing. She was much more relaxed and engaged during the painting project and happy with her final product.

- Chad’s rose seven points, from a 10 to a 17. His self-portrait earned twos across all criteria. By working with a group, he benefited by being included in an interactive process in which he did not have to generate original ideas, but could help develop them through dialogue. He was also more invested in his project because his was part of a greater whole. The depth of theme score improved because he could articulate the team’s topic and describe the imagery and symbolism they used to communicate their idea.

- Stephen’s rose six points, from a 12 to an 18. Stephen was much more engaged in this project, and was surrounded by hard-workers in his group. He appeared to be positively influenced by their work ethics, resulting in improved behavior, higher level of involvement, and better quality artwork.

- Allie’s and Cara’s each rose five points, from a 14 to a 19, and from a 13 to an 18, respectively. This change was reflected similarly in their self-scores.

- 16 others students’ scores rose 1-4 points.
Criteria 1. Idea Formation and Development

Table 11

<table>
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<tr>
<th>Symbolic Self-Portrait: Criteria 1</th>
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<tbody>
<tr>
<td><strong>Self-Score</strong></td>
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<tr>
<td>Allie</td>
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<td>Allie</td>
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<th>Theme Team Painting: Criteria 1</th>
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<tr>
<td><strong>Self-Score</strong></td>
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<td>Allie</td>
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Idea Formation and Development was scored through observation of the following levels via dialogue about student's topic as well as documented brainstorming and sketches on worksheets or in sketchbooks.
Table 12

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<td>1</td>
<td>Student used the first idea they generated, or borrowed one from another source.</td>
<td>Student generated 1-2 ideas on their own, but intended to fully develop only one of them.</td>
<td>Student generated 2-3 ideas for their artwork that each showed thoughtfulness, originality and potential before choosing their favorite idea.</td>
<td>Student generated multiple ideas for their artwork, and explored and developed 2-3 ideas through the use of research and sketches before choosing the idea with the most potential as an effective artwork.</td>
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**Student Self-Scores.** Fifteen students maintained the same score for Criteria 1. Of the three students whose score decreased, Carla’s was the most drastic, dropping two points from a four to a two. Becky’s dropped one point from a three to a two, while Maria’s dropped one point from a four to a three. The biggest increase for this criteria was Meredith’s, rising two points from a two to a four. Of the eight students whose scores increased by one point, seven rose from a three to a four, while one rose from a two to a three.

**Teachers Scores.** Eight students maintained the same score for Criteria 1. Of the three students whose score decreased, Carla’s and Ariel’s dropped 1 point from a four to a three. Grace’s dropped one point from a three to a two. The biggest increases for this criterion were Chad’s and Lindsay’s, each rising two points from a two to a four. Of the 15 students whose scores increased by one point, nine rose from a three to a four, five one rose from a two to a three, and Whitney’s rose form a one to a two.

Students seemed to score themselves lower than I did in the Theme Teams. When scoring teamwork, I could not necessarily determine which team member came up with a
particular idea, and if it appeared that all group members were involved in the planning, and could explain some of the ideas their groups collectively generated, I scored them accordingly. It is likely that students only scored themselves on the ideas they originated within their groups, and not on their part in developing the idea once it was chosen.
Criteria 2. Problem-Solving

Problem-solving was scored through observation of the following levels through interactions among students, teacher-student interaction, and visual evidence provided through sketches and final products.
Problem-solving during the self-portrait project was scored based on observation of alternative solutions, especially when students encountered a technical problem. Students who could generate different approaches to a problem rarely asked for assistance, earning them a four. At the low end of the scale, students might identify a problem as insurmountable before even attempting any solution. Whitney received the lowest teacher score for this criterion as a result of her defeated attitude about her ability to produce anything of quality. Although her final product shows some technical skill, her unwillingness to take risks and make mistakes inhibited her problem-solving abilities.

During the Theme Team project, it was more difficult for me to determine whether students were solving problems individually unless they were actively seeking my help, which was discouraged until after they had exhausted group resources. In many cases, students could solve problems and answer questions within their groups, in which case I scored their problem-solving ability identically to their self-score, as those were the best indication for me to use. It was only Whitney and Grace whom I scored lower than the self-scores. Whitney would not ask her team for help, directing her questions and issues toward me. Grace did not offer suggestions or advice to her group when they experienced issues, even though I knew that she had that ability, so in her case the score was low because I know her potential

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<td>Student sought help before attempting to solve a problem or trying a different approach.</td>
<td>Student attempted to solve a problem by repeating or adjusting his/her first method before asking for help.</td>
<td>Student tried at least one different approach to solve a problem before asking for help.</td>
<td>Student tried multiple approaches to solve a problem, and often found one that worked, before asking for help.</td>
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and she did not reach what is typical for her. This may have had a lot to do with a particular group member.

**Student Self-Scores.** Of the eight students whose scores decreased, Carla’s dropped one point from a three to a two. Seven other students dropped one point from a four to a three. The biggest increase for this criteria was Meredith’s, rising two points from a two to a four. Of the seven students whose scores increased by one point, seven rose from a three to a four, while Allie’s rose from a two to a three. Fifteen students maintained the same score for Criteria 2.

**Teacher Scores.** Of the four students whose scores decreased, Carla’s and Grace’s each dropped one point from a three to a two. Katelyn’s and Julia’s dropped one point from a four to a three. The biggest increase for this criteria was Meredith’s, rising three points from a one to a four. Of the 11 students whose scores increased by one point, seven rose from a three to a four, while four rose from a two to a three. Twelve students maintained the same score for Criteria 2.
Criteria 3. Openness to Suggestions

Openness to Suggestions was scored through observation of the following levels through interactions among students, teacher-student interaction, and visual evidence provided through sketches and final products.
Students who scored lowest in this area were unwilling to make improvements in either technique or in concept. For the self-portrait project, there were only two students, Allie and Shauna whose self-scores were lower than teacher scores. This was due to the fact that I observed them making changes to their artwork through suggestions from myself or their peers, though they may have felt that they were not using as many suggestions as were offered. In the case of Chad, Stephen, and Whitney, I had offered many suggestions for them to improve upon, but they did not feel that those improvements were necessary, or were very resistant, or simply not willing, to put forth more effort in those areas.

The biggest discrepancy in the Theme Team painting was in Victoria’s scores. She gave herself a three for this criterion, but in talking with her teammates, I discovered that she was unwilling to compromise for the group’s sake. Carla, Becky, Grace and Julian scored themselves lower than I did. For Carla and Becky, who were in the same group, I scored them higher for this criterion because they were willing to make changes to their paintings to benefit their group. In the case of Grace and Julian, their fellow teammate nearly dictated what they were to do, and they did not seem comfortable contradicting that teammate, therefore accepting the suggestions given, though perhaps not willingly.
**Student Self-Scores.** Of the eight students whose scores decreased, Carla’s was the most drastic, dropping two points from a four to a two. Seven other students dropped one point from a four to a three. The biggest increases for this criteria were Allie’s, Cara’s, and Meredith’s, each rising two points from a two to a four. Of the four students whose scores increased by one point, three rose from a three to a four, while Suzy’s rose from a two to a three. Twelve students maintained the same score for Criteria 3.

**Teacher Scores.** Of the three students whose scores decreased, Victoria’s was the most drastic, dropping two points from a three to a one. Sarah’s and Maria’s each dropped one point from a four to a three. The biggest increases for this criteria were Cara’s, Stephen’s, and Meredith’s, each rising two points from a two to a four. Of the nine students whose scores increased by one point, six rose from a three to a four, while three rose from a two to a three. Thirteen students maintained the same score for Criteria 3.
Criteria 4. Depth of Theme

Depth of Theme was scored through observation of the following levels via dialogue about student’s topic, documented brainstorming and sketches on worksheets or in sketch books, and visual evidence provided through sketches and final products.
This criteria had the most increases of any, in part because the self-portrait project did not require students to have a theme per se. Students were supposed to write a short story that revealed an aspect of themselves and use that to develop symbols to incorporate into their project, but they were did not start the project by having to choose a theme, as they did for Theme Teams. Using the vocabulary and having to discuss possible topics with their groups may have helped them develop a deeper understanding of what a theme was, as well as think about how to describe it visually.

Artist statements were the strongest indicators of whether or not students had incorporated adequate symbolism into their self-portraits, as well as the drawings themselves. Techniques were discussed to help students situate their symbols in a way that made visual sense (such as placing their portrait in a setting that supported all their symbols, as opposed to “floating” symbols arbitrarily in the negative space around their portrait). Symbols did not have to be universal by any means, but students were encouraged to explore multiple ways for their symbols to be represented and composed.

Theme Teams were required to have a common “big idea” under which each of their individual theme would be represented. Carla self-scored a one for this criteria, which I disagreed with because she had discussed with me her specific topic, and I felt that she had

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<td>1</td>
<td>Theme is vaguely represented. Imagery does little to support it.</td>
<td>Theme is present in imagery.</td>
<td>Theme is expressed effectively through imagery and at least one of the following methods: symbolism, text, color, or media.</td>
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conveyed that as well as her team’s “big idea” well. Because she used abstract images (her own repeating fingerprints representing the idea that technology threatens to make people too assimilated), I’m not sure that she believed it was obvious enough, although I very much did. Lindsay’s teacher score was only two because I knew that her original plan was, but she had difficulty portraying animals in her painting, and just left them out in the end, which left her painting lacking in sufficient imagery to support her team’s “big idea.”

**Self-scores.** Of the two students whose self-scores decreased, Carla’s was the most drastic, dropping three points from a four to a one. Arnie’s dropped one point from a three to a two. The biggest increase for this criteria was Meredith’s, rising two points from a two to a four. Of the nine students whose scores increased by one point, six rose from a three to a four, while three rose from a two to a three. Fifteen students maintained the same score for Criteria 4.

**Teacher Scores.** Lindsay was the only student whose teacher score decreased, dropping one point from a three to a two. The biggest increases for this criteria were Meredith’s and Chad’s, rising two points from a one to a three and from a two to a four, respectively. Of the 17 students whose scores increased by one point, 14 rose from a three to a four, while three rose from a two to a three. Eight students maintained the same score for Criteria 4.
Criteria 5. Perseverance

Perseverance was scored through observation of the following levels through interactions among students, teacher-student interaction, and visual evidence provided through sketches and final products.
Table 20

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<td></td>
<td>Student motivation to complete the art work dissolved entirely</td>
<td>Student motivation to complete the art work was hindered by</td>
<td>Student was disappointed by problems that arose, but student was</td>
<td>Student worked through problems that arose, searched for solutions</td>
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<td>when technical or conceptual problems arose. Student refused</td>
<td>technical or conceptual problems, but student was able to</td>
<td>used them as an opportunity to improve his/her artwork to the</td>
<td>using research and practice, and accepted his/her abilities and</td>
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<td>to complete the art work.</td>
<td>bring it to completion.</td>
<td>best of his/her ability.</td>
<td>limitations.</td>
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Only Meredith and Sasha scored themselves below a three on the self-portrait for this criteria, to which I agreed. Julian scored the lowest teacher score of one, because he often did not do his work in class, and when he was asked to finish it at home because we were moving on to the next project, he worked minimally if at all on it outside of class, and when he finally brought it back, which was after the Theme Team project was complete (several weeks later), it was still unfinished.

For the Theme Team paintings, Carla, Grace and Julian scored the lowest for this criteria. Carla, although she completed the painting, was clearly unhappy with the results, but resigned to follow through as opposed to make a change for the better, which was likely due to her limited time after her absences. Grace and Julian seemed to have given up on their paintings, which could have been influenced by their teammate who prematurely decided the team was done, even though (in private) they did not agree.

**Student Self-Scores.** Of the five students whose scores decreased, Carla’s dropped one point from a three to a two. Four other students dropped one point from a four to a three. The biggest increase for this criteria was Meredith’s, rising two points from a two to a four. Of the four students whose scores increased by one point, three rose from a three to a
four, while Sasha’s rose from a two to a three. Fifteen students maintained the same score for Criteria 5.

