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STRUGGLING STUDENTS BECOME SUCCESSFUL ART MENTORS: A MIXED METHOD MULTI-CASE STUDY

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Date

STRUGGLING STUDENTS BECOME SUCCESSFUL ART MENTORS: A MIXED
METHOD MULTI-CASE STUDY

A Dissertation
Submitted to the Faculty
of
Purdue University
by
Amanda Sue Mayes

In Partial Fulfillment of the
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of
Doctor of Philosophy

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I dedicate this dissertation to my son, Graham. I hope I have made you proud.

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TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ix
LIST OF FIGURES.....	x
ABSTRACT	xi
CHAPTER 1. INTRODUCTION.....	1
1.1 Statement of Purpose	1
1.2 Introduction to the Problem.....	3
1.3 Problem Statement.....	5
CHAPTER 2. BACKGROUND DEVELOPMENT: LITERATURE REVIEW	6
2.1 Review of Literature on Benefits of Art	6
2.1.1. Defining the Arts	6
2.1.2 A Case for the Arts	7
2.1.3 The Arts and Success in School	7
2.1.4 Learning in the Arts Outside of School.....	13
2.1.5 Benefits Unique to the Arts	15
2.1.6 Lack of Causal Links Between Academic Success and the Arts.....	15
2.2 Review of Literature on Benefits of Mentoring/Tutoring.....	17
2.2.1 Defining Mentoring and Tutoring.....	17
2.2.2 High School Students as Mentors.....	18
2.2.3 Mentoring and Tutoring as Beneficial to the Tutor/Mentor	20
2.2.4 Struggling Students Becoming Mentors.....	23
2.2.5 Mentoring in the Visual Arts	25
2.3 Summary	27
CHAPTER 3. DESIGN OF STUDY	29
3.1 Theoretical Framework	29

	Page
3.2 Research Questions.....	31
3.3 Methods.....	31
3.3.1 Qualitative and Quantitative Methods.....	31
3.4 Subjects.....	33
3.4.1 Criteria for Selection.....	33
3.4.1.1 School.....	33
3.4.1.2 Case Study Subjects.....	34
3.4.1.2.1 Case 1: Tori.....	34
3.4.1.2.2 Case 2: Emily.....	35
3.4.1.2.3 Case 3: Hannah.....	36
3.4.1.2.4 Case 4: Kyle.....	37
3.4.1.1.5 Case 5: Luke.....	37
3.5 Setting.....	39
3.5.1 School Community.....	39
3.6 Techniques for Gathering and Managing Data.....	40
3.6.1 Questionnaires.....	41
3.6.2 Researcher Journal & Field Notes.....	41
3.6.3 Video Recordings, Observations & Interviews.....	42
3.6.4 Academic Records.....	43
3.6.5 Piers-Harris Children's Self Concept.....	43
3.6.6 Journals.....	43
3.6.7. Artwork.....	44
3.8 Techniques for Analyzing, Interpreting, and Presenting Data.....	44
3.8.1 Transcripts & Video Recordings.....	44
3.8.2 Coding.....	45
3.8.3 Comparative Analysis.....	45
3.9 Role of Researcher.....	47
3.10 Researcher Bias.....	49
3.11 Perceptivity.....	49
CHAPTER 4. ANALYSIS OF DATA.....	50
4.1 Case Studies: Mentors.....	50
4.1.2 Case 1: Tori.....	50

	Page
4.1.2.1 Development of Mentoring Relationship	52
4.1.2.2 Elementary Mentee Perspective.....	55
4.1.2.3 Journal Entries	56
4.1.2.4 Piers-Harris Children's Self-Concept Scale	56
4.1.2.5 Teacher Questionnaire	58
4.1.2.6 School Performance	59
4.1.2.7 Interviews	59
4.1.2.8 Artwork	62
4.1.3 Case 2: Emily	69
4.1.3.1 Development of Mentoring Relationship	70
4.1.3.2 Elementary Mentee Perspective.....	73
4.1.3.3 Journal Entries	74
4.1.3.4 Piers-Harris Children's Self-Concept Scale	75
4.1.3.5 Teacher Questionnaire	77
4.1.3.6 School Performance	78
4.1.3.7 Interviews	79
4.1.3.8 Artwork	81
4.1.4 Case 3: Hannah.....	87
4.1.4.1 Development of Mentoring Relationship	88
4.1.4.2 Elementary Mentee Perspective.....	90
4.1.4.3 Journal Entries	91
4.1.4.4 Piers-Harris Children's Self-Concept Scale	92
4.1.4.5 Teacher Questionnaire	95
4.1.4.6 School Performance	95
4.1.4.7 Interviews	96
4.1.4.8 Artwork	99
4.1.5 Case 4: Kyle	105
4.1.5.1 Development of Mentoring Relationship	106
4.1.5.2 Elementary Mentee Perspective.....	109
4.1.5.3 Journal Entries	110
4.1.5.4 Piers-Harris Children's Self-Concept Scale	111
4.1.5.5 Teacher Questionnaire	113

	Page
4.1.4.6 School Performance	114
4.1.4.7 Interviews	115
4.1.4.8 Artwork	120
4.1.6 Case 5: Luke	127
4.1.6.1 Development of Mentoring Relationship	128
4.1.6.2 Elementary Mentee Perspective.....	130
4.1.5.3 Journal Entries	131
4.1.6.4 Piers-Harris Children's Self-Concept Scale	132
4.1.6.5 Teacher Questionnaires.....	134
4.1.6.6 School Performance	136
4.1.6.7 Interviews	137
4.1.6.8 Artwork	140
4.2 Case Studies: Control Group.....	144
4.2.2 Case 6: Izzy.....	144
4.2.2.2 Piers-Harris Children's Self-Concept Scale	144
4.2.2.3 Teacher Questionnaire	147
4.2.2.4 School Performance	148
4.2.3 Case 7: Phil	149
4.2.3.2 Piers-Harris Children's Self-Concept Scale	149
4.2.3.3 Teacher Questionnaire	151
4.2.3.4 School Performance	152
4.2.4 Case 8: Pam.....	153
4.2.4.2 Piers-Harris Children's Self-Concept Scale	153
4.2.4.3 Teacher Questionnaire	155
4.2.4.4 School Performance	156
4.3 Cross Case Analysis.....	157
4.3.2 Discussion and Findings of Piers-Harris Children's Self-Concept Scale	157
4.3.3 Discussion and Findings of Parent and Teacher Questionnaires.....	160
4.3.4 Discussion and Findings of School Performance.....	165
4.3.4.1 GPA	165
4.3.4.2 Discipline Referrals	166
4.3.4.3 Attendance and Tardies.....	167

	Page
4.3.5 Discussion and Findings of Student Interviews and Questionnaires	169
CHAPTER 5. SUMMARY OF FINDINGS.....	172
5.1 Research Questions.....	173
5.1.1 Impacting Self-Concept	173
5.1.2. What Effect Does the Art Mentoring Program Have on Self-Concept? .	173
5.1.3 Impacting Academic Success and Delinquent Behaviors	175
5.1.3.1 What Effect Does the Art Mentoring Program Have on Academic Success and Delinquent Behavior?	176
5.1.4 Mentoring and the Arts	179
5.1.4.1 How Does an Art Mentoring Program Impact Academically Struggling Students?.....	179
5.2 Conclusion.....	182
CHAPTER 6. IMPLICATIONS AND FURTHER RESEARCH	184
6.1 Implications.....	184
6.2 Further Research	186
6.2.1 Setting and Subjects.....	186
6.2.2 Length of Program	187
6.2.3 Student-Driven Art	187
Table of Contents	Page
6.2.4 Long-Term Effects	188
6.2.5 A Case for Art Mentoring Programs	189
REFERENCES.....	190
APPENDICES	
Appendix A	198
Appendix B	208
Appendix C.....	210
VITA.....	212

LIST OF TABLES

Table	Page
Table 4.1 Tori's Piers-Harris Scores	58
Table 4.2: Emily's Piers-Harris Scores	77
Table 4.3: Hannah's Piers-Harris Scores.....	94
Table 4.4: Kyle's Piers-Harris Scores	113
Table 4.5: Luke's Piers-Harris Scores	134
Table 4.6: Izzy's Piers-Harris Scores.....	146
Table 4.7: Phil's Piers-Harris Scores	150
Table 4.8: Pam's Piers-Harris Scores.....	155
Table 4.9: Average Piers-Harris Scores	157
Table 4.10: Piers-Harris Total Scores.....	158
Table 4.11: Average Piers-Harris Scores Across Domains.....	159
Table 4.12: Chart of Average Piers-Harris Scores Across Domains	160
Table 4.13: Negative Teacher Assessments of the Art Buddies Group	162
Table 4.14: Positive Teacher Assessments of the Art Buddies Group.....	162
Table 4.15: Positive Teacher Assessments of the Control Group.....	164
Table 4.16: Negative Teacher Assessments of the Control Group	164
Table 4.17: Cumulative GPA vs. Semester of Program GPA	165
Table 4.18: Total Days Absent Semester Before and Semester of Program	167
Table 4.19: Unexcused Absences Semester Before and Semester of Program	168
Table 4.20: Tardy to Class Semester Before and Semester of Program	169
Table 5.1: Piers-Harris Scores.....	174
Table 5.2: GPA- Cumulative vs. Semester of Program.....	177
Table 5.3: Positive Teacher Assessments of the Art Buddies Group.....	178
Table 5.4: Total Days Absent Semester Before and Semester of Program	180
Table 5.5: Unexcused Absences Semester Before and Semester of Program.....	180

LIST OF FIGURES

Figure	Page
Figure 4.1: Tori, Tami, and Amy's Radial Symmetry Shrink Plastic.....	62
Figure 4.2: Tori's Wire Tree Sculpture (name obscured).....	63
Figure 4.3: Tori's Broken Ceramic Tile Mural.....	64
Figure 4.4: Tami's Wire Tree (elementary mentee).....	65
Figure 4.5: Amy's Wire Tree (elementary mentee).....	66
Figure 4.6: Tami's Mural (elementary mentee).....	67
Figure 4.7: Amy's Mural (elementary mentee).....	68
Figure 4.8: Emily, Natalie, and Ben's Radial Symmetry Shrink Plastic.....	81
Figure 4.9: Emily's Wire Tree Sculpture.....	82
Figure 4.10: Emily's Broken Ceramic Tile Mural.....	83
Figure 4.11: Ben's Wire Tree (elementary mentee).....	84
Figure 4.12: Natalie's Wire Tree (elementary mentee)	85
Figure 4.13: Ben and Natalie's Broken Ceramic Tile Mural (elementary mentees)...	86
Figure 4.14: Hannah, Tony, and Kristi's Radial Symmetry Shrink Plastic.....	99
Figure 4.15: Hannah's Wire Tree.....	100
Figure 4.16: Hannah's Broken Ceramic Tile Mural.....	101
Figure 4.17: Tony's Wire Tree Sculpture (elementary mentee).....	102
Figure 4.18: Kristi's Wire Tree Sculpture (elementary mentee).....	103
Figure 4.19: Tony and Kristi's Broken Ceramic Tile Mural (elementary mentees)..	104
Figure 4.20: Kyle, John, and Nikki's Radial Symmetry Shrink Plastic	120
Figure 4.21: Kyle's Wire Tree Sculpture	121
Figure 4.23: John's Wire Tree Sculpture (elementary mentee)	123
Figure 4.24: Nikki's Wire Tree Sculpture (elementary mentee)	124
Figure 4.25: John's Broken Ceramic Tile Mural (elementary mentee)	125
Figure 4.26: Nikki's Broken Ceramic Tile Mural (elementary mentee)	126
Figure 4.27: Luke's Wire Tree Sculpture	140
Figure 4.28: Luke's Broken Ceramic Tile Mural (pictured on the left).....	141
Figure 4.29: Lisa's Wire Tree Sculpture (elementary mentee).....	142
Figure 4.30: Lisa's Broken Ceramic Tile Mural (elementary mentee).....	143

ABSTRACT

Mayes, Amanda Sue. PhD., Purdue University, May, 2016. Struggling students become successful art mentors: A mixed methods multi-case study. Major Professor: F. Robert Sabol.

In the era of high stakes testing and teacher accountability, schools in the US continue the fight to prevent high school drop-outs and meet the needs of academically struggling students. Both the visual arts and mentoring programs have been shown to improve academic performance and emotional well-being. This study examined the impact of an art mentoring program on academically struggling high school students who became art mentors to elementary students. It considered the impact being an art mentor would have on academic success, delinquent behavior, and self-concept. Results suggest a positive relationship between being an art mentor and academic performance as defined through a .5 average positive increase in GPA and positive changes noted by classroom teachers. Results did not reveal a significant change in delinquent behavior or self-concept and suggest the need for further research in those areas.

CHAPTER 1. INTRODUCTION

1.1 Statement of Purpose

During my first teaching job at an urban, alternative high school, I was introduced to Dave, a 10th grade student who had a juvenile record and was on his last chance at completing his high school education. If Dave failed at “Last Chance High,” he would be expelled from the school system. Even though I could tell Dave was an intelligent student with the ability to do well in school, he was struggling to pass courses and was failing. But not in my art room. Dave’s work was exceptional and displayed emotion, effort, and craftsmanship. Dave made frequent attempts to skip other classes in favor of working on his latest piece of art. In my classroom, Dave had the freedom to create works of art relevant to his life. While other teachers struggled with Dave’s classroom behaviors, I never experienced any issues. Dave was not the only student who struggled in other classes while thriving in my art room and was representative of a larger group of students. Although it was my first teaching position, Dave and the many students like him inspired me to focus my research on how the arts and mentoring programs can be used as a tool to improve the academic performance of struggling students.

The struggling students in my class were often absent or tardy, behaved poorly, and exhibited substandard academic performance, which follows the characteristics identified by Kaufman and Bradby (1992). My students were in

danger of becoming high school drop-outs. The problem of students academically struggling and potentially dropping out is of grave concern in the United States. According to *An Action Agenda for Improving America's High Schools* (Conklin, Currna, & Gandal, 2005), 29% of students do not graduate from high school. This call to action stated schools that are impersonal, rigid, and alienating for young people, especially students who struggle academically and socially, must be restructured. Schools will continue to face the pressure of meeting the needs of struggling students. Approaches to this problem are varied and include using differentiated instruction (Cusumano & Mueller, 2007), creating a meaningful curriculum (Cushman, 2006), and setting high expectations (Landsman, 2006). Research also indicates involvement in the visual and performing arts strengthens academic success, improves emotional development, and reduces inappropriate behavior (Barry, Taylor, & Walls, 1990; Boldt & Brooks, 2006; Catterall, 1997; Respress & Lufti, 2006; Wallace-Digarbo & Hill, 2006; Weitz, 1996). In addition, mentoring and tutoring programs have been found to often be just as beneficial to the mentor/tutor as they are to the mentee/tutee (Benard, 1990; Gensemer, 2000; Lee, Murdock, & Paterson, 1996). Struggling students can also benefit from mentoring and tutoring relationships (Giesecke & Cartledge, 1993; Lazerson, Foster, Brown, & Hummel, 2001).

Because mentoring and involvement in the arts appear to be beneficial to students, my research formulated a question as to whether a combination of these two strategies would be more powerful than mentoring or the arts alone.

1.2 Introduction to the Problem

Several researchers have explored the impact arts programs have on struggling students. In an after school arts intervention program conducted by Respress and Lufti (2006), 57% of the arts participants had a .5 increase in GPA compared to 11% exhibiting a .5 GPA increase in the control group. Self-esteem also improved in the arts group. Thirty-seven percent of the participants improved their total self-esteem scores while 7% of the control group showed improvement. In another study focusing on the arts as an intervention tool, participants worked together with a professional artist to create works of art including a painted mural (Wallace-DiGarbo & Hill, 2006). Although only six participants completed the study, the results for individual participants were valuable. In a test measuring deviancy, one participant began the study with a raw score of ten. This translates into a pretest decile of six, meaning 60% of the population is defined as less deviant than this particular individual. After the intervention, the participant had a raw score of three. A score of three converts to a decile of 1, meaning 10% of the population is defined as less deviant. Based on the results of that single case, Wallace-DiGarbo and Hill concluded, "the project had its most beneficial effects on the highest-risk participants" (p. 123).

An additional prospective solution for meeting the needs of struggling students lies in mentoring, especially with research exploring the benefits of mentoring on the mentor. In a study where sixth grade students served as reading mentors to kindergarten students, both groups improved their attitudes toward reading and writing. Sixth grade mentors demonstrated academic improvement and a large increase in reading on their own (Gensemer, 2000).

In a study conducted by Giesecke and Cartledge (1993), fourth grade students who were struggling readers were paired with third grade tutees with similar reading levels. In addition to vast improvements in the number of sight words students retained, tutors and tutees both reported enjoying the tutoring sessions. Tutees discussed the fun they had working with another student while the tutors enjoyed their role as helpers. The tutors' scores on the Piers-Harris Children's Self Concept Scale (Piers & Harris, 2002) improved significantly.

Only one study has focused on struggling students serving as mentors in the visual arts (Rhyan, 1995). In this study, Rhyan followed nine deviant fifth grade students serving as mentors to younger special education students during an art mentoring program. Rhyan found that the mentors increased positive verbal interactions with peers. This was measured through a pre and post intervention survey completed by the participants' classroom teachers. Participants reduced office referrals by 92%.

Although the combination of the arts and mentoring was addressed in the study by Rhyan (1995), literature in the areas of mentoring and tutoring through the visual arts does not include any studies in which an academically struggling secondary student serves as an art mentor. In addition, much of the research, including Rhyan's study, lacks an experimental design. Due to the current lack of research in this area, I am exploring the potential of an arts mentoring program and trying to understand what it is like to be an academically struggling student serving as a mentor in the visual arts. I am also interested in the effect a visual arts mentoring program will have on the academic achievement, self concept, and school engagement of the mentors.

1.3 Problem Statement

The primary purpose of this study will be to understand academically struggling students' experiences as mentors in the visual arts. The mentors' experiences will be explored using interviews, observations, journal entries, and artwork. At the same time, teacher, parent, and student surveys; GPA; attendance records; behavioral records; and the Piers-Harris Children's Self Concept Scale will be used to measure the relationship among the mentoring condition and academic achievement, self concept, and school engagement. The major research question guiding this study is as follows: How does an art mentoring program impact academically struggling students?

CHAPTER 2. BACKGROUND DEVELOPMENT: LITERATURE REVIEW

2.1 Review of Literature on Benefits of Art

2.1.1. Defining the Arts

The National Foundation on the Arts and the Humanities Act, section 20 U.S.C. 952 (b), defines the arts as:

includ[ing], but [...] not limited to, music (instrumental and vocal), dance, drama, folk art, creative writing, architecture and allied fields, painting, sculpture, photography, graphic and craft arts, industrial design, costume and fashion design, motion pictures, television, radio, film, video, tape and sound recording, the arts related to the presentation, performance, execution, and exhibition of such major art forms, all those traditional arts practiced by the diverse peoples of this country and the study and application of the arts to the human environment (National Foundation on the Arts and Humanities Act, para. 1).

This study focuses on both the arts as a whole as well as the media specific to the visual arts such as drawing, painting, photography, and sculpture.

2.1.2 A Case for the Arts

The arts have historically struggled to earn a permanent place in the curriculum of public schools in the United States (Hoffman Davis, 2008; Hetland, Winner, Veenema, Sheridan, & Fowler, 1996). Many parents and teachers see the value of the arts and view them as important to a child's education; however, the arts are frequently considered by others to be a luxury or an area for self-expression rather than a fundamental part of a child's education (Hetland et al., 2007). In an era of high stakes testing driven by the federal No Child Left Behind legislation passed in 2001, the arts are often the first programs to be cut (Hoffman Davis, 2008; Hetland, et al. 2008). The decreased support for the arts has caused arts advocates to make a case that the arts are essential, using two distinct approaches. A large body of research focuses on the importance of the arts because arts involvement appears to improve academic performance in more traditional subjects such as reading and math. Conversely, a growing body of research examines the unique skills taught by the arts, regardless of transfer of these skills to other subject areas (Hoffman Davis, 2008; Hetland et al. 2007; Fowler, 1996). Both bodies of research seek to advocate for and clarify the role of the arts in public schools.

2.1.3 The Arts and Success in School

Research indicates that involvement in the visual and performing arts strengthens academic success, improves emotional development, and reduces inappropriate behavior (Boldt & Brooks, 2006; Catterall, 1997; Barry, Taylor, & Walls, 1990; Respress & Lufti, 2006; Rhyon, 1995; Wallace-DiGarbo & Hill, 2006; Weitz,

1996). Student involvement in the arts and success in school was analyzed by Catterall (1997) in a longitudinal study of 25,000 secondary students. Catterall found that 64.2% of eighth grade students with low arts involvement earned As and Bs in English while 79.2% of their peers with high arts involvement earned the same marks. On standardized testing, 42.7% of the low arts students scored in the top two quartiles compared to 66.8% in the high arts group. Also, 4.8% of the low arts students dropped out of school by grade 10 compared to 1.4% in the high arts group. These gaps widened by the time students reached the tenth grade when 72.5% of the high arts students scored in the top two quartiles on standardized tests compared to 45% in the low arts group.

In an examination of SAT scores, Fowler (1996) found that students who studied the arts regularly and strikingly outperformed their non-arts peers. The longer students studied the arts, the higher their scores. In 1993, students who participated in arts classes for more than four years scored fifty-three points higher on the verbal portion of the test and thirty-seven points higher on the math (1996). Vaughn and Winner (2000) examined twelve years of SAT data to determine if increased arts involvement improved SAT scores. They found a correlation between any arts classes and improved SAT scores and a dramatic improvement in scores when students had taken four or more arts classes.