**Teacher Scores.** Of the seven students whose scores decreased, Carla’s was the most drastic, dropping two points from a four to a two. Of the six other students whose score decreased one point, five dropped from a four to a three, and Grace’s dropped from a three to a two. The biggest increase for this criteria was Meredith’s, rising two points from a two to a four. Of the seven students whose scores increased by one point, two rose from a three to a four, four rose from a two to a three, and Julian’s rose from a one to a two. Twelve students maintained the same score for Criteria 5.

In the cases of drastic changes between the self-portrait and the Theme Team painting, group dynamic, as well as outside circumstances seemed to play a big role. Carla, who was not satisfied with her group’s work, had been out of school, both for travel and illness, and did not have sufficient time to finish her painting the way she may have wanted, perceived her artwork to decline in quality. Meredith, who struggled a lot with her self-portrait, and barely finished it, seemed to have a great group experience, and saw a great improvement. Other teams whose experiences were more positive reaped better results, while students with negative group experiences were not as successful.

**Individual Student Observations: Symbolic Self-Portraits**

Through the study, data was collected during class time as well as in journal reflections. Data collected during class times focused on student interactions, including types of conversations, comments, and body language. Interactions that were categorized as positive included constructive comments, advice, asking for input, and encouraging or helping peers. Negative interactions we considered those that were hurtful, caused
disruptions or distractions to those who were trying to work, insults, or self-deprecating language. Prior to the interventions, interaction data collected during the Self-Portrait project was intended to provide a baseline for student interaction norms for each class. The two classes were very different in their levels of interaction from the start.

**Class 1.** This class was comprised of students who were generally interested in art, willing to participate in class discussions, and take risks. Although students used hurtful language sometimes, it was most often used in a playful way. Students abided by the assigned seating arrangement daily. Chad, Sam, Alex, Carla, and Becky were the most vocal students in the class. Among the quieter students were Allie, Victoria, Suzy, Cara, and Colleen.

**Chad and Sam.** These boys had assigned seats next to one another. Both participated enthusiastically in class discussions, though much of their input was meant to make their peers laugh. Chad often “picked” at his classmates in a playful way, but sometimes his comments went beyond playful, approaching offensive. One example of this was a culturally insensitive comment directed at Sam. Sam was particularly easy to bait, and often reacted overdramatically. It did not seem as though Chad intended it to be hurtful, and Sam corrected him by explaining why it was inappropriate. Chad, who struggled with drawing realistically, avoided doing his project by socializing with classmates and making excuses as to why he was unable to make progress. Sam worked excitedly, but hurriedly, and resisted when asked to slow down and take more time, or add more detail.

**Alex, Carla, and Becky.** These students all participated respectfully in class discussion, and were all willing to take risks during the discussions. Alex and Becky were hardworking, considerate, encouraging, and helpful to their classmates. Carla was very
interested in art, enjoyed drawing, and liked to look at and talk about artwork, but did not
generally extend herself to assisting other students. Still she gave advice when she was asked,
and was sensitive to those whose work was not as good as hers.

Allie, Victoria, and Suzy. These three students enjoyed art class, but were not
forthcoming with responses during class discussions unless prompted. Victoria and Suzy
would contribute when called upon, but Allie was still hesitant to answer and often avoided
answering by saying “I don’t know.” These girls were also very quiet during work time, and
seemed to focus their attention on their work.

Colleen and Cara. Neither of this students contributed very much during class
discussions either, but they were social during work time, often discussing topics that were
related to school, but not specifically to art class.

Class 2. This group did not contribute very much during class discussions, but often
had pockets of discussions that were unrelated to the topic. Despite the assigned seating,
students tended to migrate to other tables, but were allowed because in most cases students
were working on and talking about their work. Several students seemed self-conscious about
their artistic abilities, and especially about the photographs of themselves that they were to
use as reference for their self-portraits. These students complained loudly that they did not
like their photo, that the project was too hard and that they couldn’t do it. There was also a
quiet majority who worked diligently, some even collaboratively, but were seldom willing to
participate in class discussion. One student who was not in the study had a particularly
strong personality that may have prevented others from contributing. The most vocal
students in the group were still very reserved during class discussions, and were split between
those who primarily used negative language, and those who worked very cooperatively in a small group. Others were quiet in both situations.

**Whitney, Meredith, Stephen, and Julian.** These students displayed the most negative language throughout the self-portrait project. Whitney and Meredith seemed very upset with their photographs, resisted even beginning their drawing, and then agonized over each mark they put on paper. They did not resort to distracting others from their work, however, like Stephen and Julian did. In fact, Meredith preferred helping others with their drawings rather than working on her own, at one point she switched drawings with Whitney so they could work on each other’s. The boys did not seem to be as distraught about their photographs, but approached the project in the same resistant way, if they managed to begin working at all. All of these students complained loudly that the task was too hard, that nothing they did was right, that they couldn’t do it, and they didn’t want to try. All of this was amplified by body language including sitting with their head down, hunching over, and simply not working.

**Shauna, Katelyn, Sarah, Ariel, and Jenna.** In contrast, this group of girls migrated toward each other, though their assigned seats happened to be in somewhat close proximity. I allowed this because, though they did not contribute much to class discussions, they also were respectful during them and only talked during appropriate times. They worked on their projects collaboratively, asking each other for advice and suggestions, as well as providing constructive feedback. They were all skilled at drawing and displayed a willingness to take risks in their artworks.

**Molly and Madeline.** These girls were best friends and worked very closely with each other on their art projects. They separated themselves from the rest of the group and
often only talked with one another, almost in a secretive manner. One exception was a constructive comment Madeline made to Sarah, suggesting, “Maybe you can add something to the background if you think it’s too plain.” Though they claimed to be working on their drawings collaboratively, it was unclear whether they were getting much work done in class, but they would take their drawings home and work there. Neither contributed during class discussions unless prompted.

**Jesus, Grace, Arnie and Tyrone.** Each of these students were willing to contribute modestly during class discussions. Jesus, Grace, and Arnie worked quietly and diligently on their projects. Tyrone was hesitant to work, and when he did, he made little progress on the actual project, working mostly on practice self-portraits in his sketchbook. He was not disruptive, but would talk with Julian, who was often distracting him.

**Sasha, Maria, Lindsay and Julia.** These students barely talked, whether during class discussions, or during work time. Maria, Lindsay and Julia would elicit help very rarely, while Sasha did not, even though she made slow progress. Due to some of the more vocal students needing help or redirection often, it was difficult to check in with those who did not seek assistance. Lindsay sometimes displayed body language that implied disinterest in the activity. Julia and Maria seemed to work diligently and kept to themselves.

**Group Observations: Constructive Language Videos**

For this segment of the study, data was collected solely through teacher observations, as student videos were assessed by participation in the process and not rubrics. Students were given a worksheet illustrating the difference between constructive language and unhelpful language. After introducing the terms and allowing opportunities to practice, students were permitted to choose groups for the Constructive Language Video activity.
Although most groups were satisfied with their selections, there were some cases in which students had to split away from the group they wanted or had to include someone they did not want in their group. It was a good opportunity for those groups to implement what they were learning, however, it did not appease those groups to hear that. The following descriptions illustrate the wide range of group dynamics represented, even when students are permitted to choose their own groups.

**Sam’s Group.** Sam was in a group with two non-participants. The group members did not choose to be together. Sam experienced problems with his group, and was overheard saying to a group member, “You can’t let us do all the work!”, “You’re a liar! Can we get to work and not talk to me?!”, and “This group is falling apart!” When asked what the problem was Sam replied, “We don’t get along.” However, after they were all reminded to use the experience to practice using constructive language, not just to make a video about it, they made an effort to get along better by finding out more about each other. During filming, Henry still struggled to get along with his group would overreact during even minor conflicts that arose. During one episode, Sam repeatedly hit himself in the face causing a bloody nose, and bringing production to a halt and losing filming time. Though the video was completed, the second scene had to be rushed, and they did not have time to edit it or add any musical tracks or sound effects.

**Allie’s Group.** Victoria, Becky and Allie chose their group, but it seemed to be for proximity as their assigned seats were in a row. Victoria and Becky worked well together and used constructive language, but Allie was observed reading a book while they were planning and when asked, responded, “I don’t know what to do.” She ended up filming so the other
two could act, but did not seem to contribute otherwise to the process. There video was effective because Becky and Victoria took the lead and were able to direct Allie.

**Whitney’s Group.** Whitney, Meredith, and Grace chose to be in a group together, but had to include Stephen and a non-participant. The girls were visibly annoyed by this addition, as was Stephen. Grace was trying to get her group started, but the others were displaying negative body language. Whitney was doodling on her notebook, Meredith had her head down and her face covered by her arm, and Stephen was quiet. When asked how she felt about her group members’ lack of help, Grace responded “I wish they would talk.” After offering some suggestions about what art problems they could portray, Whitney began coming up with ideas, and soon Meredith and Stephen began participating too. When they had come up with an idea that sounded too hard to Whitney, she commented, “Why are we making it so difficult? We should pick something easier.” They were able to finish their video on time despite the delayed start, however they did not do well distinguishing between constructive and unhelpful language, and there was an inappropriate part of the video that I had to edit. It appeared that they were more interested in socializing than actually working to make a good video.

**Maria’s Group.** Maria and Sasha formed a group with a non-participant. They struggled to get started because they were all very quiet and would not offer ideas. The non-participant was also absent one of the days they were supposed to plan and rehearse. When they finally chose a topic and roles, they worked quietly, but slowly. They did not record the video until the last possible day because they were all avoiding having to act on camera. They had problems finding a place to film, and ended up outside, where the wind was making it
hard to hear. They only managed to record the “unhelpful language” portion of their video, so their project was unfinished.

**Shauna’s Group.** Shauna, Ariel, Jenna, and Sarah worked together on the project. All of these girls hardworking and creative. As soon as they were given the go ahead they set to work. Their video included props made from materials in the art room, as well as a set of angel wings one of the girls brought from home. Once they began working, the only time they needed any help was when they were in search of prop materials. Their video was entertaining, effective, and well executed. It was clear that they had all had previous experience working in groups and had developed cooperative learning skills prior to this project. They managed their time well enough that they were able to add bloopers at the end.

**Group Observations: Theme Team Collaborative Paintings**

Once the video unit was completed, students filled out an assent inventory to help determine their strengths and weaknesses in cooperative learning situations, art skills, and interests. To create the most effective groups, students who had circle “organizing and manage projects” were chosen to head each team, then others were shuffled around based on past experience, art skills, interests and personality types. Class 1 was split into five groups, three of which are included in the study. Class 2 was split into six groups that all participated in the study, although some groups included non-participants. The collaboration began with choosing group names as an “ice-breaker” activity. During this project, two colleagues were also asked to come into the classroom to provide objective data collection which is included in the following analyses. Charts are provided to show correlations between survey response changes and growth percentages for overall group self-score and teacher score averages.
Scoring for this project was largely based on the group’s process, from the brainstorming stage, to the planning, and through the execution. Although there were worksheets, art work, and artist statements to document idea formation and development and depth of theme, the other criteria (problem-solving, openness to suggestions, and perseverance) were scored through teacher observation of group interactions and took into consideration the student’s self-score for the criteria.

**Class 1.** During the introductory activity for Theme Team Collaborative Paintings, Class 1 had a lively discussion. Students were reminded that listening was an important component of collaboration when students excitedly interrupted their peers, and interruptions then decreased. Students were encouraged to contribute to their groups, as well as seek assistance from group members first. Teacher assistance was only to be sought if the group could not work out answers together.

**Group 1: Das Skittles.** This groups included Allie, Chad, Alex, and Cara. Chad and Alex had been in the same group for the video activity as well. This group worked well together, with no major conflicts.

Use of constructive language was recorded 13 times, while unhelpful language was recorded 15 times. Chad used more constructive language than he had previously, complimenting his teammates’ work, and being encouraging to others. The following interaction occurred between Sam, Chad and Alex:

Sam (taking painting off drying rack at the beginning of class): It looks disgusting!

Chad: It looks great!

Alex: You can paint over it if you need to!
Later during the class period, Sam yelled loudly, and Chad said very calmly and respectfully, “Sam, would you please be a little quieter?” There was also a change in how students talked about their work and problems they were having. Chad and Alex both commented that the color they were using was not right. Cara told Alex his looked okay, while Chad specified that his needed to be lighter.

Negative interactions in this group were mostly playful. Cara told Chad at one point to “Shut up and get over here,” but both students were smiling. Allie still displayed negative body language, being very quiet and hunching over. When Alex said his color was not right, she responded flatly, “You put too much black in it,” but did not offer help, even though the color he was struggling to make was supposed to match one she had already created.

Figure 1
This group explained their theme through the following artist statement,

Our theme was the relationship between the good side and bad side of individuals. It’s one individual painting that uses symbolism such as an angel and devil wing with a bright and dark colored ribbon and different backgrounds. The left side of the painting represents the good side, that’s innocent and knows to do the right thing, but the red ribbon on its wrist represents the small bit of bad inside. Same with the bad side, that has feelings of greed and violence, with a small bit of good (Group Artist Statement, 2014).

It is clear that the group used imagery, symbolism, and color to express their ideas. It seemed as though Cara was leading the group, but they all seemed engaged in the planning of the design, and all could explain the group’s theme in their own words. Because they were all involved in the brainstorming process and planning, and, for the most part, used each other as a resource for problem-solving and suggestions, I perceived their quality of artwork to increase.

<table>
<thead>
<tr>
<th>Das Skittles</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
<th>Survey Change</th>
<th>Self-Portrait Self-Score</th>
<th>Theme Team Painting Self-Score</th>
<th>Self-Score Change</th>
<th>Self-Portrait Teacher Score</th>
<th>Theme Team Painting Teacher Score</th>
<th>Teacher Score Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allie</td>
<td>23</td>
<td>23</td>
<td>0</td>
<td>13</td>
<td>18</td>
<td>5</td>
<td>14</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>Alex</td>
<td>25</td>
<td>30</td>
<td>5</td>
<td>17</td>
<td>20</td>
<td>3</td>
<td>15</td>
<td>19</td>
<td>4</td>
</tr>
<tr>
<td>Chad</td>
<td>25</td>
<td>30</td>
<td>5</td>
<td>16</td>
<td>15</td>
<td>-1</td>
<td>10</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>Cara</td>
<td>25</td>
<td>25</td>
<td>0</td>
<td>12</td>
<td>17</td>
<td>5</td>
<td>13</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>Group Results</td>
<td>10</td>
<td>0.73</td>
<td>0.88</td>
<td>0.15</td>
<td>0.65</td>
<td>0.26</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Das Skittles group results show an increase of 10 points on the survey, a 15% increase in self-scores, and a 26% increase in teacher scores. Although Allie’s and Cara’s
survey score remained the same, they both perceived their quality of artwork to increase by five points. Alex’s and Chad’s five point increase on survey scores indicates and increase in their perception of cooperative learning and the importance of dialogue in art. Alex’s self-score increased by three points, and teacher score increased by four. Chad’s self-score dropped by one, but teacher score rose by seven, because there was a discrepancy in our scoring. Chad’s self-portrait only earned him a teacher score of 10 (twos in all categories), while the painting, along with its other components earned him a 17.

**Group 2: Purple Chinese Carrots.** This group included Carla, Suzy, Becky, and one non-participant. None of these students worked together on the video project. This group worked well together and had the most recorded positive interactions of all the groups, 28, and only one recorded as negative. Becky often asked her teammates for advice, and offered encouragement, at one point telling her teammate, “Like Ms. Thompson said, the nice thing about painting is that you can overlap those lines.” Carla took the leadership position and did a good job directing the group, but was not afraid to express her disappointment in some of the choices her teammates made if she did not agree. During the time that Carla was absent, Becky commented, “Carla is not going to like this very much tomorrow, but it’s my art and my mom told me I shouldn’t care what other people think,” revealing her consideration of Carla’s opinion, but also advocating for herself. Suzy remained fairly quiet, but sought her team’s suggestions and offered help when asked. Teammates were all involved in the process and asked each other clarification questions when needed.
The group’s artist statement read

Our painting is about the good and bad things about technology in the future. One side is the good and one side is the bad. One the left side we drew a guy watching TV and a girl video chatting a family member. On the right side we [depicted] thumb prints that are all same. That means that in the future lots of people will be the same because of social media. The other painting on the right side shows a person taking a pill. That shows how people are insecure about them selves [sic] so they take pills to kill them selves. We picked this topic because we didn’t know how the future will be, good or bad. So we painted both things to show the good things and the bad things (Group Artist Statement, 2014).
Before Carla was absent for several days due to travelling and illness, she seemed to enjoy leading her group. She was highly skilled in art, both technically and conceptually, and displayed confidence in the art room environment. After she returned, she seemed less engaged in the project, frustrated about her lost days, and had less energy. It is hard to say what happened over those missing days that affected her remaining experience in the group. It is likely that the way she was feeling influenced her survey and rubric score, and therefore bring her entire team’s score down considerably.

Becky and Suzy accepted Carla taking the leadership role, while working to develop their own ideas for their individual paintings once the larger unifying component of the circuit board was chosen. I felt that they both contributed constructively to the project and used some of the constructive language they had learned. Both of them experienced increases in teacher scores. Becky’s willingness to step back and let Carla take the lead may explain her perception that her idea formation and development score decreased, when I had observed her contributing, sketching and modifying adequately enough to earn her a three for that criterion.

Their other group member was a non-participant who seemed to be less engaged in the process, which may have created tension within the group as well.

<table>
<thead>
<tr>
<th></th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
<th>Survey Change</th>
<th>Self-Portrait Self-Score</th>
<th>Theme Team Painting Self-Score</th>
<th>Self-Score Change</th>
<th>Self-Portrait Teacher Score</th>
<th>Theme Team Painting Teacher Score</th>
<th>Teacher Score Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purple Chinese Carrots</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carla</td>
<td>22</td>
<td>19</td>
<td>-3</td>
<td>18</td>
<td>9</td>
<td>-9</td>
<td>18</td>
<td>13</td>
<td>.5</td>
</tr>
<tr>
<td>Suzy</td>
<td>31</td>
<td>30</td>
<td>-1</td>
<td>14</td>
<td>16</td>
<td>2</td>
<td>15</td>
<td>17</td>
<td>2</td>
</tr>
<tr>
<td>Becky</td>
<td>26</td>
<td>24</td>
<td>-2</td>
<td>16</td>
<td>15</td>
<td>1</td>
<td>16</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>Group Results</td>
<td>-6</td>
<td>0.8</td>
<td>0.68</td>
<td>-0.13</td>
<td>0.82</td>
<td>0.8</td>
<td>-0.02</td>
<td></td>
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</tr>
</tbody>
</table>
Purple Chinese Carrots group results show a decrease of 6 points on the survey, a 13% decrease in self-scores, and a 2% decrease in teacher scores. All three members of the team had lower scores on their surveys after the interventions, but the only rubric score decreases were attributed to Carla, who was not satisfied with her painting even though she seemed to like her team’s overall idea. This could have been due to her preferred style of work, which is much cleaner and detail oriented.

**Group 3: Arterrifics.** This group included Victoria, Colleen, and Sam, who had also not worked together previously. This group had experienced problems due to conflicting personalities. Sam displayed his typical outbursts of exasperation when small issues arose. Colleen seemed frustrated by his antics, but tried to keep the group functioning. Victoria was mostly engrossed in her work, and was resistant to making any changes or compromises on her painting to contribute to the unity of the group’s collaboration, which resulted in outbursts from Sam, and more frustration for Colleen. During one class, the group argued about whether Colleen was being “bossy,” after which the girls began to ignore Sam completely. Victoria and Colleen were also neater painters, while Sam was messier in both his work area and his painting, which seemed to cause some tension too.
The Arterrifics wrote the following statement:

We tried to communicate pollution which is our theme. We showed what our environment should be like, what it looks like today, and what it shouldn’t look like. We used dark colors, trash, and pollution for what our environment should not look like. We used bright colors, clean streams, no pollution, and no trash for what our environment should look like. For the middle one we used little bit pollution, streams somewhat polluted (Group Artist Statement, 2014).

Although both Victoria’s self- and teacher scores remained the same, her survey score increased dramatically. This could have been due to a number of factors, including her excitement about art class in general. If her past group experiences had been in subjects she did not enjoy, there would naturally be a contrast in her perceptions of those experiences. It may have been in part because she enjoyed the painting process a lot, and seemed very
satisfied with her final product. It also may have been because she did not feel compelled to compromise when her group members made suggestions, so even though she was working in a group, she was not always working with them, which she did not seem to perceive any differently.

Sam and Colleen both experienced increases in teacher scores, in part because of their understanding that the group’s success required them to compromise and make changes when Victoria would not. Despite their arguments and differences, this team created a successful Theme Team project.

<table>
<thead>
<tr>
<th>Arterrifics</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
<th>Survey Change</th>
<th>Self-Portrait Self-Score</th>
<th>Theme Team Painting Self-Score</th>
<th>Self-Score Change</th>
<th>Teacher Score Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Victoria</td>
<td>15</td>
<td>23</td>
<td>8</td>
<td>19</td>
<td>19</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>Colleen</td>
<td>28</td>
<td>27</td>
<td>-1</td>
<td>19</td>
<td>19</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Sam</td>
<td>29</td>
<td>26</td>
<td>-3</td>
<td>19</td>
<td>20</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Group Results</td>
<td>4</td>
<td>0.95</td>
<td>0.02</td>
<td>0.87</td>
<td>0.93</td>
<td>0.06</td>
<td></td>
</tr>
</tbody>
</table>

Arterrifics group results show an increase of 4 points on the survey, a 2% increase in self-scores, and a 6% increase in teacher scores. Colleen and Sam had lower scores on their surveys after the interventions, while Victoria’s survey score rose by 8 points. Both Victoria and Colleen’s self-score remained the same, while Sam’s rose by one point. However, both Colleen’s and Sam’s teacher scores increased, while Victoria’s remained the same. This was largely due to her unwillingness to make compromises.

**Class 2.** The day the Theme Team unit began, students were told to get sketchbooks out of the cabinet and sit down. Some students had to be told individually to get out sketchbooks as they came in and either sat down, or began socializing. Julian forgot
his sketchbook at home, but didn’t say anything about it until he was asked where it was. Stephen had to be told directly to get his, then took Arnie’s and pretended it was his, before finally going to get it. While this was happening other students talked quietly to each other or just waited for class to begin.

Once the presentation began, students were asked to talk to others at their tables to come up with two benefits and two disadvantages of collaboration. The class was nearly silent for almost a full minute. Once they finally began talking, conversations were muffled and brief. In some cases students just wrote down answers without talking to anyone else. When asked to share what they had written, it was silent. Whitney was asked to share one of the disadvantages she had written down as it seemed pertinent to the situation: “No one talks, so you get nothing done.”

There were a couple of disruptions involving a non-participant, which revealed a possible reason that students in the class didn’t speak up. This particular student was combative, and not afraid to intimidate or humiliate any classmate that the student didn’t consider a friend or acquaintance. Despite this issue, most groups seemed to work well together; it is difficult to have conflicts when no one is talking.

**Group 4: Orbiting Around Oreos.** This group included Sarah, Whitney, and Sasha. This group had a slow start because of how quiet each student was. Once they finally agreed on a theme for their paintings, they barely spoke to each other. Whitney needed a lot of help, or believed she did, but would not seek it from her group, even when redirected. Yet, when a suggestion for a paint color was offered, she refused it, saying, “I like it like this.” There were two positive interactions recorded for the group, comments from Sarah and Whitney. The negative comments came solely from Whitney, and there were no comments recorded at all.
for Sasha. Sarah finished her painting much earlier than her teammates, and would sit facing another group and chatting quietly with them during the rest of the project.