Hotvedt (2001) set out to measure how the arts, movement, and emotion would impact her second grade students. Twenty students who were identified as being at least one academic year behind participated in the after school program. Hotvedt began by assessing the reading comprehension level of the students. They

read and discussed a story and then were asked to rewrite the story using picture cues in their own words. A single student was able to retell it, and most of the other students were not motivated to finish their retelling. One month later, they read the story again. This time, each student was assigned a character and acted out the parts. When asked to retell the story, each student was able to complete it successfully. In addition, the students did not require encouragement to complete the task. Hotvedt reported that “by integrating the arts into the curriculum, I have seen students master concepts that I thought were beyond their abilities” (p. 72).

In an investigation of the impact the Chicago Arts Partnership in Education (CAPE) program had on the Chicago Public Schools (CPS), Catterall and Waldorf (1999) found that schools using the CAPE program consistently scored higher on standardized testing than their non-CAPE counterparts. The difference in scores grew over time. When the CAPE program was introduced in 1992, CPS schools had an average of 28% of grade six students performing at grade level on the ITBS Math exam. CAPE schools averaged about 40%. By 1998, 60% of CAPE sixth graders were performing at grade level compared to 40% in the remainder of the CPS schools. On a reading test that determines the average grade levels of ninth graders, both CAPE and non-CAPE schools began at a low eighth grade reading level in 1992. By 1998, CAPE ninth graders were averaging ninth grade, fifth month performance in reading while other CPS schools were a grade level lower at eighth grade fifth month. This examination of the arts program showed strong and significant academic gains in schools using the CAPE program.

The same results noted by Catterall and Waldorf were observed by Kelly (2012) in an analysis of twelfth grade students in Florida public schools. Kelly found that students participating in arts classes were more likely to stay in school, have higher graduation rates, perform better in academic classes, and score higher on standardized testing including the SAT. Both math and verbal SAT scores showed a trend of improved scores as students took more arts classes.

Dropout prevention was also the focus of a pilot study in a ninth grade English class by Rosal, McCulloch-Vislisel, and Neece (1997). Art therapy sessions were integrated into the class to “improve self-esteem; explore ways to deal with teen concerns; open new avenues of expression (nonverbal and artistic modes); improve cooperation and group cohesion; develop sensitivity, appreciation, and tolerance towards others and their differences; connect the literature with their life experiences; and provide additional information about students for the teacher” (p.31). With a one group pretest-posttest quasi-experimental research design, a total of fifty students from two ninth grade English classes participated, ranging in age from thirteen to fifteen. Art therapy experiences took place once a month for a total of nine sessions. Students were asked to reflect on and discuss the literature they were reading at the time and how it related to their lives. Art materials such as paper, markers, scissors, and collage materials were used for personal expression. Artwork was shared with the group at the discretion of each student. At the end of each class session, students were encouraged to write about their art making in their journals. A Student Attitude Inventory, measuring issues related to school, family dynamics, and self-perception; report card grades; and dropout rates were used to evaluate the effectiveness of the art therapy program. Results of the Student Attitude Survey

showed statistically significant changes in a positive direction toward attitudes about school and family. In addition to the positive attitude changes, none of the students in the student failed the ninth grade or dropped out. One participant failed two classes, but retook them to earn a passing grade during the following summer. The authors concluded that the pilot research in this study suggested the need to further examine the use of art therapy techniques in mainstream schoolwork.

In a study of over 14,000 West Virginia high school students, Whisman and Hixson (2012) found that students who took at least two art classes were 1.3 times more likely to score at the proficient level on the mathematics portion and 1.6 times more likely to be proficient on the language arts portion of the WESTEST 2 standardized test. Students with two or more art credits were 1.5 times more likely to have scored at or above proficient levels on the ACT PLAN. A positive correlation was also found between additional arts credits and higher scores on standardized testing.

Catterall, Dumais, and Hampden-Thompson (2012) also examined the impact the arts had on students from families of low socio-economic status (SES). Their findings were drawn from the following large databases: National Education Longitudinal Study of 1988 (NELS:88), Early Childhood Longitudinal Study, Kindergarten Class of 1998-1999 (ECLS-K), and the Educational Longitudinal Study of 2002 (ELS:2002). Comparisons were made between students with a low and high level of arts involvement. Eighth grade low SES students with high arts involvement scored higher on writing and science test scores than their peers with less arts involvement. At the high school level, low SES students with rich art experiences

had higher GPAs than their peers with little arts involvement. Low arts, low SES students had a mean GPA of 2.41 while the high arts, low SES students had a mean of 2.63. One of the most profound arguments for arts involvement rests on high school dropout rates. This study found high school students with either few or no arts credits were five times more likely not to graduate than the students who earned many arts credits. The authors concluded that at-risk teenagers who were heavily involved in the arts showed achievement levels close to or slightly above the levels of the general population.

Catterall (2009) continued to follow the NELS:88 students through college and beyond. The final two components of data collection in the NELS:88 study took place when the participants were 20 and 26 years old. Catterall again divided the subjects into low and high arts involvement and examined the difference between a low and high SES status. Twenty percent of the high arts, low SES subjects were enrolled in four-year colleges compared to 11.4 percent of the low arts, low SES subjects. In the final survey of the low SES students at the age of 26, 70.7 percent of the high arts group reported attending college compared to 48.1 percent of the low arts group. High arts students were nearly twice as likely to have earned an associates degree and nearly three times more likely to have completed a bachelors degree or earned a masters or higher.

The role the fine and performing arts played in dropout prevention was also examined through surveys and interviews with administrators, teachers, and students by Barry, Taylor, and Walls (1990). Of the twenty-eight administrators interviewed, twenty were aware of specific instances when participation in the arts

influenced a student to stay in school. Sixty-eight of the seventy-six arts teachers interviewed knew of specific students who persisted to graduation due to involvement in the arts. Students in the study confirmed the statements of the teachers and administrators. Over half of the forty participants stated they considered dropping out of school, but nearly all said their participation in the arts influenced their decision to stay. The positive role the arts played is best told through the words of one student who stated: "Things just got so rough at home that work and school got in my way. I just wanted to quit everything so no one would expect anything of me...My love for the arts is the only thing that keeps me here [in school] and my grades up" (p. 26).

2.1.4 Learning in the Arts Outside of School

The benefits of rich arts experiences are evident outside the traditional school day. Heath and Roach (1999) found that students who participated in after-school arts programs gained skills in learning how to think and talk as adults. They learned how to critique the work of their peers as well as evaluate their own pieces or performances. After six weeks in an arts program, the students involved exhibited significant increases in syntactic difficulty, hypothetical reasoning, and questioning approaches. Arts-based programs appeared to be more beneficial than athletic or community service programs.

Respress & Lufti (2006) described the Health, Education, in the Arts, Refining Talented Students (HEARTS) Family Life Center's after-school program aimed at violence prevention. The HEARTS program served African American middle school

students who were at high risk for academic and social failure. Students were enrolled in a visual art, drama, dance, or music module based upon interest. Sixty-six students were randomly assigned to either a participant or comparison group. When looking for an improvement in GPA, the researchers found that 57% of the arts participants had a .5 increase in GPA compared to 11% of the control group exhibiting a .5 increase in GPA. On a self-esteem assessment measured by the Rosenberg Self-Esteem Test, 37% of the arts participants improved their self-esteem scores compared to 7% of the comparison group showing improvement. No significant differences were seen on math, spelling, or violence risk assessments or in attitudes toward school.

In a study focusing on empowering at-risk youth, Wallace-DiGarbo and Hill (2006) sought to determine if the engagement of at-risk adolescents in an arts intervention program could impact the “participants’ sense of self and promote confidence to act effectively in their world” (p. 120). Study participants worked together on several art projects that concluded in the painting of a mural. They met with a local artist for ten sessions over a six-week period. The sample size of the study was small. Nineteen seventh and eighth grade students participated in the study, but only six students participated in all of the assessments. Although statistical significance was not found in any of the measured outcomes, all of the measurements trended toward improved functioning and reduced risk. Individual results of this study for participants with the highest degree of risk proved to be valuable. In a test measuring deviancy, one participant began the study with a raw pretest decile of six, meaning 60% of the population is defined as less deviant than this particular individual. After the intervention, the participant had a raw score of

three. This converts to a decile of 1, meaning 10% of the population is defined as less deviant. Even though the results are promising, this study was limited by a lack of experimental design and a small number of participants.

2.1.5 Benefits Unique to the Arts

When making the case for including the arts in education, most researchers have been focused on the academic benefits of the arts. Another body of research takes the opposite approach and argues that studies should be done to find out what the arts uniquely teach. Fowler (1996) stated, "Perhaps the thing that the arts do best, at their best, is open doors to learning. They open our eyes, our ears, our feelings, our minds. They make us more sensitive and aware" (p. 9-10). Fowler suggested that the arts teach children to think receptively, aesthetically, creatively, communicatively, and culturally. In *Studio Thinking*, Hetland, Winner, Veenema, and Sheridan (2007) present a case for the arts, specifically the visual arts. They describe the dispositions specific to the arts and at least six additional dispositions the arts teach that are more general and could potentially transfer to other ways of learning. The dispositions unique to the arts are developing craft and understanding the art world. The dispositions that represent potential transfer to other areas of learning are observing, envisioning, reflecting, expressing, exploring, and engaging and persisting.

2.1.6 Lack of Causal Links Between Academic Success and the Arts

Although a large body of research has found relationships between involvement in the arts and improved test scores, very few have found a causal

relationship (Hetland & Winner, 2001; Winner and Cooper, 2000). In a meta-analyses of thirty-one studies examining the benefits of an arts rich education, Winner and Cooper found a positive correlation between arts education and academic outcomes. But they caution that no proof of causality has been found.

Eisner (2000) compared the SAT scores of students taking one year of arts study versus four and also examined one year versus four years of study in other subjects such as English, math, science, and foreign language. Eisner found that in-depth study in any subject area was linked to improved SAT scores. On the verbal portion of the SAT, students with four years of art study versus one scored 40 points higher. Students with four years of English study versus one scored 55 points higher. It appears that students who choose in-depth study in any area are high achievers who will perform well on the SATs.

In another meta-analyses of 188 reports involving the arts and academic benefit, Hetland and Winner (2001) found only three areas with clear causal links between the arts and achievement in academic areas. The first area was using classroom drama to improve reading readiness and reading achievement scores. The second area was improved performance on spatial reasoning tests following listening to classical music. The final area used classroom music programs involving improvisation and movement to music to improve paper and pencil spatial tests. Hetland and Winner found no causal links between arts education and improved verbal and mathematics scores, creative thinking, or reading nor any causal links between the visual arts, dance, or music and improved reading ability. Hetland and Winner argue that instead of justifying the arts through other subject areas, research

should focus on finding the links between the arts and the transfer of knowledge to other subject areas, determining what is different about arts rich schools, and determining if the arts can be a motivational point of entry to other subjects.

Hoffman Davis (2008) echoes these same concerns. Instead of justifying the arts through other subjects, we should try to find out what is distinctive and significant about learning in the arts. She argues that the arts should be taught in their own right so students can experience meaning making across artistic disciplines. Hoffman Davis also makes a call to stop evaluating the arts through their potential transfer to other subjects. She argues, "The arts need to be incorporated into every child's learning - not to improve test scores, but to provide individuals with the necessary tools to make and find meaning through aesthetic symbols" (p. 48).

2.2 Review of Literature on Benefits of Mentoring/Tutoring

2.2.1 Defining Mentoring and Tutoring

This study will examine research in the areas of mentoring and tutoring. These terms are sometimes used interchangeably and an argument could be made that mentors are often tutors. This study will focus on the mentoring definition offered by Healy and Welchert (1990), which defines mentoring as a "dynamic, reciprocal relationship in a work environment between an advanced career incumbent (mentor) and a beginner (protégé) aimed at promoting the career development of both" (p. 17). The difference between a mentoring relationship and other helping relationships

such as teaching and supervising is “reciprocity between mentor and protégé and accomplishment of an identity transformation by each party” (p. 18).

2.2.2 High School Students as Mentors

Big Brother Big Sisters (BBBS) is one of the largest mentoring programs in the United States. The goal of the program is to make a positive impact in the lives of children and empower them to succeed through mentoring relationships (www.bbbs.org). In a nationwide study of the program, Herrera, Grossman, Kauh, Feldman, and McMaken (2007) examined the school-based mentoring program with high school volunteers. The program has nearly 50,000 high school “Bigs” who serve as mentors to younger students, “Littles.” Ten BBBS agencies in different parts of the country participated in the study involving 1,139 youth participants in seventy-one schools. Half of the Littles were randomly matched with their high school Bigs while the other half served as a delayed control to be matched when the study ended in fifteen months. Littles, Bigs, and their teachers were surveyed in the fall of 2004 prior to program implementation, at the end of the 2004-05 school year, and in late fall of 2005 of the next school year. Principals and school liaisons were also interviewed.

The study sought to understand how matches with high school Bigs differ from adult volunteers, if Littles and their mentors benefit from the match, and the characteristics of the BBBS programs using high school Bigs. One of the strengths of the high school Bigs was their exposure and experience with children. Forty-nine percent of the high school Bigs reported having had a lot of contact with youth, with

47% having mentored informally in the past. High school Bigs used techniques known to positively impact match success such as involving their Littles in decision making more than adult Bigs (Morrow and Styles, 1995). High school Bigs also engaged in less academic activities with their Littles than adults do, which has been linked to lower levels of mentor satisfaction (Karcher, 2004; Karcher 2007). The quality and length of the mentoring relationship with high school Bigs was similar to those with adults (Herrera et al. 2007).

Although high school Bigs have useful strengths, they also present challenges. High school Bigs missed more match meetings during the school year, averaging 4.8 missed in comparison to an average of 3.5 with adult Bigs. High school Bigs were less likely to carry over their match into the following school year. In addition, Littles matched with high school Bigs made fewer improvements in comparison to their adult mentored peers on the thirty-one tested outcomes. They improved only in the teacher-reported social acceptance, while Littles matched with adult Bigs improved on twelve of the thirty-one outcomes. However, these outcomes did not hold true in every school. Differences were seen in favor of schools with more structured mentoring programs (Herrera et al. 2007).

The BBBS program was also beneficial to the high school mentors. High school Bigs reported several benefits including “improvements in interpersonal skills and abilities, including communicating better, being more patient and wanting to be a better role model; personal abilities such as being responsible, reliable and organized; knowledge of child development; leadership abilities; and interesting in working with children as a career” (p. 16).

2.2.3 Mentoring and Tutoring as Beneficial to the Tutor/Mentor

Although intended to be beneficial to the mentee, mentoring programs are often more beneficial to the mentor (Benard, 1990; Hedin, 1987). Benard advocates for a youth service model in which children are valued as a community resource beginning in early childhood. These peer programs give youth a sense of personal worth and value. According to Benard (1990), peer relationships contribute to a child's development in the following ways:

1. Peer interactions provide a model for pro-social development and allow children to learn attitudes, ideals, and skills through peer modeling.
2. Compared to communications with adults, peer interactions are more numerous, powerful, and diverse and allow for experimentation.
3. Peers are crucial in the development of internalized moral standards.
4. When interacting with peers, children learn to share, aid, comfort, and emphasize with others.
5. Peer interactions support the development of social skills such as impulse control, communication, relationship, and friendship skills.
6. Peer relationships have an influence on achievement.
7. Interactions with peers have a deep influence on the development of identity and autonomy.

Because of the success of peer-tutoring models, Darrow, Gibbs, and Wedel (2005) created a study to examine the impact of peer tutoring on music learning. The study participants were 104 fifth grade students who met in music classes three times a week for forty minutes. All participants were tested on their knowledge of key signatures before and after the tutoring sessions. All students taught their peer a

lesson on either flat or sharp key signatures. Thus, all students were both a tutor and a tutee during the study. The teacher demonstrated tutoring techniques, had several sessions of role playing with tutoring, and provided feedback on those role-playing sessions. In the first sessions, tutors had forty minutes to teach their tutees about flat key signatures. At the completion of the session, a test was administered to the tutors and the tutees. This sequence was repeated in session two with the students trading roles and teaching sharp key signatures. A statistically significant difference was seen in post-test scores for both groups of students. Pretest scores had a mean score of 0.09 out of ten while post-test scores had a mean of 6.66. No significant difference in scores was seen between the tutors and tutees on the flat key signature test. A significant difference was found on the sharp key signature test, with tutees scoring higher than tutors. Students were also able to give written feedback on the tutoring project and reported enjoying helping their classmates.

In a study aimed at building a passion for reading, Leland and Fitzpatrick (1993) paired twenty-four sixth grade students who were unenthusiastic readers reading at or below grade level with kindergarten reading buddies. Three groups had three members while the remaining students were in groups of two. Groups were flexible depending upon student absences and personality conflicts. The reading buddies met weekly in forty-five minute sessions. The sixth grade students learned specific strategies to use while reading with their buddies. After several months of reading together, the sixth grade students led their kindergarten partners in the creation of a basic story dealing with fear. At the conclusion of the program, the sixth grade students reported that the program was fun and did not feel like work. One student stated, "This was the best part of being in sixth grade." Another student said,

“My partner made me feel like a really good reader” and it “felt important being the teacher” (p. 299). In a reading attitude survey, a statistically significant difference was found in the amount of time students read outside of school. Prior to the mentoring program, they averaged 0.92 books per month; by the end of the year, they averaged 2.5 books per month. Parents observed that their children were reading more on their own at home. The school librarian also noted a large increase in the use of the library by that class.

In another cross-age mentoring program, Karcher (2005) developed a six-month after-school program for thirty-three middle school mentors and thirty-three fourth and fifth grade mentees. Mentoring interactions were two hours after school twice a week. Students worked one on one except in cases of an absence. Each meeting time consisted of an icebreaker activity, an activity designed to build connections to the school and peers, a snack, and a group game or recreational activity. Karcher found that the mentor’s attendance had a direct impact on the mentee’s social skills, behavioral self-management, and self-esteem. It also appeared that the quality of the mentoring relationship was more important than the amount of exposure to the program curriculum.

Cohen, Kulik, and Kulik (1982) presented a meta-analysis of 65 tutoring programs, examining effects in three major areas: “student achievement as measured on examinations, favorability of student attitudes toward the subject matter, and favorability of student self-concept” (p. 240). Of the fifty-two studies reporting on tutee achievement, forty-five noted tutees had better results than the control group. Effect sizes were generally modest, with larger effects in more structured programs and in short programs. Of the eight studies measuring attitude

toward subject matter, all reported more positive results in classrooms with tutoring. A total of thirty-eight studies examined the effects on the tutor. In that group of thirty-eight studies, thirty-three reported positive gains in achievement for the tutors. Ten reported statistically significant results. Four of the five studies reporting on attitude toward subject matter noted positive gains. A total of sixteen studies measured self-concept for tutors. In twelve of the studies, tutors had a higher self-concept, while four studies had statistically significant differences. The average effect was small.

2.2.4 Struggling Students Becoming Mentors

Giesecke and Cartledge (1993) studied the benefits of tutoring using low-achieving students as tutors. A group of four fourth grade students who were struggling readers with low peer social status were selected as tutors by classroom teachers. Another group of four third grade tutees were selected who had reading levels similar to the tutors. The six-week tutoring program began with a week of training followed by five weeks of tutoring that included nineteen thirty-minute tutoring sessions. During the tutoring sessions, students learned sight words taken from the third and fourth grade reading series. In addition to vast improvements in the number of sight words students retained, tutors and tutees both reported enjoying the tutoring sessions. Tutees discussed the fun they had working with another student, while the tutors enjoyed their role as helpers. Teachers unrelated to the study saw benefits as well. Giesecke and Cartledge reported, "One unified arts teacher, unaware of the tutoring program, commented on the sudden improved behavior of one of the tutors" (p. 7). Tutors' scores on the Piers-Harris Children's Self Concept Scale also improved. The tutors, on average, improved from the 45th

percentile of scoring to the 76th percentile. Tutor number three demonstrated remarkable improvement, beginning the study with a raw score of forty-five, representing the 29th percentile, and ending the study with a raw score of sixty-three, representing the 77th percentile.

Lazerson, Foster, Brown, and Hummel (1988) studied the effect of becoming tutors on junior high students with truancy problems and learning disabilities. Sixteen learning disabled, truant, junior high tutors were paired with sixteen elementary school tutees who were also learning disabled. The tutors completed training sessions that included information on their responsibilities as tutors, how to correct responses from tutees, and general familiarity with the program. The tutoring phase lasted six weeks. Tutors met with their tutees at least three times for a minimum of twenty minutes. The Bailer Locus of Control was administered before and after the intervention to determine the tutor's internal/external locus of control, or the individual's ability to believe they control the events impacting them. The tutors increased scores on the Bailer Locus of Control Scale from a 6.3, reflecting a strong external orientation, to a 13.3, which represented a strong move toward an internal locus of control. Truancy decreased from 2.5 absences per week to 0.5 per week. Tardiness decreased from 4 per day to 1.5 per day. The authors believed the tutoring program was highly successful for the tutors.