**Figure 4**

<table>
<thead>
<tr>
<th>Orbiting Around Oreos: Self-Portrait and Theme Team Painting Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sarah</td>
</tr>
<tr>
<td><img src="image1" alt="Sarah's Painting" /></td>
</tr>
<tr>
<td><img src="image4" alt="Sarah's Painting" /></td>
</tr>
</tbody>
</table>

The following is the group artist statement for their paintings:

> Our paintings are of after the world ends. We painted different landmarks and their destruction. We ordered them by their location in the real world. We used the Golden Gate Bridge in San Francisco, the Statue of Liberty in New York City, and the Eiffel Tower in Paris (Group Artist Statement, 2014).
Their group artist statement was very general, but they had explained the concept to me before they began. They each depicted a major city being destroyed in some fashion, an idea that appeared to be generated mostly by Sarah, after which point the others just had to choose a city and the mode of destruction. They each refer to the end of the world in their individual artist statements, but Whitney uses the word “apocalypse” in her artist statement, and Sarah uses dystopian in hers. Using well-known landmarks created unity within their paintings, as well as symbolizing the cities in which they are located, along with their histories, large populations, and cultures.

<table>
<thead>
<tr>
<th>Table 24</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orbiting Around Oreos</strong></td>
</tr>
<tr>
<td>Sarah</td>
</tr>
<tr>
<td>Whitney</td>
</tr>
<tr>
<td>Sasha</td>
</tr>
</tbody>
</table>

This group’s survey rating increased by one point, self-scores by 5% and teacher scores by 11%. Whitney’s self-score dropped by one, but teacher score rose by four, because there was a discrepancy in our scoring. Whitney’s self-portrait only earned her a teacher score of 10, while the painting, along with its other components earned her a 14.

**Group 5: Real Slim Shady.** Shauna, Katelyn and Molly worked well together, though it was apparent Shauna and Katelyn were heading up the project. They seemed to be fairly excited about their idea, and set to work quickly. No negative interactions were recorded, and two positive interactions were. Molly was not talkative through the project, but worked alongside her group, and adding to the conversation here and there.
This group’s artist statement reads

Our paintings were showing the differences of being perfect & imperfect. Our paintings represented this with the different qualities & condition of the mirrors. The shattered mirror shows the perfect people in magazines. As it goes on & the mirror gets fixed, it starts reflecting normal people like US (Group Artist Statement, 2014).

Shauna and Katelyn worked very closely on this project, while Molly was involved but did not seem as excited about it. Shauna’s high survey score reveals that she had a positive perception of group work, had many previous experiences in it, and that she
understood the importance of dialogue in art before all the interventions. She also experienced a four-point increase in self-score, which could imply that she is more satisfied with work completed in groups. She scored herself three points lower than I did on her self-portrait, which indicates to me that she is very self-critical, yet another reason she may prefer group projects.

Molly and Madeline sat near each other during this project, even though I had intentionally put them in different groups. The decrease in Molly’s survey score may have been attributed to her not being able to work with her best friend.

<table>
<thead>
<tr>
<th>Table 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Slim Shady</td>
</tr>
<tr>
<td>Shauna</td>
</tr>
<tr>
<td>Katelyn</td>
</tr>
<tr>
<td>Molly</td>
</tr>
</tbody>
</table>

This group’s survey rating experienced no change, but self-scores increased by 7% and teacher scores by 2%. All members of this group were skilled in art techniques, and had a solid understanding of theme and symbolism going into both the self-portrait project and Theme Teams.
**Group 6: Eat, Draw, Sleep, Gymnastics, Repeat (EDSGR).** Jenna, Stephen, Jesus, and Madeline comprised this group. Although Stephen struggled with his self-portrait project, he appeared to be thriving in the group environment. He did not display his typical behavioral issues, such as avoiding work, wandering around the room, or distracting others. Jesus, Jenna, and Madeline made decisions collaboratively, though Madeline directed the group when they were in need of leadership, and offered advice to her teammates. Jesus, whose drawing abilities were revealed during the self-portrait project, struggled with the paint, painting over large areas of his composition several times and having to start over almost from scratch, but he was not angered or defeated by this and kept working. Jenna was mostly quiet and worked consistently.

**Figure 6**

<table>
<thead>
<tr>
<th>EDSGR: Self-Portrait and Theme Team Painting Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jenna</td>
</tr>
<tr>
<td>![Jenna's Portrait]</td>
</tr>
<tr>
<td>![Jesus's Painting]</td>
</tr>
<tr>
<td>![Jenna's Painting]</td>
</tr>
<tr>
<td>![Stephen's Portrait]</td>
</tr>
<tr>
<td>![Madeline's Portrait]</td>
</tr>
</tbody>
</table>
The following is EDSGR’s group artist statement:

All of our paintings are about different futures. The paintings all involve a building. Each painting represents a different future. The one in the upper right is about the future days which has a floating car. The bottom left is about our days now with trees, a building, a road, grass, and a pond. The one in the upper left is about the sordove [sort of] bad past. It has dark colors, buildings cracking and cars loosing fuel and people are having to use bikes. The bottom right is about the really super bad past with explosions, fires, buildings falling down, big huge storms, and air pollution with lots of smoke and also tornadoes (Group Artist Statement, 2014).

It is important to note that all of the paintings were representing alternative futures, not the past, as mistakenly referred to in the artist statement. I did not observe an interpersonal conflicts within this group, and in fact heard very little from them throughout the process. The solved issues within their team, and were often talking quietly amongst themselves, though it was hard to hear what the topics of conversation were. They seemed to be working diligently. Madeline would talk with Molly, but did not neglect her team in the process.

<table>
<thead>
<tr>
<th>Table 26</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDSGR</td>
</tr>
<tr>
<td>Jenna</td>
</tr>
<tr>
<td>Stephen</td>
</tr>
<tr>
<td>Jesus</td>
</tr>
<tr>
<td>Madeline</td>
</tr>
</tbody>
</table>
This group’s survey rating dropped one point, but self-scores increased by 3% (though Stephen did not turn in a self-evaluation for this project) and teacher scores by 15%. All members of this group experience sizable increases in teacher scores, except for Jesus, since his self-portrait score was already a 19. His survey score dropped five points, which may have had to do with his frustration with painting. Stephens survey score increased by five, which seems to correlate to his feeling of success within his group.

**Group 7: McMakms.** This group included Grace, Julian, and two non-participants. When the theme was chosen, Grace was satisfied, but Julian was not interested in the topic. One of the non-participants made most of the decisions, to which no one objected. Once the plan was in motion, Julian and Grace followed directions, but neither seemed to have much input into the process. There was little collaboration occurring in the group, and most of the dialogue amongst group members was social and unrelated to their project.

**Figure 7**
The artist statement for this McMakms was:

Our painting is about gender roles. People think that if you’re a girl you have to do certain things, and if you are a boy. Boys shouldn’t cry, shouldn’t have a broken heard or do girly things. Girls shouldn’t play certain sports like football or baseball. The one with the pink background [sic] is what girls should do. The one on the girls side with the pink is what they shouldn’t do. The one with the blue background is what boys should do and the black background is what they shouldn’t do (Group Artist Statement, 2014).

This team chose gender roles as their general theme, largely in part because of one non-participant’s influence. Although Grace seemed to be on board with the topic, the non-participant took over the design of the project, with some suggestions from me to help them get started, drew out the man/woman icon on all four paintings, then directed the others on how to paint them, even mixing the pink and blue for others to use. Julian didn’t want to choose that topic at first, but resigned to it when the others agreed. Once the black, pink, and blue areas on each painting were covered, team members were to add symbols to represent items or activities often associated with one gender. The painting with flowers on it had been worked on by both non-participants, but Grace and Julian had do little to nothing for their own. I approached them about the lack of imagery on their paintings when the non-participant leader was out of earshot, and they both expressed disappointment in the project and agreed that the painting were in need of more imagery, but when the student returned to the group, both denied that they had said that. The last day, the non-participant was absent, so the Grace and Julian rushed to get symbols onto their canvases.
This group’s survey rating dropped 8 points, but self-scores increased by 7%.

Teacher scores for the group remained the same, although that was due to a three point decrease for Graces scores and a three point increase for Julian’s. The drop in survey scores reflects a group experience that was disappointing and possibly frustrating for both, since they seemed uncomfortable disagreeing with the other student, and therefore had little to do with the process.

<table>
<thead>
<tr>
<th>McMakms</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
<th>Survey Change</th>
<th>SelfPortrait Self-Score</th>
<th>Theme Team Painting Self-Score</th>
<th>SelfScore Change</th>
<th>SelfPortrait Teacher Score</th>
<th>Theme Team Painting Teacher Score</th>
<th>Teacher Score Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grace</td>
<td>27</td>
<td>24</td>
<td>-.3</td>
<td>16</td>
<td>16</td>
<td>0</td>
<td>17</td>
<td>14</td>
<td>-.3</td>
</tr>
<tr>
<td>Julian</td>
<td>30</td>
<td>25</td>
<td>-.5</td>
<td>13</td>
<td>16</td>
<td>3</td>
<td>10</td>
<td>13</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 27
**Group 8: Chocolate Starbursts.** Maria, Lindsay, and Meredith were group together because of a combination of skill strengths, as well as a common interest in animals. They worked well together, but were all very quiet. The only interaction recorded during the project included positive comments and questions about their paintings.

Figure 8

<table>
<thead>
<tr>
<th>Chocolate Starbursts: Self-Portrait and Theme Team Painting Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria</td>
</tr>
<tr>
<td><img src="image1" alt="Maria's painting" /></td>
</tr>
</tbody>
</table>

This group explained their theme through the following artist statement,

Our painting is about what humans have done to nature. We have taken animals homes. We polluted the area with gases. [Maria] did the polluted area. [She] made everything dark & spooky. [She] put smoke going to a flower and attacking it. And [she] made sure there is no nature. In [Meredith’s] painting its half & half showing
how different nature looks when it gets polluted. [Lindsay] made sure she drew nature (Group Artist Statement, 2014).

One reason I grouped these three together was that they each expressed a passion for animals. They seemed to enjoy working together, and Meredith and Maria reported being “active” after the Theme Team project, though their pre-survey response was only “some” for level of involvement. Lindsay had some technical difficulty trying to incorporate animals into her painting, and ended up excluding them in the end, but overall the girls seemed satisfied with their final product.

<table>
<thead>
<tr>
<th></th>
<th>Chocolate Starbursts Pre-Survey</th>
<th>Chocolate Starbursts Post-Survey</th>
<th>Survey Change</th>
<th>Self-Portrait Self-Score</th>
<th>Theme Team Painting Self-Score</th>
<th>Self-Score Change</th>
<th>Self-Portrait Teacher Score</th>
<th>Theme Team Painting Teacher Score</th>
<th>Teacher Score Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria</td>
<td>25</td>
<td>31</td>
<td>6</td>
<td>19</td>
<td>18</td>
<td>-1</td>
<td>17</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Lindsay</td>
<td>26</td>
<td>29</td>
<td>3</td>
<td>15</td>
<td>16</td>
<td>1</td>
<td>13</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>Meredith</td>
<td>26</td>
<td>31</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>10</td>
<td>8</td>
<td>18</td>
<td>10</td>
</tr>
</tbody>
</table>

This group’s survey rating increased by 14 points, the most of any group’s. Self-scores increased by 17% teacher scores by 20%. In both cases the increases we due to 10 point increases for Meredith. It seemed that the girls had a positive group experience. Although Maria’s survey score increased the most, her self-score decrease by one point and her teacher score remained the same.
**Group 9: Volleyball + Soccer = Pizza.** In this group were Julia, Ariel, Arnie, and a non-participant. The group functioned well together, and Ariel made a good leader. She sought input from everyone in the group, added her own ideas, and made sure all members were included and satisfied. Julia helped Ariel mix colors, and the group chatted quietly about their work.

The artist statement for this group reads

Our painting was about how the world changes over time. The unifying aspect of our paintings was the world that spanned across all of our paintings. The top-left painting is utopian, the top-right is dystopian, the bottom-right is Happy Birthday, and the bottom-left is summer (Group Artist Statement, 2014).
Volleyball + Soccer = Pizza seemed to work together well, though sometimes Arnie would not contribute freely, and had to be asked directly by one of his teammates. Ariel and Julia discussed techniques and helped each other from time to time, and Ariel helped Arnie when he needed suggestions. There may have been some linguistic barriers between Julia and her team, which is why her specific topic is so different from the others. Her family left the country before the group statement was written, so her group members had no way to clarify exactly how her painting fit in. When I have talked to the group about their ideas, they had mentioned something about the immediate future being the summer, the near future representing a year (which would explain the birthday idea), and then the dystopian and utopian versions of the far future.

I did not observe any conflicts in this group, and all that I did see did not give me any real indication as to why Arnie’s survey score dropped six points. He was separated from the boys he usually sat with, and had to work with girls more than he had before, so that is a possibility. It could also have been a small conflict that I missed, or even being upset for another reason on the day her filled out the post-survey.

<table>
<thead>
<tr>
<th>Volleyball + Soccer = Pizza</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
<th>Survey Change</th>
<th>Self-Portrait</th>
<th>Self-Score</th>
<th>Theme Team Painting</th>
<th>Self-Score</th>
<th>Self-Score Change</th>
<th>Self-Portrait</th>
<th>Teacher Score</th>
<th>Teacher Score Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julia</td>
<td>27</td>
<td>29</td>
<td>2</td>
<td>19</td>
<td>19</td>
<td>0</td>
<td>18</td>
<td>19</td>
<td>1</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Ariel</td>
<td>29</td>
<td>31</td>
<td>2</td>
<td>18</td>
<td>18</td>
<td>0</td>
<td>18</td>
<td>19</td>
<td>1</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Arnie</td>
<td>29</td>
<td>23</td>
<td>-6</td>
<td>17</td>
<td>15</td>
<td>-2</td>
<td>14</td>
<td>16</td>
<td>2</td>
<td>18</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 29

This group’s survey rating decreased by 2 points. Self-scores also decreased by 3%, but teacher scores rose by 7%. Arnie’s survey score dropped six points, though there were
no recorded incidents to indicate why that was the case. Both girls survey scores increased 2 points, while their self-scores remained the same.

**Individual Artist Statements**

Artist statement worksheets were collected after both the self-portrait project and the Theme Team painting project. One major difference observed between the two sets was that self-portrait artist statements included more thorough responses, and much more writing. Students had to explain their use of symbolism in their individual projects, which they knew more intimately because it was their own creation. The Theme Team responses were shorter because they reflected their general understanding of a much broader topic. For the most part students were able to explain their team’s theme and their specific piece of the team puzzle, but they were not nearly as invested in the symbolism and imagery as they were for their self-portrait. To illustrate the difference, these excerpts were taken from students’ responses on artist statement worksheets.

**Table 30**

<table>
<thead>
<tr>
<th>Student</th>
<th>Self-Portrait Artist Statement Prompt: Explain the symbols you incorporated into your self-portrait, and what they mean.</th>
<th>Theme Team Artist Statement Prompt: Using descriptive language, explain the visuals and imagery you used, and how they helped communicate your concept.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sam</td>
<td>The shark, South Korea flag and squid mean a lot to me. Not only do sharks look cool, but they are part of the food chain. I like the shark I drew because I saw its bloody gums showing with its large, sharp teeth. The squid is because I love to eat squid. The South Korea flag is important because I was born their [sic] and is what I think of a lot.</td>
<td>We made modern skyline cities, polluted rivers, a disgusting landfill. And for right now and modern, we put clean river, nice sky.</td>
</tr>
<tr>
<td>Becky</td>
<td>I included musical notes because my life is pretty much devoted in to music and I can’t live without it. I did mermaid tails because I am into fantasy creatures and mermaids are my favorite. I did the conch shell because I love the beach and I think they are really pretty.</td>
<td>The circuit board helps represent the inside of a computer and the TV screen helps explain some technology people use.</td>
</tr>
</tbody>
</table>
Stephen
I like my bed because I can lay down and text friends and sleep, not like having to get up and go to school. The McDonald’s is to go out and end and not be in the house. GTA cause [sic] no one lives near me so I like to play it with me friends.
“tornadoes, floods, building fire, everything ruend [sic].”

Sarah
I only did two symbols but one of them had multiple meanings. The first one was the puzzle pieces which symbolize indecision, many parts, missing parts, and that not all the pieces are straight and perfect. Also the puzzle pieces run off the ends of the paper sugesting [sic] that everything is connected. The second symbol I used was distant birds which symbolize far off freedom because I don’t feel in power of many things in my life.
I drew the Golden Gate Bridge broken. The buildings in the background are burning, and I used dark colors.

Many of the self-portrait artist statements described student preferences and interests very specifically. Sarah’s was one of the few that considered her personality, faults, contrast between present and future, and a universal ideology (“everything is connected”). Sarah’s statement suggests that she has more experience in metacognition and a broader worldview than most of her peers, as well as being skilled in writing. However, in her Theme Team artist statement, she merely explained the imagery she used in two brief sentences.
Regardless of the content of the self-portrait artist statements, almost all of them include symbols that are very specific (McDonald’s, as opposed to any “fast food” restaurant, Hello Kitty as opposed to cartoons, a particular animal, etc.). Because students were challenged to think of their personal qualities first, and *then* translate these aspects visually, their imagery in many cases became very narrow, reflecting the limited experiences many of them have had.

In the Theme Team project, students began the process by having to select a broad idea that their group agreed upon. This step alone will affect the specificity of the imagery used, based on the amount of knowledge each student has about the topic. Collaborative art projects must be “filtered” through each group member’s experience, technical ability, and
interest in order for members to be able to work together and contribute evenly. Therefore, many groups had to determine how each teammate would be able to contribute, and plan their project accordingly. The implications of this are seen both in the artworks as well as the written responses. Imagery was simplified so that teammates of all skill levels could create a cohesive component, and artist statements addressed only the topic and the imagery used to express it, something everyone was capable of accomplishing.

Another influence on the contrast between artist statements written about self-portraits as opposed to theme teams is the comfort level of the students in their groups. It is likely that students will write more when they are more interested in or familiar with a certain topic. When students don’t feel comfortable talking with their teams, because of shyness, mood, past conflict, or other inhibiting reasons, they won’t have as deep an understanding of their subject. Groups who chose their topics and then isolated themselves to work also were not likely to have any more to say after completing their project than they did before, since little processing happened during the creation of it.

Individually completed projects concerning identity have a much narrower focus for middle school students, who are at a developmental and social stage in life that is constantly in flux. This is a time for self-discovery, which means that their art projects may look very different one week than they would the next because of the variety and frequency of changes students at this age experience. Working on a group project forces them to broaden their focus in ways that they may or may not be ready to do depending on their levels of maturity and experience, resulting in an artwork that my reach a larger audience, but with minimal detail.
The data collected in this study has been presented in this chapter, and analyses have been made that consider relationships between data sets to ensure triangulation. Although some patterns emerged, it is clear there were many variables affecting student experiences throughout, both in the classroom and outside of it. The projects were very different from each other in terms of objectives and media and they were executed in different ways. Also, questions on the artist statements were slightly different, causing inherent differences from project to project.
Chapter 5

Conclusions and Recommendations

The conclusions and recommendations in this chapter are provided for each research question, and supported by the data collected for this study.

Research Question 1

*How does explicit instruction in constructive language usage affect cooperative learning in a seventh grade art class?*

After completing an individual self-portrait project to provide baseline data, the explicit instruction in the use of constructive language was implemented through class discussion, informal small group discussion, a worksheet, and opportunity to practice. The culminating experience involved student splitting into groups of three to four to write, direct and produce videos that would successfully illustrate the difference between constructive and unhelpful language using art problems students might face. Student groups worked at varying levels of efficacy, and it was observed that groups whose membership was fully agreed upon by all functioned more smoothly and efficiently, and produced better videos. Groups who were comprised of members that were placed together by default after other groups were formed, who were forced to include someone they had not chosen, or who included a member that was absent during the project, create less successful videos, and in some cases did not complete filming and/or editing their video fully.

Groups for the Theme Team project were determined in part from an asset inventory students filled out to express their strengths and weaknesses, as well as common interests, personality types, participation in the study, and previous observations of student interactions, and not by allowing students to choose their own groups. This seemed to
relieve some of the discomfort of students who were “picked last” or placed together because the group they wanted to be in was already full. This was beneficial to some group members because they didn’t feel the rejection they may have in the first group experience, or they were placed with someone they were excited to get to know. For some students it was a disadvantage because they were either shy, unhappy about their placement, or could not elicit the level of participation they wanted from quiet teammates. In these groups, the students with higher cooperative learning skills and better use of constructive language functioned better than their less skilled counterparts, whereas the video groups who chose to be together had previously formed social relationships and therefore did not need to rely on cooperative learning skills. All students were reminded to use constructive language in the development, preparation, and execution of their collaborative paintings, and varying levels of constructive language use were documented over the course of the project.

**Conclusions.** Explicit instruction in constructive language can be useful for students who are mentally and emotionally prepared to see the value in it and conscientiously employ it, but for students who are not, it doesn’t seem to immediately enhance their group experiences. In middle school, the social skills students value are a complex mixture comprised of saying the right things, to the right people, at the right time, and avoiding embarrassment at all costs. No matter how much constructive language they learn, they may not use it depending on the social norms and expectations of their peers.

Another important consideration is the “social chemistry” of the class. As in all classes and with all projects, there may be more learning going on than is directly observable. Although there may be a disruptive student who intimidates others from participating vocally, it does not mean that the lesson is lost on them. Adversely, a lively class that has a
high rate of participation does not necessarily learn everything they are taught. In specific cases, such as Chad’s, there was a remarkable difference in the language he used from before the interventions to after, while other students like Whitney, may understand the concept, yet not be emotionally mature enough to overcome her frustrations and try to be more constructive. In Stephen’s case, he was much more successful in a group that used constructive language than he was in a group that used more unhelpful language, as he rose or fell to the level of his peers in each situation. For others, they may understand the concept, but choose not to apply it universally, preferring the unhelpful language as a social weapon or shield.

**Recommendations.** Explicit instruction in constructive language has a place in the middle school art curriculum, and can be applied across all disciplines. That not all students are equipped to use it right away is no reason to avoid the topic, because students in middle school absorb a lot of information that they may not articulate or use until later in their development. It is something that can be introduced in the beginning of the year or semester, and can be reinforced throughout the course of the class. It is not necessary that all projects involve cooperative learning groups, but collaboration and constructive dialogue should be taught as tools for learning in art.

Sentence frames such as “I’m having difficulty with ____________, can you help me?” and “I really like how you ____________, would you show me how you did that?” posted on the wall after a brief class discussion may prove to be as, or possibly more, effective as a week-long lesson focused on the difference between constructive and unhelpful language. Having visuals displayed as permanent fixtures in the room would make
it easier to correct students by simply pointing and having them reframe their unhelpful comments.

**Research Question 2**

*How does cooperative learning affect the quality of student art work in a seventh grade art class?*

**Conclusions.** When I began this research study, this question was about quality in terms of “bad, good, better.” I had assumed that collaborative art activities would produce “better” quality artwork than individually completed projects. As it turns out, this interpretation of the question is not an appropriate one. The question is a valid one, but the answer is not simply a matter of it being “better” or “worse.” Although 52% of student self-scores and 74% of teacher scores increased, it is important to note the rubrics were designed to measure criteria that mostly had to do with process, and that some students had more experience developing art concepts and hands-on art practice, and therefore were likely to score highly regardless of what specific project objectives were. Some students lacked in technique, confidence, or critical thinking skills, which adversely affected their self-portrait, but were not as detrimental when working in a group because support was readily available for those who had those deficiencies.

This resulted in distinct differences between individual and collaborative artworks, but did not create the hierarchy I had expected. Both forms of art are valid, and each functions differently in the larger realm of the art world, as well as in the middle school art classroom. Individual projects allow students to be more self-reflective in the process, make all choices, experiment, and express their unique perspective. This is an important practice for all artists, and especially for students at this developmental stage, who are dealing with
Issues of identity daily. Students want control over how they are perceived by others, and artistic expression is one way they can obtain that.

Collaborative work, on the other hand, provides students with opportunities to learn from their peers, develop social and cooperative learning skills, and be part of something bigger than themselves. The artwork borne out of collaboration is simply a different quality of artwork, in that it reaches a broader audience and involves an entirely different process for the participants. If done effectively, art collaborations represent the views of each person, but also show their commonalities and ability to reconcile differences for a greater purpose. Many careers involve collaboration at some level, and it is important for students to experience the benefits, disadvantages, and results of working with other people.