In a cross-age tutoring program aimed at improving literacy skills, Jacobson, Thrope, Fisher, Lapp, Frey, and Flood (2001) paired twenty-one seventh grade students with reading deficiencies with ninety-two third grade tutees. Before each tutoring session, the seventh graders worked to master reading skills they would be presenting to their tutees. This training was part of a five-day strategic reading class

that included two day of training and preparation, two days of tutoring, and a whole class discussion to identify successes and challenges during tutoring time. The literacy growth of the seventh grade tutors was assessed using a rubric that measured the writer's craft and skill. A pre- and post-test model was used at the beginning and end of the eight-month intervention. Data were also collected from a school-wide assessment known as the Stanford Diagnostic Reading Test (SCRT) as well as the Metacomprehension Strategy Index (MSI) (Schmitt, 1990). Tutoring sessions were observed by the researchers and field notes were taken. Last, semi-structured interviews were conducted with the tutors at the end of the eight-month tutoring project. Findings from the writing assessment showed improvement but were not statistically significant. The SCRT and MSI tests both showed significant growth, with students averaging 1.1 years of literacy growth. The researchers also observed an improved attentiveness in reading fluency and attitude toward reading. The tutoring program was reported to be a positive experience for the tutors. Tutors described the program as fun, great, useful, and challenging (Jacobson et al., 2001).

2.2.5 Mentoring in the Visual Arts

Morrison and Smith (1991) created a mentoring program during a summer session art class. High school students experienced in art were paired with elementary students in grades four through six. High school students were selected to serve as mentors based upon their art interest, ability, and maturity level. Pairs were matched by the authors after discussing the personalities of the participants and attempting to pair similar personality types. The mentoring project lasted two

weeks. During this time, the mentoring pairs worked on separate projects. Elementary students relied on their mentors for help with techniques and critique. The high school mentors largely created art on their own but shared ideas and critiques of their work with their mentees. Morrison and Smith reported a “high level of excellence achieved by the elementary students” (p. 52). When the following school year began, classroom teachers reported that mentees displayed more confidence in their abilities.

Kelehear and Heid (2002) created one of the few documented examples of cross-age peer mentoring in the arts. In their study, high school students in an art class served as mentors to first grade students. The high school students met with their mentees three times a week in fifty-minute sessions for three weeks. The high school and elementary students designed and created a tile mural to be installed in the elementary school. Both groups of students were on task during each session and easily talked about their artwork. High school students who had been previously shy about discussing their work exhibited a new confidence when addressing their peers. Kelehear and Heid reported that the making of art was secondary to the development of the mentoring relationship.

In another study, Rhyan (1995) created a twelve-week art mentorship program developed as a behavioral intervention for nine deviant fifth grade students. Each fifth grade student was paired with a younger special education student in an art setting. Participants worked on hands-on art activities using materials including crayons, oil pastels, paint, and chalk. The goals of the program were to increase positive verbal interactions and cooperation with teachers and peers, decrease office referrals, and increase positive statements. Interactions were logged using a

checklist by the students' regular classroom teachers. All students logged their experiences as an art buddy as well as their reflections on the program in a weekly journal. In weekly log entries, some mentors expressed a "new feeling of importance and usefulness" (p. 57). One of the nine participants was removed in week four of the program for having a poor attitude and displaying negative behaviors to the detriment of the program. The displaced younger art buddy worked with the remaining mentors on a rotating basis. At the conclusion of the study, the remaining eight participants reduced office referrals from thirteen in a twelve-week period down to one, which represented a 92% reduction in office referrals. Classroom teachers noted a moderate increase in positive verbal interactions and a large increase in classroom cooperation. Finally, in an attitude survey designed by the author, mentors showed a 65% improvement in self-esteem and socialization skills.

2.3 Summary

Teachers and researchers have the important task of determining what and how students should learn. Research in the arts and in mentoring shows that both should have a place in a student's education. Studies have shown correlations between involvement in the arts and improved academic performance, attendance, and behaviors. In addition, students have been shown to come to school and stay in school because of their involvement in the arts. By reaching students who struggle academically, the arts can give them successes in school they may otherwise not experience. Mentoring has also proven to be an effective tool for helping struggling students. Students who mentor gain knowledge of what they are teaching as well as

confidence and a sense of importance. Very little research has examined the potential powerful combination of mentoring through the arts. This study attempts to address that gap in the literature.

CHAPTER 3. DESIGN OF STUDY

3.1 Theoretical Framework

To determine what impact an art mentoring program has on academically struggling students, this study employed a mixed methods approach utilizing both qualitative and quantitative forms. The use of both qualitative and quantitative methods in tandem will lend strength to the study that cannot be found in using either method alone (Creswell & Clark, 2007). The mixed method strategy will aid in the triangulation of data sources to seek convergence across quantitative and qualitative data (Jick, 1979). This study uses a concurrent mixed methods approach, defined as a procedure in which:

The researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem...the investigator collects both forms of data at the same time and then integrates the information in the interpretation of the overall results. (Creswell, 2009, p. 14-15) Some researchers have debated whether the mixed methods approach is a “method,” a “methodology,” or a combination of the two (Creswell, 2011). As a result, this study will be guided by a theoretical framework. Merriam (2006) compares the theoretical framework to the underlying structures of a building: the theoretical framework defines the problem to

be investigated, the research questions, the data collected to answer the questions, and how the data are analyzed and interpreted. Yin (2014) describes research studies asking “how” or “why” questions as explanatory and likely to lead to the use of case study, history, or experiment as the research method. The research question of this study focuses on how an art mentoring program impacts participants, which lends itself to a case study method.

Yin (2014) defines a case study in two parts. First, a case study is “an empirical inquiry that investigates a contemporary phenomenon (the ‘case’) in depth and within its real world context, especially when the boundaries between phenomenon and context may not be clearly evident” (p. 16). The second part of the definition is necessary because the context and the phenomenon are not always easily distinguishable. Therefore, Yin adds,

A case study inquiry

- copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result
- relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result
- benefits from the prior development of theoretical propositions to guide data collection and analysis (p. 17).

Case studies focus on a single unit of study with a defined set of boundaries (Flyvbjerg, 2011). If the study has more than one subject, case studies can be layered or nested within the primary case (Patton, 2002). In multicase research, the goal is to fully understand each case one case at a time (Stake, 2006).

The art mentoring program for this study is a case study, with each of the five high school mentors serving as a single case. Each student case serves as a rich source of data individually while also helping to understand the art mentoring program as a whole. This method will also allow for cross-case analysis of the individual cases. Cross-case analysis allows for a greater understanding of the aggregate as well as what an understanding of what is unique to each case (Stake, 2006).

3.2 Research Questions

One primary question guided this study: *How does an art mentoring program impact academically struggling students?* Additional questions included the following:

- What effect does the art mentoring program have on self-concept?
- What effect does the art mentoring program have on academic success and delinquent behavior?

3.3 Methods

3.3.1 Qualitative and Quantitative Methods

This study used quantitative data to assess GPA, attendance, parent and teacher perceptions of the child/student, and self-concept. However, the depth in this

study is found in the qualitative data and research methods. Qualitative methods were used to explore and understand the art mentoring program as a case as well as to understand each participant as an individual case in ways that quantitative data does not allow. To understand each case, qualitative data collected included participant interviews, observations in a research journal, video recordings, participant journals, and photographs.

These data were collected over the course of one semester. Initial student interviews and mentor training took place in August. Mentoring interactions began in September. I met with the high school mentors once a week on Fridays and trained them how to make a piece of artwork. The high school mentors met with their elementary mentees on the following Mondays. The high school mentors would in turn teach their elementary mentees how to make the artwork they learned about in our previous session. The mentoring sessions continued throughout the semester. All mentoring interactions were video recorded. I also took notes during and after each mentoring session. High school mentors answered questions in a journal after each meeting with their elementary mentees. The creation of all artwork was documented with photographs. At the conclusion of the mentoring program in December, the high school mentors participated in closing interviews. In the spring all work created in the mentoring program was exhibited at an art show at a local library. Additional information used in the case study of each student was obtained through parent and teacher surveys.

3.4 Subjects

The subjects of this study were eight high school students and nine elementary school students. Originally, four high school students were randomly assigned to be mentors and four were assigned to a control group. After one of the high school mentors exhibited poor attendance, one of the control group students was asked to serve as a mentor to ensure the elementary participants always had an older student to work with. The original mentor remained in the study. The elementary students were fourth and fifth grade students who were coming from their regular elementary art class time. The high school students consisted of two sophomores, two juniors, and four seniors. The high school students served as mentors during their study hall. I met with the high school students in the art room that was not being used at the time. Mentoring interactions between the high school and elementary students took place either in the high school art room or the high school drafting room. All names, including the name of the town, school, teachers, and students have been changed to protect the anonymity of the subjects.

3.4.1 Criteria for Selection

3.4.1.1 School

The school selected for this study was chosen for several reasons. First, the building administrators were supportive of the program at both the elementary and high school levels. The corporation was set up in a way that allowed high school students and elementary school students to easily meet together as both sets of students were located on the same campus. Last, the art teacher was supportive of

the project and allowed the elementary students to miss their regularly scheduled art class to participate in the program.

3.4.1.2 Case Study Subjects

All five students who served as art mentors were studied as individual cases. All five subjects had a GPA of 2.5 or lower and had a study hall period. The sample consisted of the following:

- Two 10th grade girls
- One 11th grade boy
- One 11th grade girl
- One 12th grade boy

3.4.1.2.1 Case 1: Tori

Tenth grade student Tori was known for her athleticism, artistic ability, and sense of style. Although she preferred to keep to herself at school, she did have a small group of close friends and was respected by her peers for her uniqueness. Tori was very fashionable and it never bothered her to dare to be different. She was a member of the cheerleading squad, cross country team, and track team. She enjoyed photography and fashion design.

In addition to exceling in athletics, Tori was in academic honors classes. However, she was not working up to her ability in those classes. Her teachers reported it was difficult to get her to speak during class. Her Algebra 2 teacher

described her as “very quiet during class. I have a hard time getting anything out of her...I feel it could be that she is torn between being disinterested—‘cool factor’—and wanting to do well. She’s an honor program student for math...however, she’s a bit atypical in her reserved-ness for an honor student.” Tori reported struggling with math classes and having difficulty with the amount of memorization those classes required. She enjoyed fashion design and physical education classes. She wanted to be an art mentor because she enjoyed art.

3.4.1.2.2 Case 2: Emily

Emily was a tenth grade student who was well liked by her peers. She was on the homecoming court and was involved in 4H showing sheep and llamas. Emily was an only child and said the social aspect of school was her favorite part of the day. She enjoyed being around her peers.

In class, Emily tended to be more reserved. Her teachers reported that she was never a behavior problem but frequently did not work up to her ability. Her agriculture teacher stated, “She always does her work and is very quiet. I have had no problems with her. I think if she tried harder; however, she would see much more potential in herself.” Emily’s mother reported that she, “may not be the best student in school as far as grades go. She is a very well-liked student and is always respectful to others and her elders.”

Emily reported struggling with test taking. Poor test scores negatively impacted her grades. Low test scores were mentioned by three of her teachers. She

also had difficulty in math and science classes. Despite struggling in some of her classes, Emily knew being at school and doing well was the key to a successful future. She decided to be an art mentor because she enjoyed working with kids and had experience as a mentor through her 4H club. She was considering a career working with children.

3.4.1.2.3 Case 3: Hannah

Hannah was an eleventh grade student who was frequently a loner at school. She had a difficult home life and was misunderstood by her peers. She was engaged and enjoyed spending time with her fiancé. She was not involved in any activities at school but was a frequent babysitter for others and spent much of her time outside of school with younger children. She reported that her favorite thing about school was that she was away from home.

Hannah enjoyed her choir and history classes and did not report struggling with any classes in particular. She was frequently absent from school and it had a negative impact on her work. Her teachers reported that she often did not turn in required work and had low test scores. Hannah's English teacher stated, "I have a great relationship [with Hannah] so she seems to work really well for me...however, I know she struggles with other teachers." Hannah's mother reported that she seldom got along with her peers and didn't believe that most of her teachers cared about her.

3.4.1.2.4 Case 4: Kyle

Kyle was a senior who was not on track to graduate. He had a high number of unexcused absences from school. He was liked by his peers but did not participate in any activities at school. He enjoyed playing guitar and video games; in fact, Kyle reported that he spent at least five hours a day playing video games. His favorite class at school was Advanced Foods because he enjoyed cooking and was considering the culinary arts as a career path. He was also interested in potentially joining the military.

Kyle struggled in his English classes and did not complete the required work. His English classes required that he read and pass a test on at least two books from an approved list. He did not enjoy reading and did not pass his English classes, in part, because of that requirement. He would prefer to listen to audio recordings of books. Kyle's teachers reported that he was a pleasant student to have in class but did not work up to his potential. His short stories teacher stated, "Kyle is absent often and it affects his work. He is also capable of much more than he exhibits. He chooses not to work to his potential." Kyle chose to be an art mentor because he enjoyed spending time with his younger cousins. He also wanted to be a mentor because his girlfriend was pregnant and he wanted to gain experience with children.

3.4.1.1.5 Case 5: Luke

Luke was an athletic eleventh grade student. He was the class clown and was known for his school spirit. He enjoyed being at school and had moved to

Fieldworth High School from a neighboring school district in the previous school year. Luke thought the move had been a positive change for him and liked the students at Fieldworth. He enjoyed basketball and baseball. Luke recognized that his grades had slipped in high school and knew he needed to try harder in his classes.

The amount of effort Luke demonstrated in his classes varied. His Personal Finance teacher reported that he was seldom attentive in class and rarely turned in assigned work. She stated, "He seeks peer approval and tries to do things to make students laugh." His Animal Science teacher commented, "Luke was not showing any interest in Animal Science at all. He did not care or want to learn the subject matter." His Algebra 2 teacher stated, "Luke shows a lot of improvement from last school year to this school year in his maturity and work ethic." She further stated, "He is an aide for me, and I see some social awkwardness....I wonder, however, if he struggles socially with those his age."

Luke was an employee at the local Boys and Girls Club. He stated that he would rather be at work than at school. He enjoyed working with the students there, especially the nine and ten year olds. He decided to participate in the art buddy program because he had always enjoyed working with younger students. He was considering a career working with children.

3.5 Setting

3.5.1 School Community

The community surrounding Fieldworth High School is largely rural, and the school is surrounded by corn fields. The district includes three small towns with populations under 1300 people. Students in the district can live as far as forty-five minutes away from each other. Many of the students enjoy coming to school because it is the only time they get to interact with their friends. The Fieldworth schools are a source of pride in the community. School and athletic events are well attended by family and friends of the students.

The Fieldworth community is located thirty minutes from a large university and forty-five minutes from a city with a population over 800,000. A larger, neighboring industrial community where many of the Fieldworth parents find employment is ten minutes from Fieldworth High. The factories in the area are supportive of Fieldworth High both with donations to the schools and volunteers.

The students at Fieldworth High share their building with the junior high and elementary students. The elementary students are housed in a separate portion of the building and do not have interactions with the older students. Gymnasiums, an auditorium, and the cafeteria are used by all students, K-12. A total of 265 students were enrolled in grades 9-12. Fieldworth High students are 96.3% white, 2.6% Hispanic, 0.7% American Indian and 0.5% multi-racial (Indiana Department of Education). Additionally, 30.9% of the students receive a free or reduced price lunch. Class sizes at Fieldworth are relatively small, usually under twenty students.

Because of budget constraints, several elective classes had recently been cut from Fieldworth High. Art classes were reduced by half, music classes were reduced by over half, the size of physical education classes doubled, and drafting and shop classes were eliminated completely. This left the school with a lack of elective offerings and a large number of students in study halls. In addition, a new administrator was leading Fieldworth High. The retiring principal was well liked by students and staff, so the administrative transition was met with uneasiness. But the new principal was looking for ways to restore lost programs and was supportive of the potential he saw in the art mentoring program.

3.6 Techniques for Gathering and Managing Data

Data collection, management, and storage were accomplished in accordance with and were approved by the Purdue University Institutional Review Board (IRB) for the use of human subjects. Consent forms (Appendix A) were provided to the teachers, parents, and students eighteen and over to gain their permission to participate in this research study. These forms were signed and returned to me. An Assent Form (Appendix A) was explained to the children whose parents had consented to allow their children to participate in this research study. All Assent Forms were signed by the children and returned. All data collected in this study were confidential. The names of the students, adults, school, and community are protected as confidential information.

3.6.1 Questionnaires

At the beginning and end of the study, the parents of the high school students received an IRB-approved questionnaire (Appendix B). This questionnaire was intended to help triangulate data observed during the study and determine if the parents noticed any changes in their children. Five of the eight surveys were returned at the start of the study. No surveys were returned at the end of the study, which did not allow for a comparison before and after the program. In addition to parent surveys, teachers of the high school participants received an IRB-approved questionnaire at the beginning and end of the study (Appendix B). This survey helped determine if any changes were noted in classroom performance and behavior.

3.6.2 Researcher Journal & Field Notes

Throughout the course of the study and during the data analysis, I documented observations, ideas, and questions in a researcher journal. Entries were created on each day I worked with the students on the project with additional entries added as needed. The journal documented my observations during the study. I also recorded questions I wanted to think about between meetings with the students, research I wanted to explore, ideas to share with the art mentors, and supplies I needed to obtain between meetings. The most valuable part of the journal is my observations on how the mentoring relationships between the elementary students and their high school mentors developed throughout the semester they worked together. I have been able to compare my notes to video recordings of the students

working together as well as the interviews with the students to reduce researcher bias and gain additional insight into the interpretation of the data collected.

3.6.3 Video Recordings, Observations & Interviews

During the mentoring program, I observed the interactions between the high school mentors and their mentees, monitored the teachings of the high school mentors, observed the progression of the artwork being made, and helped the students as needed. With approval from the Institutional Review Board, all mentoring interactions between the high school mentors and their elementary mentees were video recorded. Although I was present during all of the mentoring interactions and took notes in my researcher journal, I was not able to observe all of the interactions because more than one group met at a time. Three mentoring teams met in the first time block and two mentoring teams met in the second. There were also occasions when a mentor was absent and I worked with the elementary students or periods when I was working with one group and not able to observe the other group closely. The video recordings helped fill in the gaps in my observations. My observations and the video recordings also gave me insight into contextual clues such as body language and tone that would not have been captured otherwise.

Interviews were conducted with the five students who served as mentors at the beginning and end of the study (Appendix C). The purpose of the interviews was to serve as another source of data triangulation. The interviews allowed the students to express their viewpoints on school and the mentoring program in their own words.

3.6.4 Academic Records

After receiving consent and approval from the Institutional Review Board, academic records for the high school participants were collected. Records examined were attendance, report cards including grade point average, and discipline referrals.

3.6.5 Piers-Harris Children's Self Concept

To measure self-concept, mentors completed the Piers-Harris Children's Self Concept Scale (Piers & Harris, 2002) before and after a mentoring intervention. The Piers-Harris scale is a 60-item self-report questionnaire. It is designed to be used with students from the ages of seven to eighteen. The scale offers statements expressing how people feel about themselves. The scale was normed on a sample population of 1,387 students from across the United States, a sample designed to mirror the ethnic composition of the U.S. population (Piers & Harris, 2002). Sample questions on the scale include the following: It is usually my fault when something goes wrong. I worry a lot. I am a happy person (Piers & Harris, 2002).

3.6.6 Journals

Throughout the mentoring program, the high school mentors kept weekly journals. Journal entries were short and consisted of a few sentences detailing what the mentors worked on each week and how their mentoring relationship with their elementary mentees was developing. Journal prompts included questions and statements such as the following:

- Describe what you did with your art buddy today
- What do you like best about being an art buddy?
- Describe your experiences as an art buddy this semester

3.6.7. Artwork

All artwork created during the art mentoring program was photographed both in progress and at completion. The students began the program by creating radial symmetry designs inspired by stained glass rose windows on shrink plastic. Once completed, the students moved on to making trees from soft sculpture wire. The final projects, large broken ceramic tile murals, were completed in groups. Artwork was exhibited at a local library and was photographed in that location. Students involved in the art buddies program retained all of their original artwork with the exception of the large ceramic tile murals. The murals were permanently installed in the Fieldworth schools.

3.8 Techniques for Analyzing, Interpreting, and Presenting Data

3.8.1 Transcripts & Video Recordings

Audio recordings of the mentor interviews were transcribed to allow for analysis and coding of the data. Each interview was given an identifying code label entered into a document. After the transcription process was complete, the audio recordings were erased. The video recordings were used in addition to field notes to

analyze the development of the mentoring relationships. Notes were taken from each video recording and were used to determine the accuracy of the field notes taken after each mentoring session. Following analysis, the video recordings were erased.

3.8.2 Coding

Before coding began, I initially took notes on several pieces of data. After reading through each piece of data several times, I started open coding using the NVivo software system. Open coding requires the data to be broken down into distinct pieces for close examination (Smith & Strahan, 2004). This allowed patterns and concepts to emerge in the data and also allowed for the coding of data to be arranged by theme, which was easily organized through NVivo. Qualitative data analyzed during coding helped answer the following research question: How does an art mentoring program impact academically struggling students?

3.8.3 Comparative Analysis

Comparative analysis was conducted on teacher surveys, academic records, and the Piers Harris Children's Self Concept Scale tests. Comparisons were made between the data at the beginning and end of the semester in which the study took place. This analysis helped answer the following research questions: What effect does the art mentoring program have on self-concept? What effect does the art mentoring program have on academic success and delinquent behavior?

The teacher survey questions were analyzed for positive or negative changes in their perception of each high school mentor's work in their classrooms. Changes were tracked in a spreadsheet. Teacher comments were also analyzed. Grade point averages were compared before and after the study as were attendance and discipline reports.