**Recommendations.** Incorporating both individual and group projects into the middle school art curriculum, supported by explicit instruction in constructive language, affords students opportunities to explore who they are as unique entities, and also gleaning an understanding of how they fit into larger contexts, whether in a small group, a whole class, a school, their community, or the world. Neither process is better than the other; they inform each other reciprocally. As we are influenced by our surrounding and experiences, so do we influence our surroundings and create experiences for others. To know where we stand, we must know who we are.

**Recommendations for Future Studies**

For a more direct comparison of individual and collaborative work, lessons that are more similar would be recommended. Because the individual project was so personal, the collaborative artist statements showed a huge disparity of descriptive language. It would also be helpful to implement the individual project at the beginning of the year or semester, then
introduce constructive language and support with visuals, such as sentence frames, posted on the walls. Continue reinforcing the use of constructive language through the semester or school year, and implement the collaborative project at the end of the semester or year. Also, group projects are often more successful if students have at least one person they are amicable with in their group, so by having students list their top 5 choices for group members discreetly and using that information to help form student groups may increase their overall performance.
Appendix A

Parent/Guardian Informed Consent

Identification of Investigators & Purpose of Study
Your child is being asked to participate in a research study conducted by Laura Thompson, art teacher at Thomas Harrison Middle School and graduate students at James Madison University, and Dr. Karin Tollefson-Hall from James Madison University. The purpose of this study is to investigate the effects of cooperative learning activities on the quality of artwork in a seventh grade art class, as well as student perceptions of cooperative learning in art. This study will contribute to the researcher’s completion of her graduate thesis.

Research Procedures
All art students will complete three art activities over a 6-week period, including one independent art project and two collaborative art projects.

By signing this form, you are permitting the collection of data through observations of student dialogue, student-completed self-evaluation rubrics and artist statements, and photographs of finished artwork. All students will complete self-evaluation rubrics and artist statements regardless of whether they participate in the study, but the work of those who do not have permission to participate will not be used in the data analysis.

Should you decide to allow your child to participate in this research study, he/she will participate in 7-question pre- and post-instruction surveys on their perceptions of cooperative learning, but no other extra activities or work is required of him/her.

Time Required
Participation in this study will require approximately 36 art class periods. All art students will participate in the three art activities regardless of participation in the study.

Risks
The investigator does not perceive more than minimal risks from your child’s involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits
Although there is no direct benefit to your child for participating, they will be contributing to the quality of my teaching practice, which will benefit all art students at THMS.

Confidentiality
The results of this research will be published and made available for Art Education faculty and students at James Madison University. There is a possibility that these results may be shared at Art Education conferences. The results of this project will be coded in such a way that your child’s identity will not be attached to the final form of this study. The researcher retains the right to use and publish non-identifiable data, as well as photographs of the artwork with names blurred or not visible. While individual responses are confidential, aggregate data will be presented representing averages or generalizations about the responses as a whole. All digital data will be stored both on a password protected computer and privately shared storage location accessible only to the researcher and research advisor. Paper data collection forms with
be secured in a locked cabinet in my classroom. Upon completion of the study, all information that matches up individual respondents with their answers will be destroyed. Identifiable data on images will also be destroyed.

**Participation & Withdrawal**

Your child’s participation is entirely voluntary. He/she is free to choose not to participate. Should you and your child choose to participate, he/she can withdraw at any time without consequences of any kind. If your child does not participate in the study, they will still participate in the art activities (and be grouped with other students who are not participating in the study for the collaborative projects), but they will not complete the surveys. There will be no negative consequences for your child should they not participate, and the same attention will be given to all students.

**Questions about the Study**

If you have questions or concerns during the time of your child’s participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Laura Thompson  
Dr. Karin Tollefson-Hall
Thomas Harrison Middle School  
School of Art, Design, and Art History
Harrisonburg City Public Schools  
James Madison University
lthompson@harrisonburg.k12.va.us  
tollefkl@jmu.edu

**Questions about Your Rights as a Research Subject**

Dr. David Cockley  
Chair, Institutional Review Board
James Madison University
(540) 568-2834
cocklede@jmu.edu

**Giving of Consent**

I have read this consent form and I understand what is being requested of my child as a participant in this study. I freely consent for my child to participate. I have been given satisfactory answers to my questions. The investigator provided me with a copy of this form. I certify that I am at least 18 years of age.

☐ I give consent for my child’s artwork to be photographed. _______ (Parent’s initial)

______________________________________________  
Name of Child (Printed)

______________________________________________  
Name of Parent/Guardian (Printed)

______________________________________________  
Name of Parent/Guardian (Signed)  
Date

______________________________________________  
Name of Researcher (Signed)  
Date
Appendix B

Student Assent Form

The Effects of Constructive Language Instruction and Cooperative Learning on the Quality of Art Work at the Middle Level
Laura Thompson, THMS Art Teacher and JMU Graduate Student

I am doing a research study to see if giving students suggestions on how to talk to each other in art before doing a group art project will make your artwork better. A research study is a way to learn more about people.

Everyone will participate in the lessons and activities I have planned, complete the projects and write artist statements. However, if you decide to be part of this study, your artwork will be photographed, I will document parts of your conversations over the course of the study, and I will collect your self-evaluation rubrics and artist statements. The only extra work for you is to complete a 7-question survey before and after the study.

When I am finished with this study I will write a report about what was learned. This report will not include your name or that you were in the study.

You do not have to be in this study if you do not want to be. If you decide to stop after we begin, that’s okay too. Your parents know about the study too.

If you decide you want to be in this study, please print and sign your name below.

I, _________________________________, want to be in this research study.

___________________________________
(Sign your name here)  (Date)
Appendix C

Cooperative Learning Survey

Name: __________________________

How many times have you worked on long-term group projects in school?
1-Never 2-Once 3-Twice 4-Three Times 5-4 or more times

My most recent experience working on a group project was:
1-Awful 2-Disappointing 3-Alright 4-Good 5-Awesome

When I hear the phrase “group project”, I feel:
1-Angry 2-Nervous 3-Neutral 4-Happy 5-Excited

My level of involvement in group projects is typically:
1-None 2-Very Little 3-Some 4-Active 5-Fully Engaged

I feel that group project results, in comparison to individual project results, are often:
1-A failure 2-Less Successful 3-Similar 4-More Successful 5-Way better!

How likely are you to incorporate other people’s ideas into your own artwork?
1-Highly Unlikely 2-Somewhat Unlikely 3-Not Sure 4-Somewhat Likely 5-Extremely Likely

How important do you think it is for an artist to talk about their ideas?
1-Unimportant 2-Somewhat Unimportant 3-Not Sure 4-Somewhat Important 5-Extremely Important
## Appendix D

### Rubric for Quality of Artwork

<table>
<thead>
<tr>
<th>Category Rating</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Idea Formation and Development</strong></td>
<td>Student used the first idea they generated, or borrowed one from another source.</td>
<td>Student generated 1-2 ideas on their own, but intended to fully develop only one of them.</td>
<td>Student generated 2-3 ideas for their artwork that each showed thoughtfulness, originality and potential before choosing their favorite idea.</td>
<td>Student generated multiple ideas for their artwork, and explored and developed 2-3 ideas through the use of research and sketches before choosing the idea with the most potential as an effective artwork.</td>
</tr>
<tr>
<td><strong>Problem-Solving</strong></td>
<td>Student sought help before attempting to solve a problem or trying a different approach.</td>
<td>Student attempted to solve a problem by repeating or adjusting his/her first method before asking for help.</td>
<td>Student tried at least one different approach to solve a problem before asking for help.</td>
<td>Student tried multiple approaches to solve a problem, and often found one that worked, before asking for help.</td>
</tr>
<tr>
<td><strong>Openness to Suggestions</strong></td>
<td>Student resisted or rejected suggestions for improvement by peers or teacher.</td>
<td>Student listened to suggestions but made little effort to improve artwork based on them.</td>
<td>Student incorporated at least 2 suggestions made by peers or teacher to improve his/her artwork.</td>
<td>Student actively sought suggestions from peers or teacher to improve their artwork and incorporated several.</td>
</tr>
<tr>
<td><strong>Depth of Theme</strong></td>
<td>Theme is vaguely represented. Imagery does little to support it.</td>
<td>Theme is present in imagery.</td>
<td>Theme is expressed effectively through imagery and at least one of the following methods: symbolism, text, color, or media.</td>
<td>Theme is communicated in multiply ways including several of the following methods: imagery, symbolism, text, color, media.</td>
</tr>
<tr>
<td><strong>Perseverance</strong></td>
<td>Student motivation to complete the artwork dissolved entirely when technical or conceptual problems arose. Student refused to complete the artwork.</td>
<td>Student motivation to complete the artwork was hindered by technical or conceptual problems, but student was able to bring it to completion.</td>
<td>Student was disappointed by problems that arose, but used them as an opportunity to improve his/her artwork to the best of his/her ability.</td>
<td>Student worked through problems that arose, searched for solutions using research and practice, and accepted his/her abilities and limitations.</td>
</tr>
</tbody>
</table>

Score on Individual Artwork:________ Score on Collaborative artwork:________ Change:_______
Appendix E

Lesson #1: Symbolic Self-Portraits

Big Ideas: Identity, Symbolism

Grade Level: 7th grade

Time: 10 - 45 min class periods

Lesson Overview: Using a grayscale photograph of themselves, students will create a self-portrait incorporating meaningful symbols representing certain aspects of their personalities.

VA SOLs:

1. The student will use, and record in a sketchbook/journal, steps of the art-making process, including research, to create works of art.
2. The student will refine media techniques to demonstrate craftsmanship.
3. The student will communicate ideas, experiences, and narratives through the creation of works of art, using traditional and contemporary media.
4. The student will apply a variety of techniques in observational and expressive drawing.
5. The student will identify subjects, themes, and symbols as they relate to meaning in works of art.

Objectives:

1. The student will view and discuss artworks by Frida Kahlo.
2. The student will use graphite to draw a realistic self-portrait using a grayscale photograph as a reference.
3. The student will incorporate at least three symbols into the background of their composition.

VC Component:
Discuss symbols in popular culture and what they stand for.

Vocabulary:
Self-portrait, symbolism, value, texture, observational drawing, proportion, composition, emphasis
Images and Descriptions:

<table>
<thead>
<tr>
<th>Painting</th>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>El Venado Herido</strong></td>
<td>1946</td>
<td>The image is of Kahlo’s head placed on top of a stag, which is pierced with arrows. The arrows no doubt refer to her own pain and suffering due to her injuries, as well as her injurious marriage to Diego Rivera. At the bottom of the painting, Kahlo has written “carma,” alluding to these ancient mystic beliefs. She also combines the eastern belief system with Aztec. An ancient Aztec symbol, the deer symbolized the right foot, and in this she was alluding to her injured right side, the foot of which had been crushed in a bus accident, and right leg being fractured in eleven different places. One year before her death, her right leg was amputated up to her right knee, due to complications from gangrene.</td>
</tr>
<tr>
<td><strong>Las Dos Fridas</strong></td>
<td>1939</td>
<td>Created at the same time as her divorce from Diego Rivera, <em>The Two Fridas</em> is Kahlo’s largest painting. It is believed to be a painting depicting her deep hurt at losing her husband. One Frida sits on the left of the painting; this is the Frida that was rejected by Rivera. Her blouse is ripped open, exposing her broken and bleeding heart. The Frida to the right, the one that Rivera still loves, has a heart that is still whole. She holds a small portrait of Rivera in her hand. After her death, this small portrait of Rivera was found amongst Kahlo’s belongings, and is now on display at the Museo Frida Kahlo in Mexico.</td>
</tr>
<tr>
<td><strong>Diego Y Yo</strong></td>
<td>1949</td>
<td>Diego Rivera and Frida Kahlo’s marriage was tumultuous at best. Frida created this painting during a particularly low point in their marriage. Rivera was having an affair with the movie star Maria Felix, and he was rumored to have asked her to marry him. Although both of them had extramarital affairs, this one was particularly painful, as illustrated by this painting. Many times, Kahlo was able to laugh at Rivera’s indiscretions, but this painting shows real pain and suffering. She once referred to two accidents in her life; one of them being the streetcar accident, the other being Diego Rivera.</td>
</tr>
</tbody>
</table>
**Questioning Strategies**
How does the artist use symbols in her paintings?
What elements help create mood in her paintings?
What do we know about this artist by viewing these images?

**Materials/Prep:**
Photographs of students, printed in grayscale
Pencils
Art journals
Colored pencils

**Lesson Procedure:**

**Day 1**
View artworks by Frida Kahlo. Discuss differences between portraits and self-portraits. In small groups, have students write down 3 symbols they observe in the paintings and what they think they are supposed to represent. Have students name 3 symbols they see in their everyday lives and what they represent. Share.

In art journals, have students write a paragraph about themselves. Optional topics can include: a funny story, their family, hobbies and interests, future goals, superpowers they wish they had.

**Day 2**
Discuss facial proportions and show students how to use measurements to determine placement and size of facial features. Demonstrate sketching main shapes, observational drawing, and adding texture and value to define form. Practice in art journals.

**Day 3**
Begin final drawings on 12x18 paper.

**Days 4-5**
Continue working on self-portrait drawings.

**Day 6**
Have students read the paragraph they wrote on day one and choose three symbols to incorporate into their artworks that would represent parts of their stories/descriptions. Practice drawing the symbols in art journals before adding them to the final drawing. Discuss composition and emphasis.

**Day 7-9**
Finalize drawings. Use colored pencils if desired.

**Day 10**
Students will self-assess using the Quality of Artwork rubric, and fill out the Artist Statement worksheet. If time allows, students may present their work to the class.
Lesson Extension:
Draw a self-portrait using a mirror and only drawing with marker.
Do a blind contour drawing of your face without lifting up the pencil.
Create a symbol/logo for yourself.

Special Populations
Create a self-portrait collage instead using the grayscale printout and finding words and images from magazines.
Find pictures in magazines and write a fictional story about yourself inspired by them.
Have students trace the printout using a light box or window instead of drawing from observation.

Evaluation
Rubric: student self-assessment
Rubric: teacher assessment
Artist Statement Worksheet
Appendix F

Symbolic Self-Portraits

In this lesson you will:

1. View and discuss self-portraits by Frida Kahlo.
2. Learn about facial proportion and draw a realistic self-portrait in pencil using a grayscale photograph as a reference.
3. Incorporate at least three symbols into the background of your composition that represent certain aspects of your life.

1. What is the difference between a portrait and a self-portrait?

2. Why might an artist make a self-portrait?

3. What events in Frida Kahlo’s life influenced her artwork?

4. Name 3 symbols she used in her artwork and what they each represented:

   #1:
   #2:
   #3:

5. In groups at your table, come up with 3 symbols you might see in your daily life, on TV, or the internet. Draw them here, and explain what they represent (not just what they are).

<table>
<thead>
<tr>
<th>Ex:</th>
<th>a-book</th>
<th>a book is a symbol for knowledge and education</th>
</tr>
</thead>
</table>
A little something about ME! In the space below, write a short story or description about yourself. It can be whatever you want, fiction or non-fiction. Possible topics may include:

<table>
<thead>
<tr>
<th>a funny story</th>
<th>your family</th>
<th>hobbies and interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>future goal</td>
<td>superpowers you wish you had</td>
<td>your evil twin</td>
</tr>
<tr>
<td>favorite place</td>
<td>switching places with someone</td>
<td>most embarrassing moment</td>
</tr>
</tbody>
</table>

Title: ____________________________________________
Facial Proportions — although these rules are not exact for every single face, they are good guidelines to follow to ensure more accuracy.

Tip: Use a string or a piece of scrap paper to “measure” parts of the face and use the measurements to plot out where other features will go.

- The width of the head is about 2/3 of the height.
- The eyes are centered vertically.
- The space between the eyes is about the same length as the width of one eye.
- The nostrils line up with the inner corners of the eyes.
- The corners of the mouth line up with the pupil.
- Ears are about the same height as the space between the eyes and the tip of the nose.

Practice Here:
*Your three drawings should look like different people, since they ARE different people!
**Symbolic Self-Portrait Artist Statement**

An artist statement helps the viewer understand the concept that an artist is trying to convey (intent), the reasons why the artist chose it, and how it relates to the artist’s life. Information about choices of subject matter, media, and technique can be very helpful for the viewer to appreciate the art work. An artist statement should clarify the message, as well as provoke the viewer to consider it in relationship to their own life.

Please respond to the following prompts in order to develop an informative artist statement.

Explain how the story/description you chose is a good representation of you.

Explain the symbols you incorporated into your self-portrait, and what they mean. (Avoid sentences like: “I included a soccer ball because I like soccer” – Go deeper. What is it that you like about it exactly?)

Using descriptive language, explain how you organized the visuals and imagery you used, and how they helped communicate your idea.
Lesson #2: Constructive Language Videos

Big Ideas: Communication, Group work

Grade Level: 7th grade

Time: 5 - 45 min class periods

Lesson Overview: After discussing unhelpful and constructive language, students will work in groups to create an instructional video demonstrating the difference.

VA SOLs:
7.4 The student will communicate ideas, experiences, and narratives through the creation of works of art, using traditional and contemporary media.
7.12 The student will identify the uses and impact of persuasive techniques (e.g., selection of images, design, type, media) in print and contemporary media.
7.15 The student will apply processes of art criticism to evaluate works of art.
7.18 The student will analyze and reflect on the purposes and meaning of art.

Objectives:
1. The student will discuss the differences between unhelpful and constructive language.
2. Students will work in groups to direct and record a video demonstrating how transform unhelpful language into constructive language.
3. The student evaluate the videos of the other groups to determine which was the most effective.

VC Component:
How do commercials persuade viewers?

Vocabulary:
Unhelpful language, constructive language, script, props, cooperative learning

Images and Descriptions:
Watch Anti-littering commercial:
http://www.youtube.com/watch?v=n8R12kLfqS4
Anti-Bullying:
http://www.youtube.com/watch?v=fuz1VxQstVg
Get Active:
http://www.youtube.com/watch?v=32sYgtajv9Q

Questioning Strategies
What are the messages in these commercials?
What images, text or language make them persuasive?
Materials/Prep:
Flip cameras
Poster board
Props

Lesson Procedure:
Day 1
Discuss unhelpful language and constructive language. Have students fill out worksheet converting unhelpful responses to helpful ones. Students then make groups of 3-4 and delegate job assignments.

Day 2
View commercials and discuss persuasive techniques used. Groups choose a topic for their commercial and begin writing the script and making props.

Day 3
Continue making props, rehearse, begin filming.

Day 4
Film commercials and edit on iMovie.

Day 5
Show finished videos and have students fill out assessments for each group. Vote on most effective video.

Lesson Extension:
Make a persuasive music video.
Make a parody of a commercial you have seen on TV.

Evaluation
Video Assessment Worksheet
Appendix H

**Art Room Speak**

It can be really hard to talk about our own art. Most of us are our “own worst critic.” Alas, you are enrolled in an art class, and you be required to complete projects, some of which you will find more difficult than others.

It can be frustrating when an artwork doesn’t turn out the way you intended it to, or when you struggle with a certain media or technique. It is important remember that you are here to learn and practice techniques, and you will improve with time. Failure and mistakes are part of the learning process, so learn to be a problem-solver, not a problem-dweller.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Unhelpful Response</th>
<th>Constructive Response</th>
</tr>
</thead>
</table>
| Technical Trouble with media or technique | • I can’t do this.  
  • I hate (tool, material, technique). | • What am I doing incorrectly?  
  • Can you show me a better way?  
  • Can I have extra (material) to practice with? |
| Lack of Inspiration                   | • I can’t think of any ideas.  
  • I don’t like my ideas. | • I am interested in (activity, hobby, type of entertainment), how can use that as inspiration?  
  • I’m out of ideas, do you have any suggestions? |
| Lack of Motivation                    | • This project is boring.  
  • This is too hard/takes too long. | • I would be more interested in doing this project if I could (do it this way).  
  • This is hard, and it takes a long time, but I will do my best to complete it. |
| Missed class(es) or Instruction       | • I wasn’t here, so I didn’t know what I was supposed to be doing. | • I missed class, can you tell me what we did yesterday?  
  • I don’t understand the directions, can you explain them to me? |
| Art does not communicate idea         | • It is supposed to be about (theme), you just don’t get it. | • What did you think was the message, and how can I communicate it more clearly? |
| You think you are done, but teacher says you’re not | • Isn’t this good enough?  
  • There’s nothing left to do. | • What can I add to it to make it more finished?  
  • Is there a specific area of the work that I should work more on? |

Turn the following unhelpful phrases into constructive phrases:

1. **You’re doing that wrong, let me do it instead.**

2. **I can’t believe you think that’s a good idea.**

3. **I’m never going to be good at painting.**
Assignment - Instructional Videos

In groups of 3 or 4, you will create an instructional video that addresses an issue, problem, or difficulty a student might have while creating art, and demonstrate the benefits of constructive language in contrast to unhelpful language.

<table>
<thead>
<tr>
<th>Job</th>
<th>Responsibilities</th>
<th>Person/People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writer</td>
<td>create 2 scripts, one using unhelpful language, and the other using constructive language, both addressing the same art issue</td>
<td></td>
</tr>
<tr>
<td>Prop Manager</td>
<td>make or provide any necessary signs or props</td>
<td></td>
</tr>
<tr>
<td>Actors (at least 2)</td>
<td>Deliver convincing performances</td>
<td>1. 2.</td>
</tr>
<tr>
<td>Director</td>
<td>Gives actors direction and films</td>
<td></td>
</tr>
</tbody>
</table>

Art Problem (be specific):___________________________________________

Unhelpful language:_________________________________________________

Constructive Language:_____________________________________________

Setting:__________________________________________________________

Props needed:_____________________________________________________

Timeline:

Day 1      Assign jobs, fill out worksheet
Day 2      Writer and actors work on scripts, director and prop manager design/make props
Day 3      Director and actors rehearse, prop manager and write finish making props
Day 4      Filming
Day 5      Present Videos
Appendix I

Constructive Language Video Assessment

1. Group Members:  
   Topic:  
   Using a scale of 1-5, 1 being “not successful,” and 5 being “very successful,” rate the following:
   Camera angle(s): 1 2 3 4 5  
   Clarity of Dialogue: 1 2 3 4 5  
   Effectiveness of Message: 1 2 3 4 5  
   Acting/Believability: 1 2 3 4 5

2. Group Members:  
   Topic:  
   Using a scale of 1-5, 1 being “not successful,” and 5 being “very successful,” rate the following:
   Camera angle(s): 1 2 3 4 5  
   Clarity of Dialogue: 1 2 3 4 5  
   Effectiveness of Message: 1 2 3 4 5  
   Acting/Believability: 1 2 3 4 5

3. Group Members:  
   Topic:  
   Using a scale of 1-5, 1 being “not successful,” and 5 being “very successful,” rate the following:
   Camera angle(s): 1 2 3 4 5  
   Clarity of Dialogue: 1 2 3 4 5  
   Effectiveness of Message: 1 2 3 4 5  
   Acting/Believability: 1 2 3 4 5

4. Group Members:  
   Topic:  
   Using a scale of 1-5, 1 being “not successful,” and 5 being “very successful,” rate the following:
   Camera angle(s): 1 2 3 4 5  
   Clarity of Dialogue: 1 2 3 4 5  
   Effectiveness of Message: 1 2 3 4 5  
   Acting/Believability: 1 2 3 4 5

5. Group Members:  
   Topic:  
   Using a scale of 1-5, 1 being “not successful,” and 5 being “very successful,” rate the following:
   Camera angle(s): 1 2 3 4 5  
   Clarity of Dialogue: 1 2 3 4 5  
   Effectiveness of Message: 1 2 3 4 5  
   Acting/Believability: 1 2 3 4 5
6. Group Members: ____________________________
   Topic: ______________________________________

   Using a scale of 1-5, 1 being “not successful,” and 5 being “very successful,” rate the following:

   Camera angle(s): 1 2 3 4 5
   Clarity of Dialogue: 1 2 3 4 5
   Effectiveness of Message: 1 2 3 4 5
   Acting/Believability: 1 2 3 4 5

7. Group Members: ____________________________
   Topic: ______________________________________

   Using a scale of 1-5, 1 being “not successful,” and 5 being “very successful,” rate the following:

   Camera angle(s): 1 2 3 4 5
   Clarity of Dialogue: 1 2 3 4 5
   Effectiveness of Message: 1 2 3 4 5
   Acting/Believability: 1 2 3 4 5

8. Group Members: ____________________________
   Topic: ______________________________________

   Using a scale of 1-5, 1 being “not successful,” and 5 being “very successful,” rate the following:

   Camera angle(s): 1 2 3 4 5
   Clarity of Dialogue: 1 2 3 4 5
   Effectiveness of Message: 1 2 3 4 5
   Acting/Believability: 1 2 3 4 5

   Describe what your experience was like in this group project using 2-3 sentences:
   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

   Most Effective Video: ________________________________
   Why? __________________________________________________
   _______________________________________________________

   Best Actor/Actress: ________________________________
   Best Director: ________________________________
   Best Script: ________________________________
Appendix J

Lesson #3: Theme Teams

**Big Ideas:** Collaboration, Elaboration

**Grade Level:** 7th grade

**Time:** 15 - 45 min class periods

**Lesson Overview:** Students will work in groups to create a series of cohesive paintings that communicate individual aspects of an over-arching theme.