The Piers-Harris Children's Self Concept Scale provided a detailed analysis of several dimensions of self-concept. The Piers-Harris provides an overall self-concept score, a validity measure, and scores in the categories of behavioral adjustment, intellectual and school status, physical appearance and attributes, freedom from anxiety, popularity, and happiness and satisfaction. Each individual dimension is described below:

1. Total Score (TOT): "The most reliable measure on the Piers-Harris 2, and the one with the best research support" (Piers & Harris, 2002). The TOT score measures general self-concept, and raw scores range from zero to sixty. A high score represents a positive self-concept while a low score would be associated with a low self-concept.
2. Behavior Adjustment (BEH): A fourteen-item scale that measures problematic behaviors. An example from this scale is "I do many bad things" (Piers & Harris, 2002).
3. Intellectual and School Status (INT): Consists of sixteen questions that reveals the child's assessment of his or her capability for intellectual and academic tasks. This portion of the Piers-Harris also covers general

happiness with school and includes statements such as “I am smart” (Piers & Harris, 2002).

4. Physical Appearance and Attributes (PHY): This eleven-item scale measures the child’s perception of his or her appearance as well as leadership skills and includes items such as “I am good-looking” (Piers & Harris, 2002).

5. Freedom From Anxiety (FRE): A fourteen-item scale designed to reflect anxiety and dysphoric mood. Items on the scale include “I worry a lot” and “I feel left out of things” (Piers & Harris, 2002).

6. Popularity (POP): The POP scale is a twelve-item scale that measures a child’s perception of his or her social functioning. Items include statements such as “I have many friends” (Piers & Harris, 2002).

7. Happiness and Satisfaction (HAP): A ten-item scale dealing with general happiness and satisfaction with life. Statements include “I am unhappy” (Piers & Harris, 2002).

3.9 Role of Researcher

My role in this study combined my role as a researcher with my roles as a teacher and mentor. My meetings with the high school mentors involved teaching them to be mentors. I also taught them how to create each art project and gave them instruction on how to teach their elementary mentees. I was also a researcher and

interviewed the high school students, taking notes on their interactions and attitudes toward the program.

When the high school mentors met with their elementary mentees, my roles varied. I was occasionally able to step back from the project and take notes on the interactions I saw taking place. When a high school mentor was absent, I would fill in and work with those mentees. Most often, I moved between the groups and helped where needed. Sometimes this role included offering additional instruction, cleaning up supplies as the students worked, or getting additional materials ready.

I conducted interviews with the high school mentors that were audio recorded at the beginning and end of the semester in which the mentoring interactions took place. I collected data during the mentoring interactions by direct observation, taking notes, and video recording the sessions. These interactions took place once a week. I was the only adult present during the mentoring interactions and supervised all of the students. At the end of each session, I collected a journal entry from each high school student that discussed what happened at each session. I also met with the high school mentors once a week to discuss how their relationship was progressing with their mentees and to allow the high school students to work on their own artwork. I collected photographs of all artwork as it progressed and upon its completion. I also organized an art show at a local library to showcase the students' work completed during the project.

3.10 Researcher Bias

Because I am an art teacher with many years of teaching experience, I have witnessed the positive effects the arts can have on a student's sense of self-worth and on their overall experience at school. I have also served as a mentor through the Big Brothers Big Sisters program, have been mentored, and experienced the positive changes mentoring can bring. My bias is that I value instruction in the arts and value mentoring and believe they are effective ways to reach students. To control my research bias, I collected a variety of data from the students, their parents, their teachers, and their academic record to assist in triangulation. The variety of data collected helped ensure the results of the study were accurate and free from bias.

3.11 Perceptivity

My art teaching experience at both the public school and college level, working with students of a variety of ages, significantly added to my perceptivity. My mentoring experiences combined with my teaching experiences helped me understand what I was observing during the art mentoring program with a great amount of depth. I have personally experienced the transformative power of both the arts and mentoring.

CHAPTER 4. ANALYSIS OF DATA

4.1 Case Studies: Mentors

To understand the impact the art mentoring program had on the academically struggling students in this program, I developed a case study of each high school mentor. Four students enthusiastically embraced the art mentoring program while one student partially accepted the program. Each case provides insight into their experiences as art mentors as well as the impact the program had on them. Case data includes interviews, mentor journal entries, researcher observations, parent and teacher surveys, video recordings, GPA, attendance records, discipline records, Piers-Harris Children's Self-Concept Scale, and artwork. Analysis will begin with each individual case and will also include a cross-case pattern analysis (Patton, 2002).

4.1.2 Case 1: Tori

Tori was a tenth-grade student who was well-known for being unique. She was a trendy dresser, was known for her artistic ability and creativity, and was a respected athlete. Because she tended to follow fashion trends, Tori frequently tested the limits of the school dress code. She often wore skirts and dresses that

were shorter than the minimum length required and once wore a shirt to school that was largely backless and had to change clothing. Of above average height, Tori commonly wore 4-inch heels to school. She enrolled in modeling classes outside of school and carried herself well. Tori was easily considered the most fashionable student in her grade.

In addition to exhibiting her uniqueness through her clothing choices, Tori was known amongst her peers for her creativity and artistic talent. She had an excellent eye for composition, enjoyed drawing, and often doodled in class. Tori drew celebrity portraits for her friends, but she was also not afraid to address darker, more mature topics in her work than what was typical in the work of her peers, exploring themes of abuse, betrayal, and identity formation in her drawings. She won numerous awards at local art shows. Her favorite classes at school were fashion design, housing, and physical education. She participated in cheerleading, track, and cross country. Even though Tori participated in many activities, she did not have a large circle of friends. She had a few close friends at Fieldworth High and a few close friends in neighboring school districts.

Tori was in academic honors classes. She was a year ahead of most of her peers in math classes. However, Tori struggled in those classes and had difficulty memorizing the required information for tests. When asked what her least favorite thing about school was, she responded by stating, "Probably tests and stuff like that 'cuz all the studying and stuff just kind of gets me stressed out sometimes." Tori was reserved in class, and her teachers reported that it was difficult to get anything out of her. Tori's algebra teacher reported, "I have yet to 'crack' this student. She is very

quiet during class. I have a very hard time getting anything out of her one-on-one/calling on her. She'll answer questions when I ask them of the class." Tori was never a behavior problem in class and exhibited excellent attendance.

Tori was interested in becoming an art mentor because she enjoyed art. Art classes at Fieldworth High typically filled with juniors and seniors, and Tori had been unable to enroll. The art buddies program was an opportunity for her to create artwork instead of being in study hall. She was enthusiastic about the program during the initial training session. Tori was assigned two elementary school mentees, both fifth-grade girls. Tori's mentees were both relatively quiet, shy students. Because Tori also tended to be more reserved at school, they related to each other well as the semester progressed.

4.1.2.1 Development of Mentoring Relationship

From the first week, Tori was an excellent mentor. In their initial meeting, she sat between her two fifth-grade elementary mentees, Amy and Tami, and instructed them on how to create a design with radial symmetry without being prompted to do so. Because Amy had a cochlear implant, Tori wore a special microphone system to be able to communicate with Amy. Although their initial conversations were minimal and related only to their artwork, Tori modeled good artistic practices by creating a design with her mentees. She consistently checked in with them to make sure they were on track and did not require additional help. In their second meeting, Tori continued to excel in her mentoring role. She was attentive to the needs of her mentees, provided instruction when needed, and happily answered any questions

asked of her. Amy and Tami enjoyed the radial symmetry design enough that they both asked to take additional materials home to create more designs (figure 4.2).

The second project created in the mentoring teams was a wire tree sculpture. Tori easily learned how to manipulate the wire. During project training, she spent more time than the other mentors creating decorations for her tree (figure 4.3). The care and pride she exhibited carried over into the mentoring session with Amy and Tami. Tori again sat between Amy and Tami. Amy finished a radial symmetry design while Tori provided Tami with the initial instructions on how to bend the wires to create the basic shape of the tree. She helped each mentee as needed and carefully observed their progress. She easily helped both girls, even though they were working on two different projects. Their conversation continued to be virtually non-existent, but both Amy and Tami felt comfortable asking Tori for help. In her weekly journal, Tori stated that her mentees, "Talked a little bit more and asked questions. They seem to like the project we are doing."

On the second week of the tree project, Tori continued to do an excellent job of instructing both of her mentees. Tami continued to be ahead of Amy and was largely able to work independently. When Tami and Amy did not require direct assistance, Tori added beaded decorations to her own work. Natural conversation was still not a part of the mentoring relationship for this group. Work on the wire trees continued the following week. Tori demonstrated different ways Tami and Amy could decorate the base of their trees. Tami and Amy were largely able to work independently. Tori continued working on her sculpture when she wasn't helping her mentees. At the conclusion of the session, Tami and Amy took their trees with them

to finish during free time at school and at home (figures 4.5 and 4.6). Although it was clear Tami and Amy were comfortable asking Tori for help, conversation amongst this mentoring group remained minimal.

Week six marked the beginning of a new art project. The week began with Tori participating in the training on how to create a broken ceramic tile mosaic mural. She chose to create a design with the silhouette of hands spelling out the word love (figure 4.4). When meeting with her mentees that week, Tori showed the students her mural and helped them brainstorm ideas for their own work. The intent of the project was to create one large mural that would be permanently installed in the school. However, Amy became stuck on the idea of creating a mural depicting a Siberian Husky and refused to budge from the idea. Tami was interested in depicting sports but was willing to be flexible in the design choice. Tori worked hard to get her mentees to reach a compromise, including combining their ideas into one mural. But Amy would not budge. Tori decided it would be best for Amy and Tami to create separate, smaller murals. Although the group could not come to an agreement, more conversation happened in that meeting than in all of the previous weeks combined. In her journal, Tori stated that she had enjoyed being an art mentor and was having fun working with her elementary mentees.

The following three weeks, Amy and Tami worked on their murals. Tori again did an excellent job of helping both girls. She primarily broke the tiles as it was easier for her to do so, while Amy and Tami placed the broken tiles onto their designs. All three girls were working well, but conversation was minimal. Creating separate murals gave Amy and Tami less reason to interact, and no natural

conversation was taking place. Tori continued to do an excellent job of positioning herself between her mentees and alternating whom she was helping. Although Amy and Tami struggled to build a relationship with each other, Tori cared about both girls and was always attentive to their needs. When asked what her relationship was like with her mentees in comparison to the start of the semester, Tori wrote in her journal that it was better and everyone talked more. Over the last two weeks of the project, the girls worked hard to finish their murals. When Amy finished early, she helped Tami finish her mural. Even though this group had minimal conversations, they all seemed to enjoy creating artwork. When asked to describe her experience as an art mentor, Tori wrote, "It has been fun making projects. I think the kids really enjoyed it as much as I did" (figures 4.7 & 4.8).

4.1.2.2 Elementary Mentee Perspective

At the end of the semester, the elementary mentees filled out a short survey about their experiences as an art buddy. Tori's mentees were glowing in their reviews of the program. When asked what she thought about being an art buddy, Tami wrote, "1. It was awesome. 2. I loved it. 3. I have a new friend named Tori." Amy stated, "I love being an art buddy. I have always loved art." When asked if Tori did a good job and why, Tami wrote, "I think she did a great job because she did what she was supposed to do." Amy wrote, "I do think that she did a good job because she helped me and Tami when we were stuck or needed help." The next question was whether they would want to be an art buddy again. Tami stated, "Yes! I love art buddies and I had a blast." Amy wrote, "I would love to be an art buddy

again because I love art.” The final question asked if there was anything else they would like to add. Tami wrote, “My teacher [in reference to the researcher] rocks not to mention Tori too.” Amy stated, “I have enjoyed art buddies a lot.”

4.1.2.3 Journal Entries

In her weekly journal entries, Tori expressed how much she enjoyed being an art mentor. She was having fun both working with her mentees and having the opportunity to create artwork. When asked what she liked best about being an art mentor, Tori stated she most liked “being able to do art projects.” When asked what she liked the least, she commented that there was “not enough time.” The elementary mentees echoed this complaint and wanted to spend more time working with their mentor. Tori also noted in her journal that she made a special effort to be at school on art mentoring days because “I would feel bad if they didn’t have me there.” She also stated that she would be an art mentor again if given the opportunity because “I think it’s fun.” She also felt that the experience of being an art buddy helped her interact with others better.

4.1.2.4 Piers-Harris Children’s Self-Concept Scale

Tori completed the Piers-Harris Children’s Self-Concept Scale at the beginning and end of the art mentoring project. Her total score on the initial and final test was a forty-eight. This score places Tori in the fifty-fourth percentile. The score is considered to be within average range and indicates a fair self-evaluation that acknowledges positive and negative facets of the self.

On the Behavioral Adjustment (BEH) scale, Tori initially scored a thirteen. This score is in the fifty-fourth percentile and is in the average range. Tori's score at the end of the semester was a twelve. A twelve is also an average-range score and is at the forty-sixth percentile. This shows that Tori thought of herself as well behaved and able to abide by the rules at school and at home.

Tori began the semester with a score of thirteen on the Intellectual and School Status (INT) and ended the semester with a score of fourteen. A score of thirteen is in the fifty-fourth percentile, and a score of fourteen is the sixty-sixth percentile. Both of Tori's scores placed her in the above average range, representing confidence in her intellectual abilities.

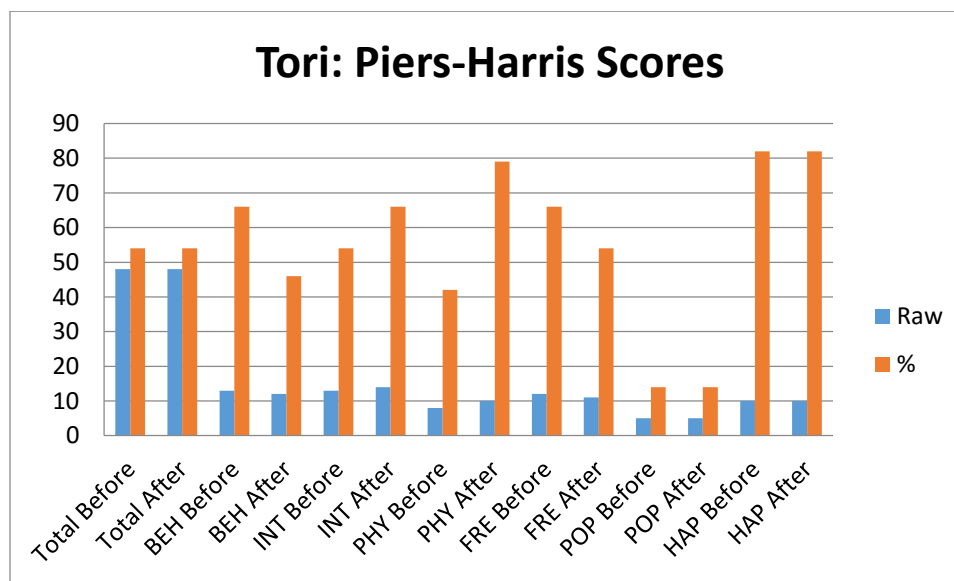
On the Physical Appearance and Attributes scale (PHY), Tori scored an eight at the beginning of the semester and a ten at the end. This represented a move in a positive direction from the forty-second percentile, considered an average assessment of physical appearance, to the seventy-ninth, an above average score.

The Freedom From Anxiety scale (FRE) measures anxiety and dysphoric mood. Tori began the semester with a score of twelve and ended with an eleven. Tori's initial score of twelve is a sixty-sixth percentile score and is in the average range. Tori's final score of eleven is a fifty-fourth percentile score and is also in the average range. Tori's average range scores indicate she had primarily positive emotional states while acknowledging some difficulties.

Tori scored a five on both exams on the Popularity scale (POP). This score is in the fourteenth percentile, is in the low range, and is "typically produced by children who feel unhappy about their social functioning" (Piers & Harris, 2002).

The final portion of the test is the Happiness and Satisfaction scale (HAP). Tori scored a ten on both tests, which is considered to be above average at the eighty-second percentile. A score of ten indicates Tori saw her life in a generally positive manner.

Table 4.1 Tori's Piers-Harris Scores



4.1.2.5 Teacher Questionnaire

Tori's Algebra 2 instructor was the only teacher who completed both the pre- and post-intervention survey. Tori's Physical Education teacher completed the initial survey only. On the initial survey, her Algebra 2 teacher noted that she never talked to Tori. In the comments section, the teacher wrote:

"I have yet to 'crack' this student. She is very quiet during class. I have a very hard time getting anything out of her one-on-one/calling on her. She'll answer questions when I ask them of the class. I feel it could be that she is torn between being disinterested ('cool' factor) and wanting to do well. She's an

'honor program' student for math – a sophomore in Algebra 2; however, she's a bit atypical in her reserved-ness for an 'honor' student."

Because Tori was very quiet in class, Mrs. Jones did not know her well and left many of the initial questions blank. Mrs. Jones did note an improvement in attendance and in the amount of assigned work that was turned in on the final survey. She also noted that Tori did try to improve even though she kept to herself.

4.1.2.6 School Performance

Prior to the art buddies program, Tori had a cumulative GPA of 2.189. Her grades were especially low in math and science classes. The semester Tori was an art buddy, she earned a 2.668 GPA, an increase of .479. Although her grades were still lowest in math and science, they were higher than in previous semesters.

Tori had a strong attendance record at school. The semester prior to the program, she missed a total of three days. Two of those days were excused absences and one was unexcused. The semester of the program, Tori missed a total of two days; one was unexcused. She was not tardy to any of her classes nor did she have any discipline referrals in the semester before or the semester of the program.

4.1.2.7 Interviews

Tori participated in an interview at the beginning and end of the art buddies program. In her initial interview, Tori expressed her love for art-related subjects and

athletics. When asked to describe herself, she stated, "I draw. I'm into photography. I run track and I just started cross country. Yesterday was my first practice and I'm a cheerleader so I'm very involved in sports. I like to draw all the time." Tori struggled with memorization and test taking, which were her least favorite things about school. However, she knew education was important and came to school because "I want to do something with my life when I get older." She chose to become an art buddy "[b]asically because I like art and stuff like that."

In her final interview, Tori was asked to describe one of the positive aspects of being an art mentor. She stated, "I got to help little kids and they got to do art if they liked it." She enjoyed being a mentor and thought it was fun. Tori described her relationship with her buddies by saying, "Well, they were really quiet at first because they didn't really know me. They didn't really talk much and Amy started talking more and more. And Tami – I think she's kind of shy and she doesn't talk as much as Amy does."

Tori did not believe that being an art buddy had changed her views on school. She did reiterate how important education was when she said, "I want to be someone when I'm older. I want to do something with my life instead of just having no education. Mostly when you're older you need a college diploma to get most jobs when you're older." When asked how she felt at school, Tori said:

Just kind of, I don't know. I'm not happy or sad or anything. I'm calm or whatever. I don't have many friends here and the one I did have we got in a fight the other day so we're not friends anymore. So I have like a couple of

friends here but I don't really care about friends at school. I'm not here for friends. I'm here to get my diploma.

Tori also made an extra effort to be at school on the days she was mentoring and said, "I would feel bad if I wasn't here because then they wouldn't have anyone to help them with their projects."

4.1.2.8 Artwork



Figure 4.1: Tori, Tami, and Amy's Radial Symmetry Shrink Plastic



Figure 4.2: Tori's Wire Tree Sculpture (name obscured)



Figure 4.3: Tori's Broken Ceramic Tile Mural



Figure 4.4: Tami's Wire Tree (elementary mentee)



Figure 4.5: Amy's Wire Tree (elementary mentee)



Figure 4.6: Tami's Mural (elementary mentee)



Figure 4.7: Amy's Mural (elementary mentee)

4.1.3 Case 2: Emily

Emily was a friendly tenth-grade student who enjoyed the social aspects of school. She was an only child, and being with her friends was her favorite part of coming to school. Emily had many friends both inside and outside school. She played softball, was an active 4H member, showed sheep and llamas, and enjoyed helping the younger 4H students.

Emily's least favorite thing about school was math classes. She explained her trouble with math classes in her initial interview:

I'm not very good at math. They make me nervous 'cuz like in English you can always get, know what the right answer is. Like who wrote Romeo and Juliet. It's like Shakespeare. Math you never know unless you check it but sometimes you can at least check it.

Emily was struggling with the high value placed on tests in her math class. She was not a good test taker and felt like she was double penalized because tests were worth the bulk of the points during the semester. Emily enjoyed her English and social studies classes. Emily's mom was a librarian, and Emily loved reading from an early age. She appreciated her social studies class because "I like watching the history channel and learning why we're here."

Although Emily was social with her peers, she was quiet in her classes. She was respectful of her teachers and was never a discipline problem. Low quiz and test scores were cited by three different teachers on her report card. Her animal

science teacher reported that Emily always lacked confidence in her work but made efforts to improve.

Even though she struggled in some of her classes, Emily understood how important her education was. In her initial interview, she stated:

If you don't go to school, you're not going to really become anything nowadays. It wasn't like back like when my parents [were my] age where if you didn't have a high school or college degree, you know you could always get your GED and then get something. Now it's kinda like you gotta have it to even work at simple places.

Emily was interested in becoming an art buddy because "I like to work with little kids. 'Cuz you know it makes me feel like I'm important like you know they look up to me. 'Cuz I help a lot of kids in the 4H group that are younger than me."