**VA SOLs:**
7.3 The student will use ideas, concepts, and prior knowledge to solve art-making problems and create works of art.
7.4 The student will communicate ideas, experiences, and narratives through the creation of works of art, using traditional and contemporary media.
7.10 The student will identify styles and themes in contemporary and historical works of art.
7.14 The student will identify subjects, themes, and symbols as they relate to meaning in works of art.

**Objectives:**
1. Students will discuss the benefits of collaboration in the creation of original artworks.
2. Students will work in groups to create a series of paintings that are visually cohesive and communicate narrower aspects of an over-arching theme.
3. The students will craft a group artist statement for their collaborative series by combining statements written about their individual works.

**Vocabulary:**
themes, collaboration, cohesive elements, style, composition, unity, harmony, symbolism

**Images and Descriptions:**
Terry Border and Noah Scalin combined their art forms to play off each other’s ideas and create a new concept.
Jean Michel Basquiat and Andy Warhol also combined their efforts to create artworks that still resembled the work of the individual artists.

**Questioning Strategies**
What kinds of careers involve collaboration?
What are the benefits of collaboration?
What are the disadvantages?
Have you ever collaborated with someone outside of school?

**Materials/Prep:**
Worksheets
Art Journals
8x10 canvas boards
Acrylic Paint

**Lesson Procedure:**
**Day 1**
View artworks by collaborative artists and discuss the benefits and disadvantages of collaboration. Fill out asset inventory and turn in. Assign students to cooperative learning groups by analyzing responses on the asset inventories.

**Day 2**
Assign students to groups. Hand out worksheets. Explain procedure of the project. Have students begin discussing the possible topics and filling out the brainstorming worksheet.

**Day 3**
Students continue filling out the brainstorming worksheet and begin sketching ideas for their paintings, including elements that will recur in their paintings to create a sense of unity.

**Day 4**
Demonstrate daily procedure for getting painting supplies and materials. Demonstrate how to begin painting by establishing large shapes on the canvas first, and using lighter values to fill in.
**Days 5-6**
Begin paintings. Groups should be working in close proximity to encourage relevant dialogue.

**Day 7**
Complete First Unity Check Point. Continue painting.

**Days 8-10**
Continue painting.

**Day 11**
Complete Second Unity Check Point. Continue Painting.

**Day 12-13**
Finish paintings.

**Day 13-14**
Complete individual Quality of Artwork Rubrics and artist statement worksheets. Turn in with artwork once completed.

**Day 15**
Combine artist statements into one group statement and type.

**Evaluation**
Student Quality of Artwork Rubric
Teacher Quality of Artwork Rubric
Artist Statement
Appendix K

Asset Inventory

Circle your 10 strongest assets, and cross out your 10 weakest assets.

General Skills
- meet deadlines
- organize and manage projects
- follow instructions
- conduct research in a library or on the Internet

Leadership skills
- make decisions
- assign jobs
- help set goals for my team
- give clear instructions
- explain things to others
- motivate people
- settle disagreements

Verbal/communication skills
- clearly express myself
- talk easily with others
- create and talk about ideas
- design presentations
- be logical
- speak in public

People skills
- help others
- manage conflicts, resolve issues
- be tactful and diplomatic
- be kind and understanding
- be a good listener
- show patience

Creative skills
- take risks when necessary
- think “outside the box”
- interpret meaning
- generate multiple solutions
- generate original ideas
- integrate ideas from other subjects

Areas of Expertise in Art:
- drawing:
  - faces
  - human figure
  - still life
  - landscape
  - buildings
  - cartoons/illustrations
  - animals
- painting
- sculpting
- color/color mixing
- expressing emotions visually
- designing posters
- line designs/patterns
- building structures
- molding clay
- Other:

Other Areas of Expertise:
- Math
- Science
- Literature
- History
- Music
- Creative writing
- Languages
- Cultures
- Genres
- Sports
- Other:
- Other:
- Other:
- Other:
**THEME TEAMS!**

**Team Name:**

**Teammates:**

**Team objectives:**

1. Agree upon an over-arching theme that will guide each of your individual paintings.
2. Brainstorm ideas for paintings that will support the theme, and each choose one.
3. Provide ideas and suggestions for teammates to enhance their artwork.
4. Provide encouragement and constructive critique for teammates.
5. Aid in problem-solving and technical issues.

Please rewrite each objective in your own words:

1. 
2. 
3. 
4. 
5. 

**Expectations:**

1. Each member will contribute to the team DAILY.
2. Teammates are responsible for informing absentees about missed classes.
3. Communication between teammates should be respectful. (No hurtful language)
4. Disagreements will be settled within the group using reasonable compromise.
5. Issues that hinder the working relationships within a team must be addressed and solutions agreed upon by all parties.

I, (print name)__________________________, understand that I will be working in a team and commit to listening to others' ideas, communicating my own ideas, and solving conflicts through dialogue and compromise.

Sign x_________________________  Date x_________________
Project Overview:

Working in teams, students will create a unified body of paintings that address a common theme.

Project Objectives:

1. After viewing groups of artworks addressing common themes, teams will mutually agree upon a theme for their individual paintings to address.
2. With their teammates’ help, each student will develop a concept for their painting that conveys an aspect of the theme.
3. Students will consult with their teams throughout the entire process to ensure cohesiveness/unity among the paintings. (i.e. painting style, recurring elements, colors, media, techniques, etc.)
4. Students will construct and type a combined artist statement, using correct grammar and punctuation, as well as descriptive language, and present to the rest of the class.

Possible Themes: Cross out the one that interests you the least.

<table>
<thead>
<tr>
<th>General</th>
<th>Specific Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships between people</td>
<td>Parents/children, siblings, friends, teachers/students, officials/citizens</td>
</tr>
<tr>
<td>Environment</td>
<td>protection of, deterioration of, threats to, man-made vs. nature</td>
</tr>
<tr>
<td>Dangers or Benefits of technology</td>
<td>social media, automation, biogenetics, dependency on, GMOs, progress, efficiency</td>
</tr>
<tr>
<td>Gender issues</td>
<td>biases, expectations, injustices, boys/men are....., girls/women are.....</td>
</tr>
<tr>
<td>Diversity</td>
<td>benefits, conflicts, what diversity means to you</td>
</tr>
<tr>
<td>Visions of the Future</td>
<td>utopian, dystopian, near future, far future, personal, global</td>
</tr>
<tr>
<td>Reflections of the Past</td>
<td>personal, historical, successes, failures, nostalgia, extinction</td>
</tr>
<tr>
<td>Traditions/Rituals/Routines</td>
<td>mundane aspects of daily life, cultural traditions, rites of passage</td>
</tr>
</tbody>
</table>

Consult your teammates. Cross out the themes that interested each of your teammates the least. From the remaining options, come to an agreement on one general theme, and write it on your “Brainstorming Worksheet.”
| Team: | | | | | | |
|------|------|------|------|------|------|
| General Theme: | | | | | |
| Specific Theme #1 | Specific Theme #2 |
| Concept For Painting #1 | Concept For Painting #2 | Concept For Painting #3 | Concept For Painting #1 | Concept For Painting #2 | Concept For Painting #3 |
| Visuals/Imagery Needed (scenes, objects, colors, textures, words/text, etc.) | Visuals/Imagery Needed (scenes, objects, colors, textures, words/text, etc.) | Visuals/Imagery Needed (scenes, objects, colors, textures, words/text, etc.) | Visuals/Imagery Needed (scenes, objects, colors, textures, words/text, etc.) | Visuals/Imagery Needed (scenes, objects, colors, textures, words/text, etc.) | Visuals/Imagery Needed (scenes, objects, colors, textures, words/text, etc.) |
| | | | | | |
| Once your team has completed this worksheet, decide which specific theme your team will address and which painting concept each person will develop. Begin sketching the visuals/imagery you listed above in your art journal.
Artist Statement

An artist statement helps the viewer understand the concept that an artist is trying to convey (intent), the reasons why the artist chose it, and how it relates to the artist's life. Information about choices of subject matter, media, and technique can be very helpful for the viewer to appreciate the artwork. An artist statement should clarify the message, as well as provoke the viewer to consider it in relationship to their own life.

Please respond to the following prompts in order to develop an informative artist statement.

Explain how the theme you chose is one that many people can relate to.

Explain your relationship to the theme you chose as the concept for your painting.

Using descriptive language, explain what visuals and imagery you used, and how they helped communicate your concept.

What did your group do to unify your paintings and make them look like a cohesive body of work?
Appendix M

Unity Check Point #1

Group Name: ___________ Date: ______

Put Paintings together in the arrangement you intended and consider the following:

1. Do they seem to go together? Why or Why not?
2. Do lines flow from one canvas to the other or do similar colors and/or textures appear in each painting to provide unity?
3. Do you feel like you are expressing your individual and overall themes effectively?

Describe the elements in your paintings that unite them: __________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

What changes do you all agree will improve your work (both individual and collaborative)?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

Unity Check Point #2

Group Name: ___________ Date: ______

Put Paintings together in the arrangement you intended and consider the following:

1. Do they seem to go together? Why or Why not?
2. Do lines flow from one canvas to the other or do similar colors and/or textures appear in each painting to provide unity?
3. Do you feel like you are expressing your individual and overall themes effectively?

What changes have you made since the first Unity Check Point?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________

What elements do you all agree are the most successful in your painting, and which parts still need improvement?
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
### Appendix N

<table>
<thead>
<tr>
<th>Students involved</th>
<th>Topic</th>
<th>+ or -</th>
<th>Tone</th>
<th>Lang.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Art</td>
<td>Technique</td>
<td>Concept</td>
<td>Friendly</td>
<td>Eng</td>
</tr>
<tr>
<td>Supplies</td>
<td>Non-Art Related</td>
<td></td>
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### Summary Measures

- **Mean:** 26.89, 27.10, -3, 16.39, 17.26, 0.93, 15.14, 17.29, 2.14
- **Median:** 27, 27, 0, 17, 18, 1, 16, 18, 2
- **Mode:** 29, 27, 5, 19, 18, 0, 18, 18, 2
- **Range:** 15-32, 19-31, -6-8, 10-19, 9-20, -9-10, 8-19, 13-20, -5-10


Corcoran, K., & Sim, C. (2009). Pedagogical reasoning, creativity and cooperative learning in the visual art classroom. *International Journal of Education through Art, 5*(1), 51-61. doi:10.1386/eta.5.1.51_1


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http://www.arteducators.org/research/art-education


http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,cookie,url,cpid,uid&custid=s8863137&db=eric&AN=ED429989&site=eds-live&scope=site&authtype=ip,uid


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