4.1.3.1 Development of Mentoring Relationship

From the first week, it was apparent that Emily was going to be a fantastic art mentor. She was excited about the process during the training session and was looking forward to working with her art buddies. In their first meeting, Emily was introduced to her art buddies, fifth-grade students Ben and Natalie. Emily sat between her mentees and gave instructions to both. She showed Ben and Natalie how to make a simple design using radial symmetry as well as a more complex pattern. Conversation amongst the group was minimal, but while they were working Emily asked questions about what they enjoyed doing in their free time and at school. Emily noted in her journal entry for the day that her art buddies did an

excellent job following her directions. When asked what could have gone better, she stated, "We could have talked more."

In their second meeting, Emily helped her art buddies finish their shrink plastic radial symmetry designs. Conversation flowed a bit more freely this session as the mentoring team became more comfortable together. When asked how it went with her art buddies, Emily stated, "I felt that it went better than the first time. There's still a little awkwardness. They seem excited about their shrinky dink art" (figure 4.8).

In their third meeting, Ben was absent from school. Emily taught Natalie how to begin a wire tree sculpture. She carefully taught Natalie how to unwrap the initial wire bundle and form the roots of the tree. Emily got her own bundle of wires to make a tree with her mentee. After Natalie finished forming the roots and trunk of her tree, Emily demonstrated how to form the individual branches. The girls talked some as they worked but were mainly focused on their sculptures. Emily was very attentive to Natalie and helped her often. Towards the end of their work time, Emily held and stabilized Natalie's tree to make it easier for her to continue working. Emily described the day in her journal. "It went pretty well. My art buddy is talking to me more. I teached [sic] her how to make the wired trees. She is excited to come back next week."

In the following week, Emily taught Ben how to make the wire tree as Natalie continued working on hers. Interactions between the art buddies were becoming very natural. While they worked on their wire trees, they discussed reading programs they had participated in when they were younger and memorable storms. Emily noted in her journal that her art buddies were talking with her more. However, in their

next meeting, Emily was unusually quiet. She helped both Natalie and Ben but was not conversing with them as much as the previous week. Both art buddies were nearing completion of their wire trees. Natalie and Ben took the needed supplies with them to finish their sculptures (figures 4.9, 4.11, and 4.12).

Week six marked the start of the ceramic tile murals. Emily showed her art buddies the mural she was working on featuring the Eifel Tower (figure 4.10). The group sat down to discuss their ideas for the mural. They quickly settled on an Indiana University versus Purdue University concept. Natalie was a fan of IU, and Ben was a PU fan. They worked as a group to find the logos and football helmets for both schools online. While they worked, they talked about how their week had gone and activities they had enjoyed over the weekend. This mentoring group had obviously reached the point where they were very comfortable working together. Emily did an excellent job of helping her art buddies determine a concept for their mural.

The next several weeks marked the construction of the murals. Emily's group began by projecting their design onto a large piece of paper and tracing it. Once the design was transferred, they began breaking their tiles using a hammer and tile nippers. Natalie and Ben were both very enthusiastic about the project (figure 4.13). The group enjoyed working on it together. Emily noted in her journal that "They really enjoy this project." As work on the mural progressed, Emily's art buddies became more and more talkative. They talked about their school day, what happened at recess, and their work. The conversation was free-flowing and very natural. Emily also made sure that her art buddies stayed on task and continued to work during

their entire time together. Emily noted in her journal that her art buddies, “are more talkative and interacting better.” In the final weeks spent working on their mural, Emily’s group continued to be social while they were working. Emily noted in her journal that she was happy with how her art buddies were progressing and that they got along very well. In the final two weeks, Emily had to work hard to keep her art buddies on task. They had become good friends and tended to want to be too social and not get enough work done. By the end of the semester, it was obvious that this mentoring team was well bonded to each other. Emily stated that when she saw her art buddies outside the mentoring time they talked to each other and were happy to see her. When asked to describe her experience as an art buddy, Emily wrote, “It was fun getting to know the art buddies and working with them.”

4.1.3.2 Elementary Mentee Perspective

Natalie and Ben both enjoyed the art buddies program. They developed a friendship with each other and with Emily as the semester progressed. They were easily the most social group of the five mentoring teams. When asked if their buddy did a good job, they both agreed. Ben wrote, “She helped with everything.” Natalie said that Emily “did a very good job. She helped us. She taught us how to do the trees.” Both Natalie and Ben wanted to be in the art buddies program again. Natalie stated, “I would really want to be a [sic] art buddy again. It is really fun.”

4.1.3.3 Journal Entries

Emily's journal entries helped to document her group's mentoring relationship development. Initially, her buddies were quiet. When asked what went well at their first meeting, Emily wrote, "They listened and followed directions very well." She noted there was little talking amongst the group, but she did ask questions to learn about her buddies. Over the course of the next several weeks, the buddies became more comfortable with one another and conversation became more natural. Emily noted this change in her journal, stating, "It went really well today. They talked more than they ever have."

Emily enjoyed being a mentor and working with her art buddies. Emily wrote, "I enjoy working with the kids and getting to know them better." When Emily's buddies began work on their mural, they were excellent at determining their concept and working towards their goals each session. Emily noted, "It's going well. They are becoming more talkative every week." As the group continued the mural, Emily described their progress, "We glazed tiles today so we could have more colors. We also got a lot done on our mural. They really enjoy this project."

Emily's relationship with her art buddies blossomed over the course of the semester. Two months into the program, Emily was asked what her relationship with her art buddies was like in comparison to the start of the semester. She responded, "We are more talkative and interacting better." Her favorite part about being an art buddy was getting to know her mentees, and there was nothing she didn't enjoy about the program. Emily was happy with how her art buddies were working and

noted, "They get along so well." She also stated that she would be interested in being an art buddy again "because I like working with kids."

Emily knew her art buddies enjoyed working with her "because they always talk to me." By the end of the semester, the group was very social and comfortably conversed during their time together. In the last few weeks of the program, Emily had to keep her group on task. When asked what suggestions she would give to future art buddies, she stated, "Try to keep your kids working along, not waste time." At the end of the program, Emily thought being an art buddy had benefited her because "its [sic] helping me work with younger children." When asked to describe her experiences as an art buddy over the course of the semester, Emily wrote, "It was fun getting to know the art buddies and working with them. It helped me work with little kids which is what I'm thinking about doing in the future."

4.1.3.4 Piers-Harris Children's Self-Concept Scale

Like Tori, Emily completed the Piers-Harris Children's Self-Concept Scale at the beginning and end of the art mentoring project. Emily's total score on the initial test was a forty-eight, which places her in the fifty-fourth percentile. Her final test score was a fifty-five, which represents the eighty-sixth percentile. Emily's initial score was considered to be within average range while her final score was in the high range. This demonstrates a potential gain in overall confidence.

On the Behavioral Adjustment (BEH) scale, Emily scored a fourteen at the pre- and post-test. Emily viewed herself as well behaved at home and at school. Although a fourteen is a perfect score and can also indicate denial of behavior

issues, this was not the case with Emily. Both her teachers and her mother reported that she was a pleasant, well-behaved young woman.

On the Intellectual and School Status scale (INT), Emily scored a twelve on the pre-test and a fourteen on the post-test. This represents a score at the forty-second percentile at the start of the semester and a score at the sixty-sixth percentile at the end of the program. Emily's scores were both in the average range. Emily saw herself as someone performing acceptably at school with a few difficulties. Her final score did improve, showing a small gain in confidence in her academic abilities and in her performance on school tasks.

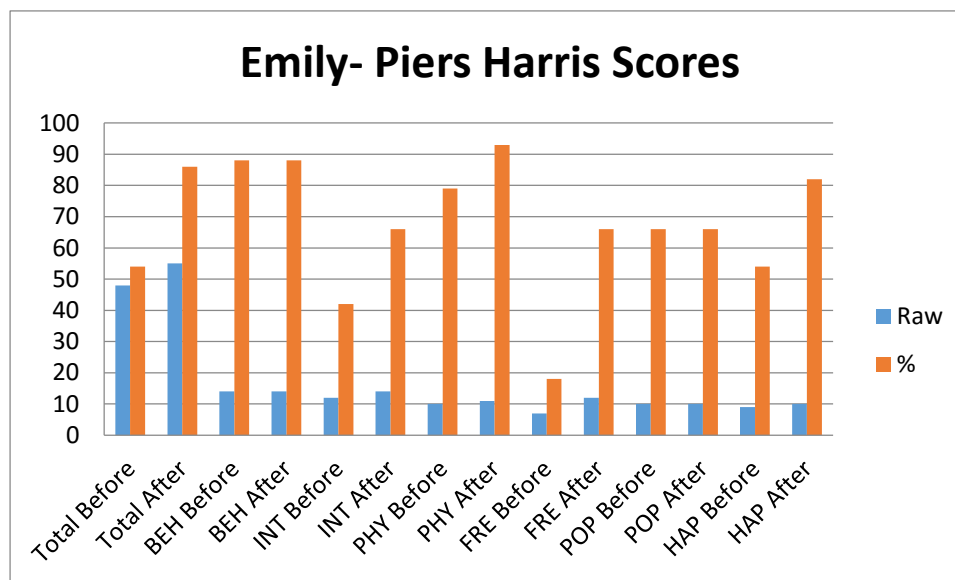
On the Physical Appearance and Attributes scale (PHY), Emily had a score of ten at the beginning of the semester and an eleven at the end. Both scores were in the above average range, starting at the seventy-ninth percentile and ending at the ninety-third. This shows an overall satisfaction with her appearance and her attributes such as leadership ability.

On the Freedom From Anxiety scale (FRE) measuring anxiety and dysphoric mood, Emily started the semester with a raw score of seven, representing a percentile score of eighteen. Emily's final score was a twelve, which is a sixty-sixth percentile score. Emily's initial and final scores were considered in the average range, which demonstrates a primarily positive emotional state.

Emily had a raw score of ten on the Popularity scale (POP) on both the pre- and post-test. This represents the sixty-sixth percentile and is on the high side of the average range. Emily was well-liked amongst her peers, and this score reflects that.

On the final domain scale, the Happiness and Satisfaction scale (HAP), Emily scored a nine on the initial test and a ten on the final test. Her initial score is considered average at the fifty-fourth percentile. Emily's final score was in the eighty-second percentile and fell in the above average range, representing an overall sense of happiness and well-being.

Table 4.2: Emily's Piers-Harris Scores



4.1.3.5 Teacher Questionnaire

Emily's Animal Science teacher was the only teacher to complete the pre- and post-program survey. Emily's Physical Education teacher completed the initial survey only. Her Animal Science teacher did note a marked improvement in many categories. At the end of the semester, Emily's teacher stated she was more attentive in class, worked better with others, completed more assigned work, and was more confident in her work abilities. In the pre-intervention survey, Emily's teacher stated, "She always does her work and is very quiet. I have had no problems

with her. I think if she tried harder however, she would see much more potential in herself.” At the end of the semester, Emily moved from seldom trying to improve to always trying to improve. Emily’s teacher also noted improvements in her respect of her peers and positive interactions with her peers.

4.1.3.6 School Performance

Before the art buddies program began, Emily had a cumulative GPA of 1.765. Emily was struggling in many of her classes. She did not pass algebra and had very low grades in English, biology, and Spanish. At the end of the semester in which the art buddies program took place, Emily earned a 2.168 semester GPA. Emily was still struggling in math, science, and Spanish, but her grades were higher. Her grade in her English class was significantly higher. And Emily did well in physical education and animal science.

Emily was regular in attendance at school. In the semester prior to the art buddies program, she missed a total of seven days, but all were excused absences for illness. The semester of the program, Emily missed only one day, which was also an excused absence. Emily was tardy to class twice in the semester prior to the program. The semester of the program, Emily did not receive any tardies. Emily was well behaved at school and did not have any discipline referrals in either the semester prior to or the semester of the art buddies program.

4.1.3.7 Interviews

Emily took part in interviews before and after the art buddies program. In her initial interview, Emily expressed her love for 4H and animals. She participated in the llama and sheep 4H projects. Emily also enjoyed playing softball. Emily was an only child and greatly enjoyed the social aspects of school. She lamented that her parents were often tired after work and there wasn't anyone to talk to at home. She enjoyed English and social studies classes. Emily believed that coming to school and getting a diploma were important to secure a better future.

Although school was largely a positive place for Emily, she did not enjoy math class. When asked why, she responded, "Because I'm not very good at math. They make me nervous 'cuz like in English you can always get, know what the right answer is. Like who wrote Romeo and Juliet. It's like Shakespeare. Math you never know unless you check it." Emily also stated that individual teachers contributed to whether or not she liked a class. Emily gave her algebra teacher in the previous year as an example. "Well, last year in algebra he made 200 point tests. So if you didn't do very good you failed twice. So you go from like a B, then you take a test and you go from a B to a D. In just one test."

Emily chose to participate in the art buddies program because "I like to work with little kids. 'Cuz you know, it makes me feel like I'm important, like you know they look up to me. 'Cuz I help a lot of kids in the 4H group that are younger than me."

In her interview at the end of the art buddies program, Emily described her experiences as an art buddy. "It's good because I got to work with the kids and see who they were and just become friends with them. It helped me because I'm thinking

about working with kids when I get older.” The only negative Emily mentioned about being a mentor was that her group was chatty. Even though they were a talkative group, Emily enjoyed the experience and how much her group laughed. When asked to describe how their relationship had changed over the course of the program, Emily said, “They were really quiet at first. They didn’t really talk and they were kind of nervous. But over time we would talk about a lot of things and even out of art buddies they would be like ‘oh- hi [Emily].”

At the end of the program, Emily was still struggling in her math class. Emily was also struggling in her chemistry class. She still believed in the importance of an education for her future. She thought her grades had improved because “I studied more and I had a friend help me with chemistry. I had a tutor for geometry. I tried to pay more attention in Spanish and tried to get it more.”

4.1.3.8 Artwork

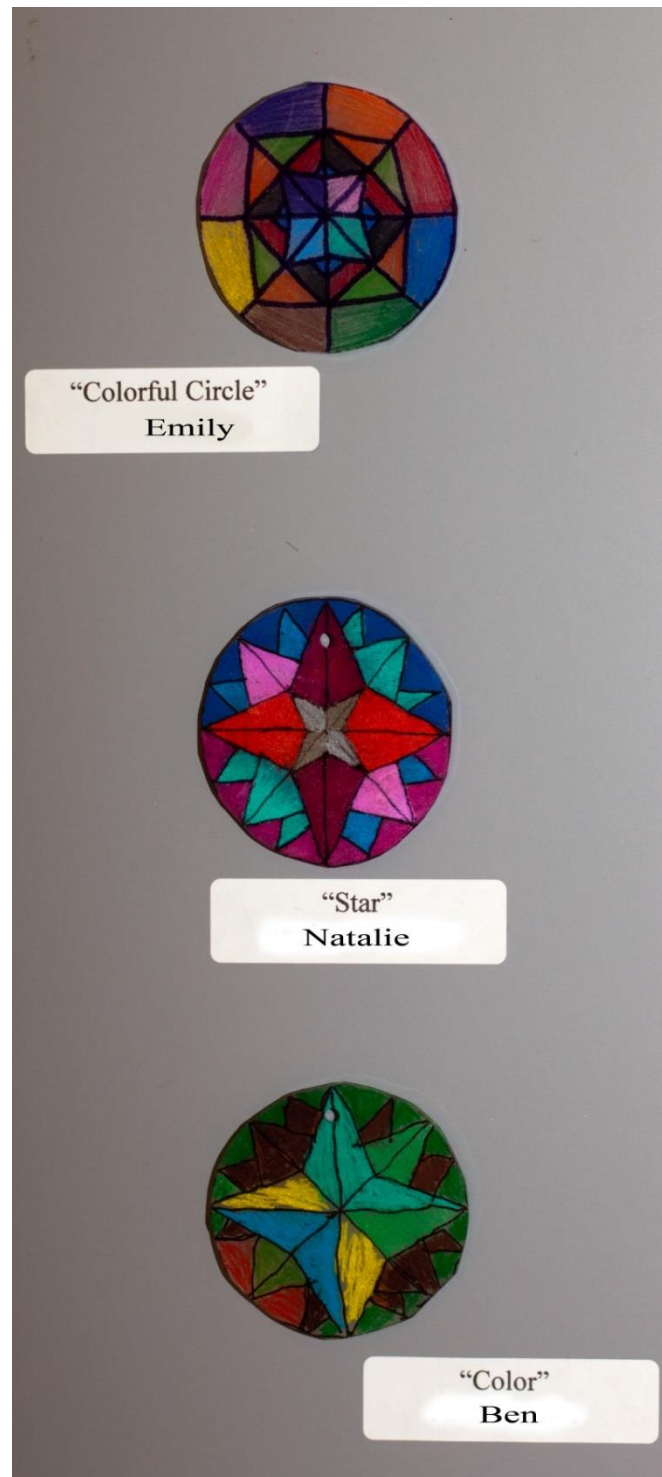


Figure 4.8: Emily, Natalie, and Ben's Radial Symmetry Shrink Plastic



Figure 4.9: Emily's Wire Tree Sculpture



Figure 4.10: Emily's Broken Ceramic Tile Mural



Figure 4.11: Ben's Wire Tree (elementary mentee)



Figure 4.12: Natalie's Wire Tree (elementary mentee)



Figure 4.13: Ben and Natalie's Broken Ceramic Tile Mural (elementary mentees)

4.1.4 Case 3: Hannah

Hannah was an eleventh-grade student who largely kept to herself at school. She valued school and knew an education was needed to have more career opportunities. She wanted to be one of the first in her family to graduate from high school. Even though she knew success in school was the key to success in later life, Hannah struggled with her attendance at school and was frequently sick.

Hannah struggled to form good relationships with her teachers and saw some of them as an enemy. She believed she was treated unfairly in some of her classes. She enjoyed choir and history, but not many of her other classes. She did not report struggling in any specific subject area. Hannah was annoyed with the standardized testing that took place at school. She viewed it as unimportant and largely irrelevant.

Hannah mostly kept to herself and had a few close friends. She did not open up easily with her peers and, in general, did not trust her classmates. She was engaged and enjoyed spending time with her fiancé. She liked being away from home and thought her home life was boring.

Hannah appeared to have a mixed level of engagement and enthusiasm for being an art buddy. Some weeks she happily created her own artwork and worked well with her art buddies. Other weeks she could be negative and would complain that her art buddies weren't paying attention and were being too social. She would lament that she really needed the time to be working on other school projects. She projected a "too cool" attitude often. Even though she at times appeared to not enjoy the project, Hannah took pride in the work she created. I observed her smiling and explaining her ceramic tile mural to the assistant principal and showing off her work

to a few of her friends. Despite her poor attitude, Hannah seemed to enjoy being an art mentor the majority of the time.

4.1.4.1 Development of Mentoring Relationship

Hannah was accustomed to babysitting younger children in her family and thought being an art buddy would be interesting because of her experiences with children. Although she thought it would be interesting, Hannah did not seem to be excited about mentoring at first. She was very flat during program training and expressed no enthusiasm. In her initial meeting with her two art buddies, sixth-grade students Kristi and Tony, Hannah seemed uncomfortable at first. There was very little conversation. Hannah did a good job explaining how to make the radial shrink plastic designs and answering questions from Kristi and Tony as they arose. Towards the end of the first session, Hannah did a better job at asking Kristi and Tony questions to get to know them. Hannah reported in her journal that it went well, but she wanted them, “asking questions instead of just looking at me.”

In their second meeting, Hannah did a much better job engaging her art buddies in conversation. Kristi and Hannah conversed much more easily. Tony was still a bit reserved. He did answer Hannah’s questions but tended to answer them as quickly as possible. While they got to know each other better, Hannah helped Kristi and Tony finish their shrink plastic radial symmetry designs (figure 4.14). Hannah noted in her journal, “They’re starting to feel more comfortable and talking. I think they’re afraid to say something and me not like it. Kristi is talking but Tony is still one word answers.”

In what was scheduled to be their third meeting, Hannah was absent from school. Kristi and Tony worked with another art buddy to start their wire trees. The following week, Hannah returned to school even though it was obvious she was still sick. Hannah helped her mentees, but her illness made the interactions seem forced. Hannah ended up missing more days of school later that week. She returned to school again the following week but was behind on her classroom work and was not able to work with her mentees. The researcher worked with Tony and Kristi in Hannah's place. They made considerable progress on their wire trees and chatted with each other freely. At the end of the session, Tony and Kristi took their trees with them to finish during free time in their regular classroom (figures 4.15, 4.17, and 4.18).

Week six of the program was the start of the ceramic tile murals. Hannah briefly showed Tony and Kristi the peace sign mural she was working on (figure 4.16). Tony and Kristi had a variety of different ideas of what they might like to create, and the group sat down at computers to narrow down their ideas and search for potential images. Conversation was very natural and ranged from talking about the mural to more social topics such as what they had done over the weekend. The group settled on creating a mural featuring the Nintendo dinosaur character Yoshi (figure 4.19).

Over the next several meetings, Hannah and her mentees worked on creating their mural. Hannah traced the Yoshi design using an overhead projector while she waited for her mentees to arrive. Hannah demonstrated how to break the ceramic tiles and Tony and Kristi were excited to get to work. Their conversation was lively

the entire time they were working, and it was obvious they were enjoying working together. Hannah noted in her journal that the relationship had evolved by stating, “They feel more comfortable talking and being themselves.” Even though Hannah missed a few more sessions due to illness, her mentees continued to progress well on their mural. When she returned from being sick, Hannah was unhappy with the progress they had made and thought they were being too social and were not focused enough on their work. In reality, they were progressing at the same pace as the other groups. Hannah seemed to be annoyed with her mentees for the last few meetings. Thankfully, they did not appear to notice and continued to work well together. Hannah was not happy with the work her mentees were doing and stated, “They don’t wanna do it; they just wanna play around.” When asked to describe her experience as an art buddy, Hannah wrote, “It was different. It wasn’t bad working with others, but I’m glad it’s over. They’re still immature, and I don’t have the patience.”

4.1.4.2 Elementary Mentee Perspective

Tony and Kristi both embraced the art buddies program and wanted to continue after the program was over. Tony was normally a very quiet student at school. It took several weeks for him to open up, but he became very comfortable with his mentoring team as the semester progressed. Kristi was more social and was comfortable faster. By the end of the semester, Kristi and Tony got along with each other well and enjoyed each other’s company. Tony stated, “This experience has helped me grow as a person and given me the tools to continue.” Both Tony and

Kristi thought Hannah did a good job as a mentor. Kristi thought she did well, “Cause she was fun,” and Tony added that he thought, “She did a great job.”

4.1.4.3 Journal Entries

Hannah’s journal entries documented the evolution of her mentoring group. Their initial meetings were quiet and a little awkward. Tony was exceptionally quiet at first but in general was shy in many situations. Hannah noted in their first meeting they should ask more questions. The next week, Kristi opened up more. Hannah wrote, “They’re starting to feel comfortable and talking. I think they’re afraid to say something and me not like it. Kristi is talking but Tony is still one worded answers.” As the relationship developed, Kristi became comfortable faster. When asked how it went with her buddies, Hannah responded, “I didn’t get very much time with them but fine otherwise. She’s [Kristi] starting to talk more. Still no break thru with Tony.” As the semester progressed and Hannah started incurring more absences, she struggled finding time to make up all of her work and grew frustrated with being an art buddy. When asked if she enjoyed being an art buddy so far, she answered, “Yes and no. I like working with them, but I also need time to work on big assignments.” Towards the end of the semester, it was obvious that this art buddies group had formed a friendship. When asked what their relationship was like in comparison to the start of the semester, Hannah said, “They feel more conformable talking and being themselves.” Hannah thought the best part about being an art mentor was working with her buddies and the least enjoyable part was it taking place during the first class period when she was often still tired.

Even though she often enjoyed being an art mentor, Hannah also could be annoyed with her mentees. When asked if she was happy with how her art buddies were working, she stated, “No. They don’t wanna do it. They wanna play around.” She did make a special effort to be at school on art buddy days because she knew her buddies needed her help. But when asked if she would be an art buddy again, Hannah stated, “No. It takes time I don’t have.” When asked to describe her experiences as an art buddy over the course of the semester in her final journal entry, Hannah said, “It was different. It wasn’t bad working with others but I’m glad it’s over. They’re still immature and I don’t have the patience.”

4.1.4.4 Piers-Harris Children’s Self-Concept Scale

Hannah filled out the Piers-Harris Children’s Self-Concept Scale at the beginning and end of the art mentoring project. Hannah’s total score on the test at the beginning of the semester was a forty-two, which places her in the thirty-fourth percentile. Hannah’s score at the end of the semester was a thirty-seven, which corresponds to a percentile of twenty-two. Hannah’s initial score was in the low range of average. Scores in the average range represent a balanced self-evaluation. Hannah’s final score is considered to be in the low range. Low total scores are typical of children who have doubts about their self-worth.

On the Behavioral Adjustment (BEH) scale, Hannah scored an eleven at the beginning and end of the semester. This equates to the thirty-fourth percentile and is considered in the average range. Students in the average range consider

themselves to be fairly well-behaved but acknowledge they occasionally experience difficulties.

On the Intellectual and School Status scale (INT), Hannah scored a ten at the beginning of the semester, representing the forty-fourth percentile. This is considered to be in the average range. An average INT score means students consider themselves generally successful in the academic realm but acknowledge some difficulties. At the end of the semester, Hannah had a raw score of eight and a percentile score of sixteen. This is also in the average range.

On the Physical Appearance and Attributes scale (PHY), Hannah had a raw score of six at the beginning of the semester and a four at the end of the semester. This equates to percentile scores of twenty-one and twelve. Hannah's initial score was on the lower end of average and her final score is considered to be in the lower range. Average scores on the PHY scale show a student has both positive and negative appraisals of their physical appearance and personal attributes. A low range score means the student likely has low self-esteem concerning their physical appearance and attributes.

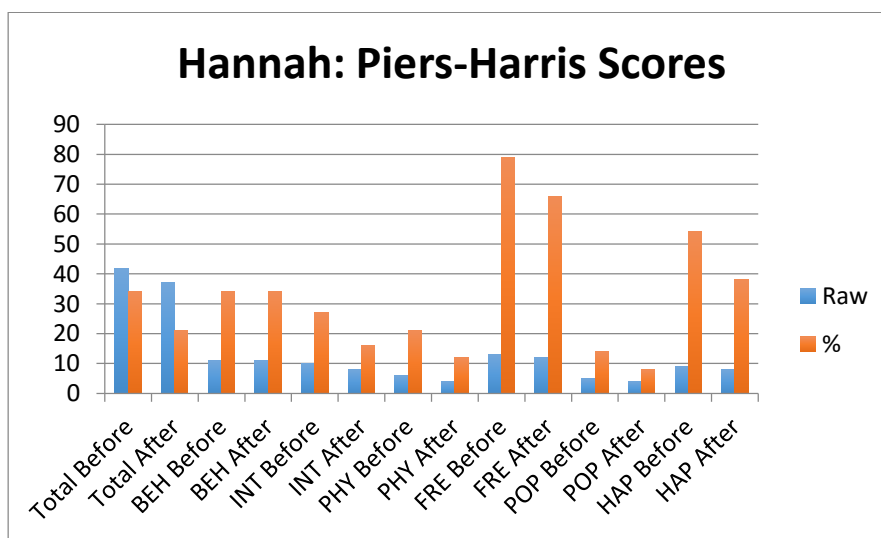
The Freedom From Anxiety scale (FRE) measures anxiety and dysphoric mood. Hannah had an initial score of thirteen and a final score of twelve, representing the seventy-ninth and sixty-sixth percentile. Her initial score was in the above average range, demonstrating she was not bothered by unpleasant mood states and represented satisfaction with appearance, social interactions, and other personal attributes. A high score can also indicate "defensive denial of emotional disturbance in order to mask real difficulties" (Piers & Harris, 2002). Based on other

indicators including illness, frequent absences from school, and a self-reported general unhappiness with her home life, Hannah likely falls into the category of masking real emotions. Her final score was in the average range, representing a mostly positive emotional state with occasional difficulties.

The Popularity (POP) scale deals with a child's assessment of social functioning. Hannah's initial score was a five and her final score was a four, aligning with the fourteenth and eighth percentiles. Both of these scores are in the low range and are typical of children who are not happy with their social functioning. Hannah had very few friends at school which aligns with this score.

On the final scale, Happiness and Satisfaction (HAP), Hannah began the semester with a raw score of nine and ended with an eight, representing the fifty-fourth and thirty-eighth percentiles. Both scores are in the average range and are considered to be a balanced self-assessment with the student reporting that positive appraisals of their general life situation outweigh the negative.

Table 4.3: Hannah's Piers-Harris Scores



4.1.4.5 Teacher Questionnaire

Hannah's English, choir, and Earth space science teachers completed the pre- and post-intervention survey. Hannah did not have positive relationships with some of her teachers as noted in this statement by her English teacher: "Hannah and I have a great relationship so she seems to work very well for me...however I know she struggles with other teachers in the high school." Hannah's English teacher noted improvements in her attentiveness, ability to work well with others, respect for her peers, confidence in her abilities, and attempts to improve. Her English teacher also noted her interest in school had improved as well as her attendance. Hannah's choir teacher saw improvements as well. She believed Hannah was more attentive in class, spoke in a more positive manner to teachers, and worked with and respected her peers more. She also believed Hannah's interest in school had improved and her confidence in her abilities was higher. She noted that Hannah's attendance was better. Hannah's Earth space science teacher also noted improvements. She moved from being always uninterested in school to never uninterested, representing a large change in attitude. She was not as easily discouraged. Her Earth space science teacher noted Hannah "has shown a great deal of patience first semester with several other students who have the potential of behavioral problems. She excelled in keeping her cool."

4.1.4.6 School Performance

Before the art buddies program started, Hannah had a cumulative GPA of 1.68. She was struggling in many of her classes with absences, low quiz and test

scores, and incomplete assignments. She did not pass biology, algebra, and Earth space science. At the end of the semester in which the art buddies program took place, Hannah earned a GPA of 3.058. This raised her cumulative GPA to 1.9. This was a significant improvement in grades and her report card included comments like good class participation and shows improvement. Her grades were primarily As and Bs with one C+. She passed classes with Bs that she had failed in the previous school year.

Hannah occasionally had attendance problems at school, largely stemming from illnesses. In the semester prior to the art buddies program, she was absent from six days of school. Five of those days were excused absences and one was unexcused. During the semester of the program, Hannah was absent five days and all of the absences were excused. Hannah was tardy to class once in the semester prior to the program and once during the program. Although Hannah did not care for all of her teachers, she was well behaved. She did not have any discipline referrals in the semester prior to or the semester of the art buddies program.

4.1.4.7 Interviews

Hannah was interviewed at the start and end of the art buddies program. In her initial interview, Hannah discussed that she was frequently around children and liked to babysit. She was looking for a part-time job but had been unsuccessful in her search. She did not participate in any school activities but enjoyed spending time with her fiancé.

Hannah's favorite part of school was "The time away from home I guess." This was important to Hannah "because my house is very boring." Hannah's least favorite part of school was testing because "most of it isn't important. They make us take it because it's state required even if we don't really need it." Hannah's best subjects in school were choir and history, and she had traditionally always done well in those classes. Hannah did not report struggling in any of her classes.

School was important to Hannah. She wanted to get an education and "actually go places in life. I don't want to sit around and be homeless and live off the government." Hannah said she was very quiet at school and didn't talk to many people and that was a result of her personality.

In her interview at the end of the art buddies program, Hannah was asked to describe both the positive and negative aspects of being an art buddy. She stated:

Well, working with the kids was great. And once they actually sat down and put their minds to it, they actually did it. But it was a struggle getting them to do that. They wanted to play more than anything. And I just didn't have the patience for it... They're observant. They want to learn. It's just hard for them to pay attention.

Hannah also worked on projects on her own and said, "I liked them. It was something different from what normal art classes are like." Hannah believed her art buddies enjoyed working with her and she enjoyed them "'cuz it gave me a chance to interact with the new junior high kids since they'll be the new ones next year. I could kinda see the differences between when I was in sixth grade and them." When asked to describe her relationship with her art buddies and how it changed over the

course of the program, Hannah stated, “Well, you know, Tony he didn’t want to talk at all. Kristi, I think she was a little shy too. But as time progressed they started to warm up to me. They wanted to actually talk.”

Hannah reported that being an art buddy did not change her attitude toward school and that testing was still her least favorite part of school. She found it difficult to focus on tests. She still enjoyed that time at school was time spent away from home. Her best subjects that semester were choir and math. She credited her improvement in math because “I actually did my homework.” Hannah was a junior and was looking to the future. She planned to work for a few years after high school to save money and be able to go to college. She was interested in studying either culinary arts or nursing.

Hannah struggled with illnesses throughout the semester. When asked if she made an extra effort to attend school when she was working with her buddies, she responded, “Sometimes depending on if it was a serious need if I needed to stay home.” Hannah reported that despite her absences, her grades were going to be much higher the semester the program took place. Her grades were improved because “I just started doing my work and paying attention instead of sleeping.” Her motivation to work harder was because she wanted to graduate a semester early and start working.

4.1.4.8 Artwork

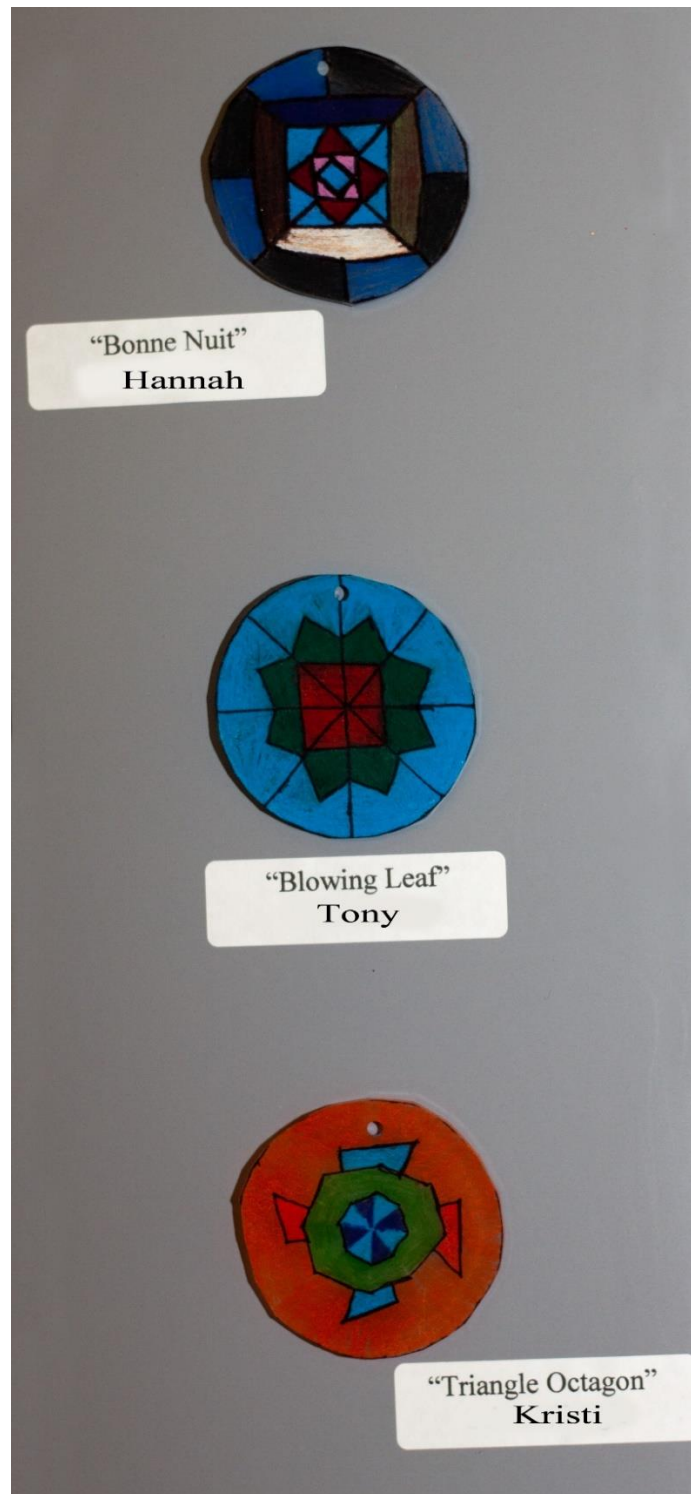


Figure 4.14: Hannah, Tony, and Kristi's Radial Symmetry Shrink Plastic



Figure 4.15: Hannah's Wire Tree



Figure 4.16: Hannah's Broken Ceramic Tile Mural



Figure 4.17: Tony's Wire Tree Sculpture (elementary mentee)



Figure 4.18: Kristi's Wire Tree Sculpture (elementary mentee)



Figure 4.19: Tony and Kristi's Broken Ceramic Tile Mural (elementary mentees)

4.1.5 Case 4: Kyle

Kyle was a twelfth-grade student who often did not put much effort into his schoolwork. Kyle played guitar and greatly enjoyed playing video games. He was often tired at school from staying up until early hours in the morning playing the latest video game. Kyle had inconsistent attendance at school and was much more academically capable than his grades in school indicated.

Kyle enjoyed seeing his friends at school. Many of his friends did not live close to him, so socializing was a highlight of the school day. He seemed to be well liked by his peers and was very laid back. Because Kyle was frequently absent from school, his grades suffered. His teachers also believed he was capable of much more than he gave himself credit for. Kyle admitted that he did not complete required coursework in classes like English. It was his least favorite subject, and he refused to read the required number of books needed to pass the class even though he was capable of doing the work. Even though his effort was not sufficient, his teachers agreed he was a pleasant student. He enjoyed his cooking classes and was considering a career either in the culinary arts, the military, or as a video game designer.

Kyle enjoyed being an art buddy and generally enjoyed being with younger children. He had many nieces and nephews and was accustomed to playing with younger children. His girlfriend was pregnant, and Kyle thought that being an art buddy would help him gain additional skills in working with children.

4.1.5.1 Development of Mentoring Relationship

Kyle was excited to be an art buddy. He offered to take on more art buddies than the two assigned to him. I explained that I didn't want them to have too many mentees in case they were absent. Kyle responded by saying, "I may be absent during the week, but I will be here on Mondays and Fridays" (the days of the art buddies program). In his initial meeting with his sixth-grade art buddies, John and Nikki, Kyle did a great job helping with and explaining the radial shrink plastic designs. Kyle was attentive to his mentees and intervened if they seemed to get off track with their work. He sat between John and Nikki and helped them figure out how to make their designs. Nikki was very quiet, but John did ask questions throughout.

In their second meeting, Kyle's art buddies finished their radial shrink plastic designs (figure 4.20). John was definitely more comfortable with Kyle, and they carried on a conversation throughout their time together. They discussed what they did over the weekend and seemed to enjoy each other's company. When asked how it went with his art buddies in his journal, Kyle said, "Great. Everyone was working and finished the project. Although Nikki is shy I still managed a couple words to come out."

Due to an abundance of homework, Kyle was not able to attend the session to learn how to make the wire trees. Directions were emailed to him, and he took materials home to learn how to do it before he met with his buddies in their third week of interactions. Kyle did a fabulous job explaining how to make the trees to his buddies. He helped them bend and manipulate the wire. Although Nikki was still somewhat quiet, conversation was becoming more natural. The following week, work

continued on the wire trees. Kyle and John were comfortable with one another and chatted the entire time they were working. Nikki was still quiet but did ask for help when needed. When asked how it went with his art buddies, Kyle wrote, "It was great. John talks a lot but it makes time go by faster. Nikki is quiet as usual. I don't know what to say to get her [to] talk more. Overall it was good." On their final week working on the wire trees, Kyle had homework to do and stayed with his art buddies for about half of the normal time. They were finished with the actual tree formation and continued on to decorating the trees. Nikki and John worked well. John was extremely conversational to the point he was beginning to annoy the other groups in the room. At the end of the session, Nikki and John took their trees with them to finish in their regular classroom as time allowed (figures 4.21, 4.23, and 4.24).

Week six of the program marked the start of the broken ceramic tile murals. Kyle's group sat together at the computers and searched for ideas. Initially, they were going to create one large mural. Because Nikki and John could not agree on one idea, the group decided that Nikki and John would create individual, smaller murals. Nikki decided to create a cheetah cub, and John decided on a cartoon robot (figures 4.25 and 4.26). Their conversations were natural while they searched for ideas. Kyle noted in his journal that he enjoyed being an art buddy because "It gives me an idea of what it will be like to have a child male or female."

In their next meeting, Kyle's group drew their ceramic tile designs on the background paper they would be placing broken tiles on. They were shown how to "nip" and break the tiles. Kyle wrote in his journal that "John and Nikki both got done with their drawings which I'm very pleased with. We will start nipping next week so

we should finish within a couple weeks. It went great today.” In their next session, Nikki and John began breaking tiles for their murals. They also glazed more tiles in the colors they knew they would need. Nikki was opening up more and was working well. John was being very social, and it was distracting from his work. Kyle noted this in his journal as well. “Today we went over to glaze more tiles. Nikki is a very hard worker but John just goofs off most of the time. I can tell that he will probably be the last one done.”

Kyle was unable to meet with his art buddies the following week because he had to complete makeup exams in his academic classes. The researcher worked with his art buddies. Nikki continued to make swift progress. Because I sat with John, I was able to keep him on track. He was still very happy to talk the entire time, but he worked while he was talking. At their next two scheduled meetings, Kyle was absent. The researcher worked with the elementary mentees in his group. When Kyle returned, he was happy to see that his art buddies had been making steady progress on their murals. He noted in his journal that he enjoyed being an art buddy and had enjoyed working with his mentees and helping them.

In the final three weeks of the art buddies program, Nikki and John worked to finish their murals. Nikki had opened up and was talking freely with John and Kyle as well as the other groups working at the same time. Because Nikki’s mural had more small, detailed sections of tile, she was not as far along as John. Kyle noted in his journal, “Both are almost done. Nikki is taking a long time but [it is] expected we should finish next week.” This group clearly developed a strong relationship. Kyle openly discussed his friends and girlfriend with his mentees and talked about getting

a job at McDonalds. They shared what video games they were playing and what they did with their friends over the weekend. When asked to describe his experience as an art buddy, Kyle wrote, “Learn to develop a relationship with a little kid and work through many problems.” In their final meeting, they laughed and celebrated the work they had accomplished together and parted with hugs.

4.1.5.2 Elementary Mentee Perspective

John and Nikki were both enthusiastic participants in the art buddies program. Both would have chosen to continue in the program the next semester if it were available. Nikki wanted to be an art buddy again because “I like doing all the fancy art,” and she thought, “IT WAS FUN” [emphasis original]. John wanted to be an art buddy again “because I learned a lot more than I knew before.” John was a very talkative student and enjoyed the opportunity to socialize with older students. He was occasionally disappointed with Kyle’s attendance issues but still enjoyed the program overall. When asked if Kyle did a good job, John said, “Yes and no. No because the times I needed him but when [he was here] he contributed.” Nikki was normally a shy and quiet student. But she opened up over the course of the semester and clearly enjoyed the projects. She thought Kyle did a good job and said, “He helped me on my projects.” John thought being an art buddy was a “totally astronomical experience. I enjoyed it.”

4.1.5.3 Journal Entries

Throughout the semester, Kyle documented his experiences as an art buddy in a journal. On his first meeting with his art buddies, Kyle noted, “Everyone was working and finished the project. Although Nikki is shy I still managed a couple words to come out.” Kyle’s mentees worked well on each project. In the following week, Kyle wrote, “Nikki is working extremely faster than normal but with perfection, John is still the same talking and working. We should get done very quickly now that we know what we are doing.” Kyle continued to note the personality differences between his buddies. When asked how it went at the end of the wire tree project, Kyle stated, “It was great. John talks a lot but it makes time go by faster. Nikki is quiet as usual. I don’t know what to say to get her to talk more. Overall it was good.”

At the start of the broken ceramic tile murals, Kyle described the start of the process. “We looked up pictures. Although they both wanted something totally different we found a solution.” When asked if he enjoyed being an art buddy so far, Kyle said, “Yes, because it gives me an idea of what it will be like to have a child male or female.” Kyle was happy to see his group progressing with their murals the following week. “John and Nikki both got done with their drawings which I’m very pleased with. We will start nipping [tiles] next week...It went great today.” As the murals progressed, it became more difficult to keep John on task. He was very social and had clearly grown comfortable with his group. Kyle stated, “Today we went over to glaze more tiles. Nikki is a very hard worker but John just goofs off most of the time. I can tell that he will probably be the last one done.”

After missing a few sessions, Kyle returned to art buddies to find that their murals were almost completed. He noted that his mentees were “fast and efficient.” Kyle struggled to attend school regularly. When asked if he made a special effort to be at school on art buddies days, he stated, “I try unless I’m sick or have lots of homework.” He said he would be an art buddy again because “I enjoy working and helping little kids.” He found being an art buddy beneficial because “Now I can work with kids a bit more easily.” In his final journal entry, when asked to describe his experiences as an art buddy, Kyle said, “Learn to develop a relationship with a little kid and work through my problems.”

4.1.5.4 Piers-Harris Children’s Self-Concept Scale

Kyle completed the Piers-Harris Children’s Self-Concept Scale at the beginning and end of the art mentoring project. Kyle’s score at the beginning of the semester was a fifty-three and he ended the semester with a total score of forty-eight. This corresponds to a score in the seventy-ninth and fifty-fourth percentiles, respectively. Both scores are considered to be in the average range and are representative of a balanced self-evaluation.

On the Behavioral Adjustment (BEH) scale, Kyle had a raw score of fourteen at the beginning of the program and a thirteen at the end of the program. His initial score was in the eighty-eighth percentile, and his final score was in the sixty-sixth percentile. Kyle’s initial score places him in the above average range, meaning he perceived himself as being able to abide by the rules and expectations at school and at home. His score at the end of the semester was in the average range, which

acknowledges that for the most part he is fairly well-behaved but does occasionally have difficulties.

On the Intellectual and School Status (INT) scale, Kyle started the program with a score of thirteen, in the fifty-fourth percentile. His raw score at the end of the semester was a nine, representing the twenty-first percentile. Although this was a noticeable decline, both scores are considered to be in the average range. Average range scores on the INT scale are exhibited by students who view themselves as performing at an acceptable level at school while acknowledging some struggles.

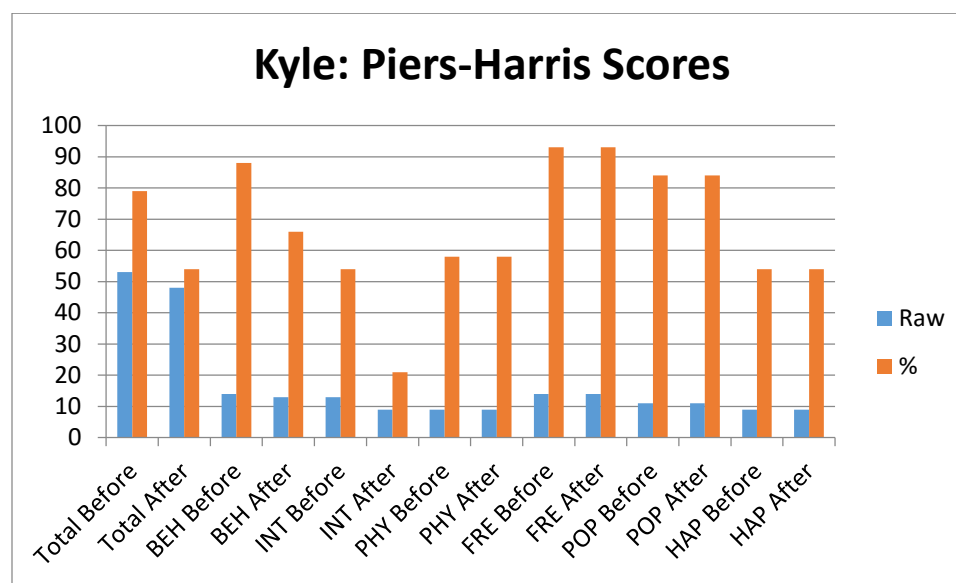
Kyle had a raw score of nine on the Physical Appearance and Attributes (PHY) scale at the beginning and end of the semester. This score is in the fifty-eighth percentile and the average range. An average range score on the PHY scales means the student has a primarily positive view of his appearance and personal attributes.

On the Freedom From Anxiety (FRE) scale measuring anxiety and dysphoric mood, Kyle scored a fourteen at the beginning and end of the program. This score is at the ninety-third percentile in the above average range. Above average scores mean the student is not bothered by sadness or other unpleasant mood states. It also indicates happiness with their appearance and social skills.

The Popularity scale (POP) measures the student's evaluation of their own social functioning. Kyle scored an eleven at the beginning and end of the semester. This score is in the eighty-fourth percentile and is in the above average range. This indicates that Kyle perceived himself as successful in his peer relationships.

On the final domain scale, the Happiness and Satisfaction scale (HAP), Kyle scored a nine at the beginning and end of the semester. A nine is in the fifty-fourth percentile and is in the average range. Average scores on the HAP scale represent a primarily positive view of general life circumstances.

Table 4.4: Kyle's Piers-Harris Scores



4.1.5.5 Teacher Questionnaire

Kyle's short stories, economics, and career exploration teachers completed surveys before and after the art buddies program. Although Kyle was not a behavior problem in any of his classes, his teachers did not believe he was working up to his potential. His short stories teacher wrote, "In some ways it is hard to tell because we are still early in the school year. I think Kyle is more capable than he gives himself credit for." His career exploration teacher echoed this sentiment at the beginning of the semester. "Pleasant but doesn't take the initiative very much."

Kyle's teachers noted his attendance problems. At the end of the semester, his economics teacher noted that he was always absent, a change from marking never absent at the beginning of the semester. His short stories teacher also commented on Kyle's attendance problems: "Kyle is absent often and it affects his work."

Overall, Kyle's short stories teacher did not note any improvements in his classroom attentiveness, interest in school, or ability to turn in work on time. She stated, "He is also capable of much more than he exhibits. He chooses not to work to his potential." Kyle's economics teacher noted that Kyle's work ethic and attitude worsened over the course of the semester. Kyle's career exploration teacher noted some improvements in the areas of speaking positively towards her and getting along with his peers. She also thought he had made attempts to improve over the course of the semester. She stated, "Kyle has a very nice demeanor and a good attitude toward others. He always has a pleasant smile and is nice to be around. He's been working steadily at McDonalds...since October, and doing a good job."

4.1.4.6 School Performance

Prior to the start of the art buddies program, Kyle had a cumulative GPA of 1.32. In the semester directly before the program, his GPA was .45. Kyle was frequently absent and struggling to complete assignments in many of his classes. His teachers noted that he was not turning in homework, had low quiz and test scores, lacked motivation, and slept in class. He did not pass English 11, geometry, Algebra 2, or U.S. history. At the end of the art buddies program, Kyle had a

semester GPA of 1.78 which raised his cumulative GPA to a 1.42. This was a large improvement in his academic work. Kyle passed all of his classes that semester except short stories. He also was taking an online course in U.S. history in an attempt to catch back up and graduate on time. Although not calculated into his GPA, Kyle passed that class as well.

Kyle was frequently absent from school. In the semester prior to the art buddies program, Kyle was absent from eight days of school. Six of the absences were unexcused while the remaining two absences were excused due to illness. During the art buddies program, Kyle was absent ten days. Four absences were excused due to illness and six were unexcused.

Kyle was tardy to class once in the semester prior to the program and was not tardy at all during the art buddies program. Kyle did not have any discipline reports during the semester before or the semester of the art buddies program.

4.1.4.7 Interviews

Kyle participated in interviews before and after the art buddies program. In his interview at the beginning of the program, Kyle discussed his love of guitar and video games. He had been playing guitar for three years and was influenced by the heavy metal music he enjoyed listening to. He spent a large amount of time on video games. He played first person shooter games like Call of Duty. When asked how much time he devoted to video games per week, Kyle stated, "I usually play about 5 or 6 hours a day so, which would be 35 a week. So quite a lot of time."

Kyle enjoyed being at school because it was the only time he got to see his friends. This was a common issue in the school district because it covered a large geographical area. Kyle often stayed up late playing video games and as a result, was not a morning person. His least favorite part of school was having to get up early in the morning. Kyle enjoyed his foods and advanced foods classes because he enjoyed cooking. His top career choices were related to his interests, "Military, chef, and like, something to design things, video game designer." Kyle was struggling in his English classes because "It's just 'cuz I don't read the two books required so like I don't really like reading that much. I can research and do writing and stuff, 'cuz I love to write but I'm not much for the reading." When asked if he would show more interest if he could pick what he was allowed to read, Kyle stated:

If it's a good book, like I think I've read one or two books in the library that I actually enjoy. But otherwise I don't know, I'm not much of reader. Like I can listen to a story and actually understand it, if they put it on cd or if we read it and actually go over it. But otherwise I can't read on my own 'cuz I never put time and effort into it.

Even though Kyle didn't always enjoy school, he knew it was important to come and would come even if it were not required. He explained he would come:

Because of the fact that... I like math, but I don't think the way that the school has it set up is like correct. Because I don't think you should have algebra, then geometry, then algebra 2. I think it should go algebra, then algebra 2 so you don't forget everything you learned in algebra. But I mean, everything else, it's not that bad. But school's not that bad. I've been here 12 years.

How much Kyle enjoyed school depended upon the day, his mood, and how his classmates were behaving.

Kyle chose to be an art mentor because he enjoyed spending time with his younger cousins and because “To be honest, because my girlfriend was pregnant and we didn’t know if we were going to have a kid or not. I figured it would be better to prepare and work with some little kids.”

After the art buddies program concluded, Kyle had a final interview. When asked to describe his experiences as an art buddy, Kyle said:

It was kind of fun. I just enjoyed working with John and Nikki although John was a little crazy. But I don’t know. I guess I had both opposites. One was really, really quiet and one was really, really loud so it was just kind of evened out. I thought it was pretty fun over all.

Kyle described his experiences as a mentor as “a good experience to have before having a kid I guess. Being able to see what it’s going to be like when they go through school. What they’re going to be doing.” Kyle enjoyed spending time with his art buddies and was enthusiastic about spending time with younger students in general. Kyle described the changes in their relationship by saying:

Well Nikki for sure when we first started, she never really talked at all. She was really shy. And finally towards the end I got her to start talking so she was really happy. John didn’t care. He just spoke his mind and didn’t really care what people thought.

Kyle did not believe that being an art buddy changed his view or attitude towards school. He still did not enjoy having to wake up for school, but that process had become a little easier because he took his mother to work before school started at 6 a.m. He also did not enjoy the drama caused by some of his classmates. He was not directly involved but said it was annoying to deal with.

Kyle continued to enjoy his foods classes more than any other subject. He wished there were further culinary courses he could enroll in. He was continuing to struggle in English classes and was not passing either English class he was taking. Kyle struggled with the classes because:

It's not really hard; I'm good at grammar and everything. It's just the fact that I don't read. So for my books you're supposed to read two every nine weeks and I have two English classes right now so I have to read four every nine weeks. And it's hard enough for me to read two. It's hard enough for me to read one every nine weeks and I don't enjoy reading at all. And they are worth 200 points.

Kyle knew he had to have high scores on his final exams to pass those classes. Although online classes were an option for credit recovery, they were expensive. Kyle was already enrolled in an online U.S. history course for credit recovery and his family could not afford to enroll him in additional classes.

When asked if he would come to school if it were not required, Kyle said:

It just depends. I would come some days and some days I wouldn't. I would come some days just because of the fact that one, I get to see some of my

friends that live quite a ways from me and also because, I mean, I don't want to grow up dumb or anything. I want to learn stuff; I just don't want to take the classes that I think I already know like English. I already know how to speak English. I can understand grammar, speaking English correctly. And then also like math. I like math but the problem is the way they do it here, I don't like it. Because they make you take algebra, then geometry, then algebra two. By the time you're done with geometry you've forgotten everything about algebra. But and then again I really don't like coming to school. I like video games. I'm a video game addict. So if I can I want to stay home and play.

How Kyle felt at school depended upon the amount of sleep he got the night before. He often stayed up late playing video games. Kyle did make an extra effort to be at school on art buddies days:

Some days I was sick a couple days. And I know a couple days I had to leave early and I can't remember exactly what for. But yeah, I enjoyed being with them. Of course I had those couple of days where I had to do homework. I tried to hurry up and finish so I could go down and see them.

Kyle enjoyed being an art buddy and wished he would have had more time to spend with his art buddies. He concluded his interview by saying, "I wish I had a study hall next semester so I could do this again."

4.1.4.8 Artwork

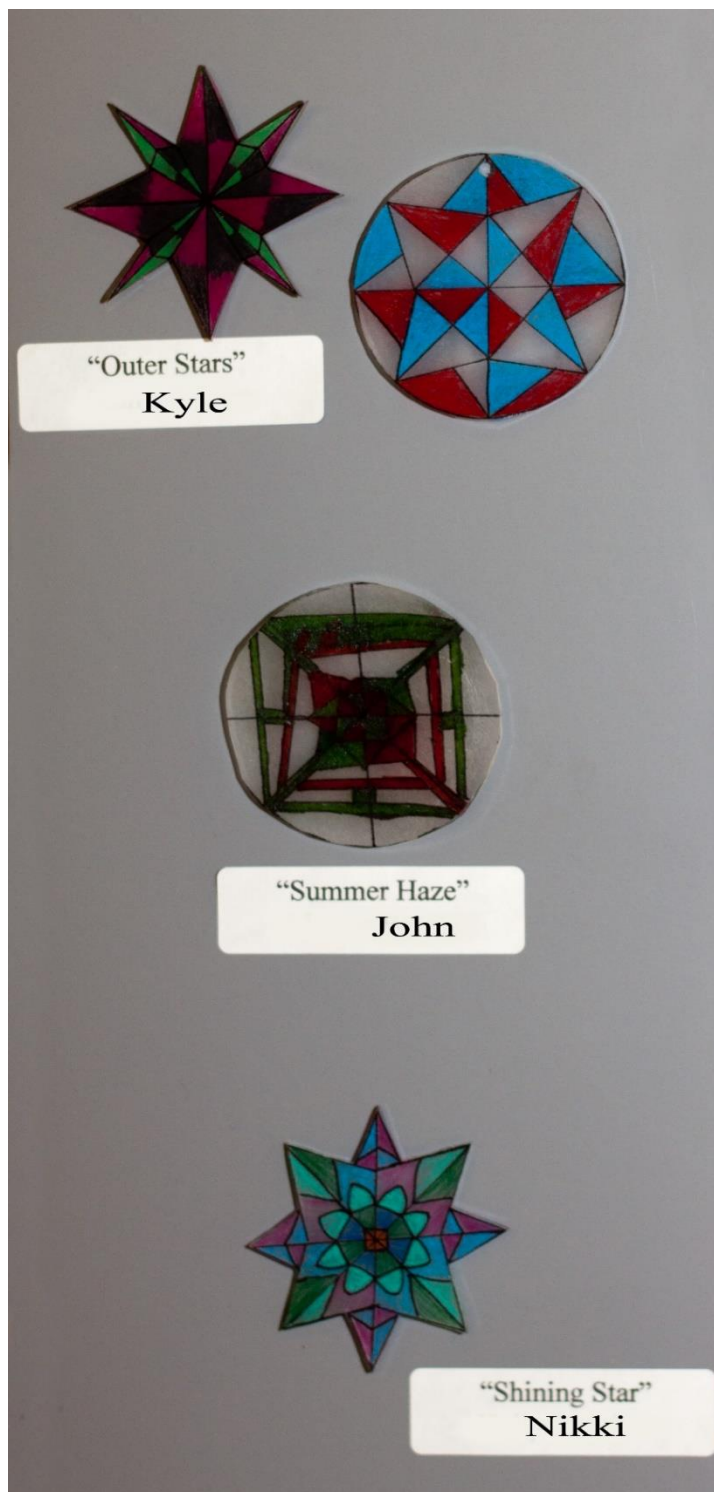


Figure 4.20: Kyle, John, and Nikki's Radial Symmetry Shrink Plastic



Figure 4.21: Kyle's Wire Tree Sculpture



Figure 4.22: Kyle's Broken Ceramic Tile Mural



Figure 4.23: John's Wire Tree Sculpture (elementary mentee)



Figure 4.24: Nikki's Wire Tree Sculpture (elementary mentee)



Figure 4.25: John's Broken Ceramic Tile Mural (elementary mentee)



Figure 4.26: Nikki's Broken Ceramic Tile Mural (elementary mentee)

4.1.6 Case 5: Luke

Luke was an eleventh-grade student who was well liked by his classmates and often took on the role of the class clown. Luke had moved from a nearby school district a year ago. It took him some time to adjust, but he was much happier at Fieldworth High School. A teacher who had Luke in the previous year stated, "He seeks peer approval and tries to do things to make students laugh." Teachers who had Luke as a sophomore and junior noted that he seemed to have settled in as a junior.

Luke was incredibly social and well liked. His favorite part about coming to school was seeing his friends. He was actively involved in athletics and was a standout on the basketball team and was a member of the baseball team. Luke was employed by the local Boys and Girls Club and greatly enjoyed spending time with younger children. He preferred going to work over coming to school.

Luke admitted he had not been trying hard at school. His animal science teacher stated, "Towards the end of the semester, Luke was not showing any interest in animal science at all. He did not care or want to learn the subject matter." Luke knew he needed to improve his grades to get into college. When his attitude changed and he began working harder, his teachers noted the improvement in his maturity and work ethic. Luke was interested in being an art buddy because he enjoyed kids and especially enjoyed late elementary school aged children, similar to the age level he worked with at his job.

4.1.6.1 Development of Mentoring Relationship

Luke was originally randomly assigned to the control group but was asked to be an art buddy after fellow art buddy Kyle exhibited attendance problems. Luke started meeting with his art buddy a week after everyone else, in the second week of the program, but was extremely happy to get the opportunity to work with sixth-grade student, Lisa. Luke was only assigned one art buddy in the event that Kyle continued to miss additional meetings. In his first meeting with Lisa, not much conversation took place. Luke did a good job explaining how to make the wire tree and Lisa followed along. Luke wrote in his journal, "I think it went well. She wasn't as shy as I thought she would be. I was a little shy."

In the third week of the program, Hannah was absent. Luke worked with his art buddy, Lisa, and Hannah's art buddies, Kristi and Tony. Luke sat opposite from the three art buddies he was helping. Lisa was further ahead on the wire tree and occasionally asked Luke for help. Luke also worked with Kristi and Tony to get their wire trees started. Conversation was still a bit forced, but the art buddies discussed what they had done over the weekend and football with Luke. In his journal, Luke reported feeling less shy and enjoying being an art buddy. In the next meeting, Luke and Lisa talked more freely while they were working. They also conversed with Kyle and his art buddies. Lisa's wire tree was progressing well, and Luke was continuing to do a good job helping her when needed. Luke wrote in his journal, "This is beginning to become a great experience." In their final week working on the wire trees, Kyle was absent. Luke worked with Lisa and Kyle's art buddies, John and Nikki. Conversation was natural, and Luke and the elementary mentees discussed

favorite places to eat, games they liked to play, and their favorite musicians. John occasionally got caught up in conversation, and Luke reminded him several times to continue working on his tree sculpture. At the end of the session, the elementary mentees took their trees with them to finish and the researcher described the next project, ceramic tile murals (figures 4.27 and 4.29).

Week six marked the beginning of the broken ceramic tile murals. The researcher briefly reviewed how the process of creating the murals would work. Luke and Lisa searched for image ideas on the internet. Conversation was natural while they debated different ideas. Luke and Lisa settled on creating an image of a frog on a lily pad (figure 4.30). In his journal, Luke noted that he enjoyed being an art buddy because “I like being around the kids.” The following week, Luke and Lisa traced their frog design onto a large piece of paper they would place the broken tiles on. After a demonstration on how to break and “nip” the tiles, Luke and Lisa worked together on their mural while they talked about what they had done in the past week. Luke wrote in his journal, “We started tracing and breaking our tiles. We have fun – and I like it!!!”

In their next session, Luke and Lisa glazed additional tiles for their mural. Once done glazing, they continued breaking and placing tiles on their frog mural. They were working well together, conversing while they worked, and made excellent progress. The following week, work continued on their mural. Luke and Lisa divided their work well. Luke broke large pieces of tile for the background with a hammer. Lisa worked on more detailed sections that required smaller pieces with a tile nipper. Luke stated in his journal that his favorite thing about being an art buddy was

hanging out with the kids. Over the next several weeks, Luke and Lisa continued work on their ceramic tile mural. They were working well together, and conversation flowed freely. They had clearly grown comfortable with each other. Lisa was unhappy with how the frog face was looking. The researcher helped to rearrange a few tiles to clean up the design. Luke missed a few sessions due to mandatory testing and homework. The researcher worked with Lisa during those sessions. She continued to make significant progress on the frog mural. In their last week working on the mural, Luke was absent due to confusion about when and where mandatory testing was taking place. The researcher and Lisa continued breaking and placing tiles. Lisa missed Luke and was disappointed he was absent.

In their final meeting, Luke and Lisa finished their mural. They happily talked about what they had accomplished over the semester while they ate donuts. They hugged at the end of their session. At the beginning of the semester, they were both very shy but had clearly developed a friendship over the course of the semester.

4.1.6.2 Elementary Mentee Perspective

Sixth-grade student Lisa enjoyed being an art buddy. When asked what she thought about being an art buddy, Lisa stated, "It was fun." Lisa started the semester shy but warmed up and was social with Luke and the other art buddies as the semester progressed. Although he did miss a few sessions, Luke was very enthusiastic about being an art mentor, and Lisa picked up on this. Lisa thought Luke was a good art buddy because "He was here and fun." If the program were offered again, Lisa wanted to participate because she loved art.

4.1.5.3 Journal Entries

During the art buddies program, Luke documented his experiences as an art buddy in a weekly journal. After his first meeting with his art buddy, Luke thought it went well. He wrote, "She wasn't as shy as I thought she would be. I was a little shy." In their next meeting, conversation was still forced but was moving in the right direction. Luke also did an excellent job interacting with Kyle's and Hannah's art buddies and they were all beginning to share conversation. Luke noted, "It went better. The kids seemed less shy and I was not as shy. They seem to enjoy it." In his next journal entry, Luke wrote, "This is beginning to become a great experience. I like doing this and would like to continue doing it."

Throughout the semester, Luke filled in for Kyle and Hannah when they were absent. He formed relationships with their art buddies quickly and easily and all three of those groups got along with each other and conversed freely. After filling in for Kyle, Luke described how it went in his journal. "It is fun. I am beginning to have fun with this but John [Kyle's art buddy] can get a little nuts. But otherwise it went well."

Luke documented the beginning of the ceramic tile murals in his journal. In their initial week of that project, Luke wrote, "We got some ideas for our tile and had fun... I like being around the kids." Luke greatly enjoyed working on the ceramic tile mural the following week. "We started tracing and breaking our tiles. We have fun. And I like it!!!" As the semester continued, Luke noted that his favorite part about being an art buddy was "hanging out with the kids." He stated there was nothing that he didn't enjoy.

At the end of the ceramic tile mural, Luke's interest started to wane. However, he was happy with the progress Lisa was making. He stated, "She is doing much more work than me." He enjoyed spending time with all of the art buddies, and if given the opportunity, Luke would have served as an art buddy again because "this is relaxing." Luke was asked to describe his experiences as an art buddy in his final journal entry. Luke wrote, "This experience has helped me grow as a person and given me the tools to continue helping and being involved in the community with children."

4.1.6.4 Piers-Harris Children's Self-Concept Scale

Luke completed the Piers-Harris Children's Self-Concept Scale at the beginning and end of the art buddy program. Luke's score at the beginning of the semester was a fifty, equating to the sixty-second percentile. His score at the end of the program was a forty-six, aligning with the forty-sixth percentile. Both scores are in the average range.

The Behavioral Adjustment (BEH) scale measure a child's awareness of their own behavior difficulties. Luke had a raw score of nine at the beginning of the semester. This is in the eighteenth percentile and is considered to be on the low side of an average score. At the end of the semester, Luke had a raw score of seven, which is the tenth percentile. This is a low range score. Children who score in this range are admitting they have difficulty meeting the behavior standards set by their parents or their teachers.

Luke's initial score on the Intellectual and School Status (INT) scale was a fourteen, or the sixty-sixth percentile. His final score was a thirteen, at the fifty-fourth percentile. They are both considered to be average range scores. Students in the average range generally perform well at school but acknowledge some struggles.

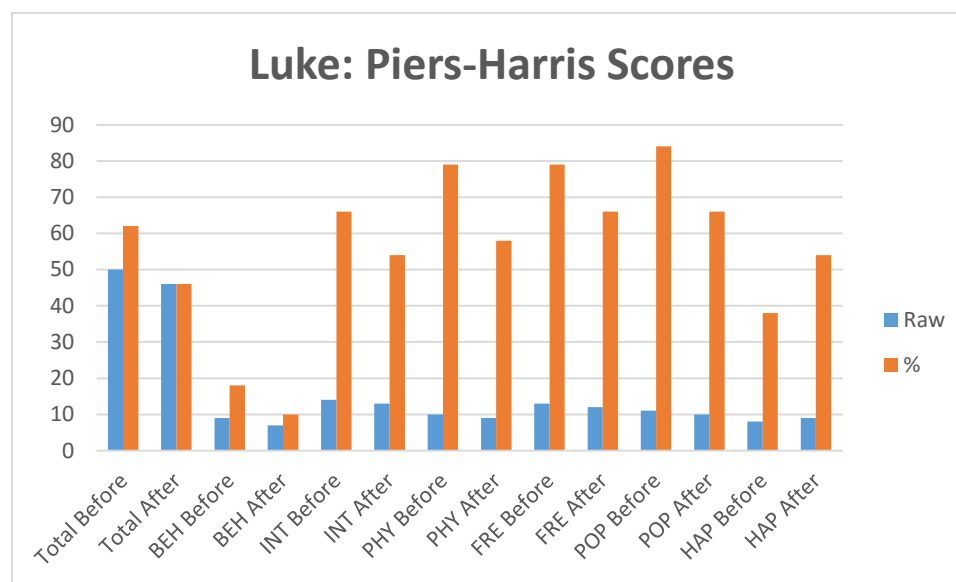
On the Physical Appearance and Attributes (PHY) scale, Luke had a raw score of ten at the beginning of the semester and a nine at the end of the semester. These scores align with the seventy-ninth and fifty-eighth percentiles. Luke's initial score was in the above average range and his final score was in the average range. Above average scores show a student is satisfied with their appearance. Average scores on the PHY scale indicate a child is generally positive about their appearance and is considered a balanced assessment.

On the Freedom From Anxiety (FRE) scale measuring anxiety and dysphoric mood, Luke scored a thirteen at the beginning of the program and a twelve at the end. His initial score was in the seventy-ninth percentile and his final score was in the sixty-sixth. Luke's initial score was in the above average range, showing he was not bothered by sadness or unpleasant moods. Luke's final score was in the average range, indicating primarily positive moods with a few difficulties.

The Popularity (POP) scale measures a child's evaluation of social functioning. Luke scored an eleven at the beginning of the program and a ten at the end. These scores are in the eighty-fourth and sixty-sixth percentiles. Luke's initial score was in the above average range, indicating Luke saw himself as successful in his peer relationships. Luke's final score was in the average range.

On the final domain scale, the Happiness and Satisfaction scale (HAP), Luke scored an eight at the beginning of the semester and a nine at the end of the semester. His initial score was in the thirty-eighth percentile and his final score was in the fifty-fourth percentile. Both of these scores are in the average range and represent a primarily positive view of life circumstances.

Table 4.5: Luke's Piers-Harris Scores



4.1.6.5 Teacher Questionnaires

Luke's Algebra 2 teacher completed a survey at the beginning and end of the art buddies program. His personal finance teacher completed the initial survey and his animal science teacher completed the final survey. Although Luke was not in general a behavior problem that would escalate to the point of an office referral, he did have a reputation for being the class clown. His personal finance teacher noted, "He seeks peer approval and tries to do things to make students laugh." She also

noted that Luke was not always attentive in class and lacked confidence in his abilities.

Luke's animal science teacher also noted that Luke was only sometimes attentive during class. Although he in general spoke in a positive manner to her, he also frequently sought negative attention from his peers. She believed Luke lacked confidence in his abilities and did not try to improve. She commented, "Towards the end of the semester Luke was not showing an interest in animal science at all. He did not care or want to learn the subject matter."

Luke's Algebra 2 teacher noted a big change in his attitude and effort from the previous school year. She had Luke for the second year because he failed Algebra 2 in the previous year. In her initial survey, she commented:

Luke was in my Algebra 2 class last year (his first year at Fieldworth). He failed second semester largely due to what I believe was a lack of motivation after feeling overwhelmed. He is doing better this year, and he has a better outlook. He is an aide for me, and I see some social awkwardness with the seventh graders that hour. However, his brother is in that class, and that could be a huge factor. I wonder, however, if he struggles socially with those his age.

In her final survey, Luke's Algebra 2 teacher thought his confidence in his abilities had improved and he was less easily discouraged. He was more interested in school. He still sought negative attention from his peers. She commented, "He shows a lot of improvement from last school year to this school year in his maturity and work ethic/focus."

4.1.6.6 School Performance

Before the art buddies program started, Luke had a cumulative GPA of 2.473. In the semester directly before the art buddies program, Luke's GPA was a 2.099. Teacher comments on his report card were low quiz and test scores and does not complete assignments. He did not pass Algebra 2 but passed all of his other classes. At the end of the art buddies program, Luke had a semester GPA of 2.602, which raised his cumulative GPA to 2.494. Luke showed clear academic improvement that semester and passed all of his classes, including Algebra 2.

Luke did not exhibit attendance problems at school. In the semester prior to the art buddies program, Luke was absent for three days. All three absences were excused due to illness. During the art buddies program, Luke was absent from school one day. It was excused due to illness. Luke was tardy to class once in the semester prior to the program. He was tardy five times during the semester of the art buddies program.

Luke exhibited minor behavior problems at school. In the semester prior to the art buddies program, Luke did not have any discipline reports. In the semester of the program, Luke had three. The first was at the beginning of the semester and was for horseplay in his ceramics class. He served a Thursday night school detention. Luke's other two office referrals were for cell phone use during class. They also occurred towards the beginning of the semester before Luke served as an art buddy. Luke served a lunch and Thursday night school detention for those infractions.

4.1.6.7 Interviews

Luke was interviewed before and after the art buddies program. When asked to talk about himself and what he did for fun in his first interview, Luke talked about playing on the basketball and baseball teams. This quickly transitioned to how he was doing in school. Luke said, “I get decent grades but they’ve been slipping since I’ve been in high school. I need to try a little bit harder. I transferred out here from [Bennett] last year. I really enjoy it out here. It’s just a lot better atmosphere for my purposes.” Luke enjoyed Fieldworth because “It’s like everybody knows everybody. It’s just you don’t have troubles like what you have at [Bennett].”

Luke’s favorite part about coming to school was getting to socialize with his friends. He also believed he was getting a good education at Fieldworth High. Homework was his least favorite thing about school. Luke thought Algebra 2 was the class he was struggling with the most because he failed it in the previous school year. Luke also reported that he would rather be at work at the Boys and Girls Club than come to school. He enjoyed setting up games for the kids to play and pitching during kickball.

Luke was interested in being an art buddy because:

I’ve always enjoyed kids. When I see a baby in the store they’re always looking at me – it’s kinda weird. I like to be around kids. I work with kids all day long. I like, like the nine to ten year olds. Just, It’s a good experience for me.

Luke was also considering a career with children and thought the program might be useful.

At the end of the art buddies program, Luke had a final interview. He started by describing his experiences as an art buddy over the course of the semester.

The kids seemed to really come out of their shells at the end. It was fun working with them. And I probably wouldn't hesitate to do it again if I was given the opportunity... I really liked it. The kids, like every time I see them in the hallway they wave to me and be like there's [Luke], stuff like that. I like that – the attention.

Luke said there were no negatives to being an art buddy. He described how their relationship had changed over the course of the semester. "At the very beginning, we were both kind of shy I think. Towards the end when we started doing the mural I think she really opened up and looked forward to coming down here every Tuesday."

Luke did not think the program had changed his views towards school. He still did not enjoy homework, but his least favorite part of school changed from being homework to testing. Finals week was coming up, and he was worried about all of the exams and thought they didn't matter. Luke's favorite part about coming to school remained seeing his friends and getting a quality education. Algebra 2 went from being the class he struggled with the most to the class he was excelling in.

Well I am taking algebra two over again this year because I passed first semester but I failed second semester. So I took the whole year over instead

of just second semester. I got a C+ last year and this year I am getting an A-. That's what I'm doing the best at.

Luke attributed his improvement to aiding for the teacher, taking notes, and completing all of his homework.

Luke largely enjoyed coming to school but acknowledged he did have days where he would get frustrated. Although attendance was not a problem for Luke, he did try to be present on art buddy meeting days. Luke said, "One day I had a dentist appointment. One day I was feeling a little sick but I came to school to be with them because I did look forward to it."

Luke reported doing much better in all of his classes the semester of the art buddies program. His grades were "much better. I have all As and Bs as of right now. And it hasn't been that way since about seventh grade." He attributed the change to "the fact that I'm a junior and I'm going to be needing better grades to get into college. I have to do better to get into college without any problems."

4.1.6.8 Artwork



Figure 4.27: Luke's Wire Tree Sculpture

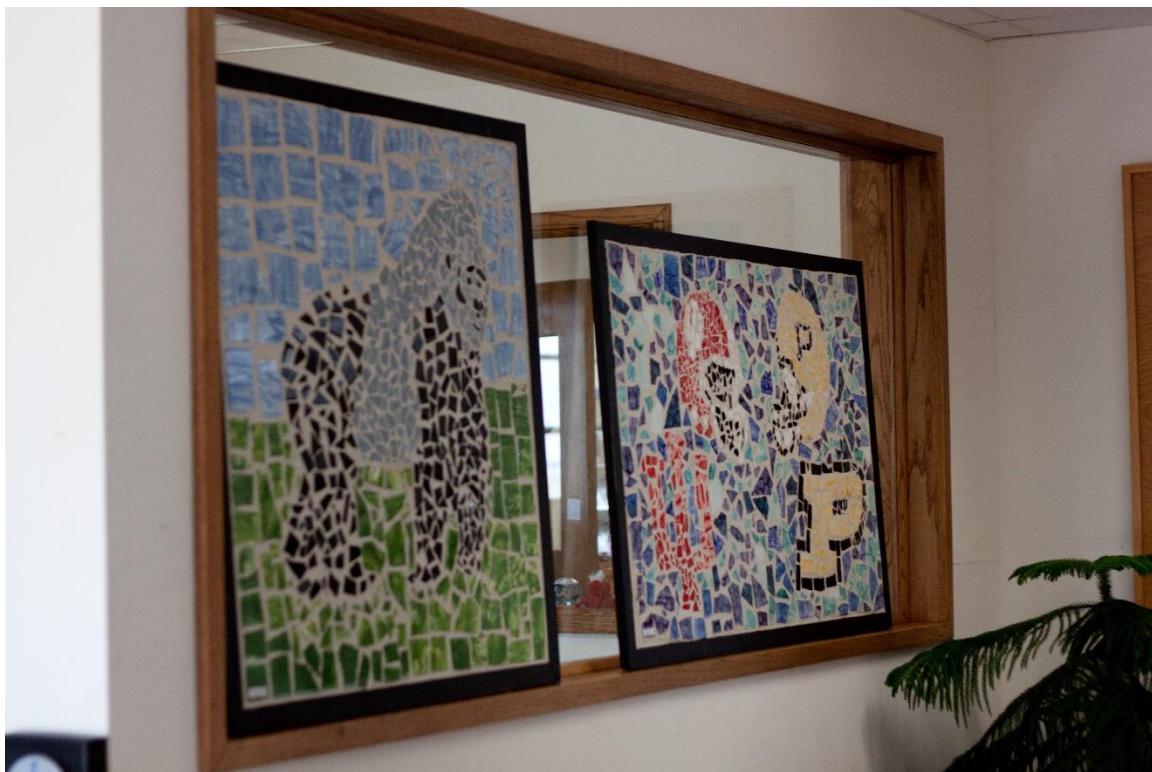


Figure 4.28: Luke's Broken Ceramic Tile Mural (pictured on the left)



Figure 4.29: Lisa's Wire Tree Sculpture (elementary mentee)



Figure 4.30: Lisa's Broken Ceramic Tile Mural (elementary mentee)

4.2 Case Studies: Control Group

In order to have a group to compare the mentoring experience to, three students served as the control group in this study. Originally, Luke was part of the control group, so there were four mentors and four students in the control. After Luke became a mentor, the remaining three students served as the control group. The control group did not participate in interviews nor did they keep weekly journals as there was no mentoring relationship for them to document. Case data for the control group includes parent and teacher surveys, GPA, attendance records, discipline records, Piers-Harris Children's Self-Concept Scale, and two short student questions.

4.2.2 Case 6: Izzy

Izzy was a shy twelfth-grade student. She had a small group of friends, but tended to work alone and ignore the majority of her peers in her classes. She strove to please the adults around her. She also enjoyed working with younger students. Her mother reported that she was in general happy and got along well with others. Her mother also reported that she enjoyed studying, always completed her homework, and that she was happy with the grades Izzy was earning in school.

4.2.2.2 Piers-Harris Children's Self-Concept Scale

Izzy completed the Piers-Harris Children's Self-Concept Scale at the beginning and end of the semester. Izzy's score at the beginning of the semester was a fifty which is in the sixty-second percentile. Izzy's total score at the end of the

semester was a forty-three which is in the thirty-eighth percentile. Both of these scores are in the average range representing a balanced self-evaluation.

On the Behavioral Adjustment (BEH) scale, measuring awareness of behavior difficulties, Izzy had a raw score of thirteen at the beginning and end of the semester. This score is in the sixty-sixth percentile and is the average range, indicating she considered herself to be fairly well behaved.

At the beginning of the semester, Izzy scored a thirteen on the Intellectual and School Status (INT) scale. This score is in the fifty-fourth percentile. Izzy's final score was a fifteen, at the eighty-second percentile. Izzy's initial score is considered to be in the average range. Students in the average range generally perform well at school but acknowledge some struggles. Izzy's final score is in the above average range and is indicative of students who see themselves as well behaved and efficient in their school work.

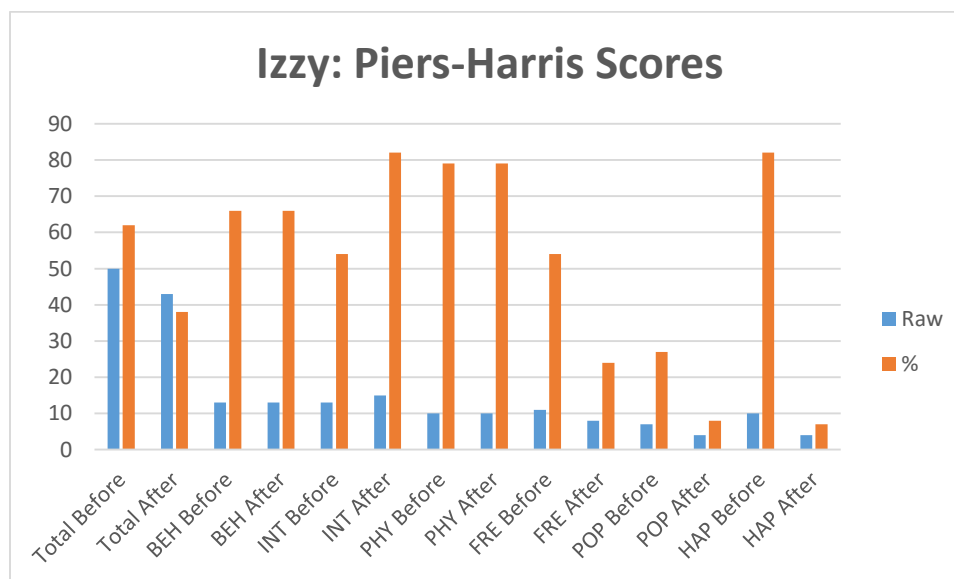
On the Physical Appearance and Attributes (PHY) scale, Izzy had a raw score of ten at the beginning and end of the semester. This score is in the seventy-ninth percentile and is in the above average range. Izzy's above average score on the PHY scale indicates she was happy with her appearance and also believed she was well liked by her peers.

The Freedom From Anxiety (FRE) scale measures anxiety and dysphoric mood. Izzy scored an eleven at the beginning of the semester and an eight at the end. Her initial score was in the fifty-fourth percentile, and her final score was in the twenty-fourth. Both of Izzy's scores on the FRE scale were in the average range, demonstrating she had a primarily positive mood.

On the Popularity (POP) scale measuring social functioning, Izzy scored a seven at the beginning of the semester and a four at the end. These scores are in the twenty-seventh and eighth percentiles. Izzy's initial score was in the average range, demonstrating she was mostly satisfied with her social functioning. Izzy's final score was in low range and indicates she was unhappy with her social standing and dissatisfied with her friendships.

The final domain scale is the Happiness and Satisfaction scale (HAP). Izzy scored a ten at the beginning of the semester, which is the eighty-second percentile. This is in the above average range and represents an overall sense of happiness and well-being. Izzy's score on the HAP scale at the end of the semester was a four. This is an eighth percentile score and is in the low range. Izzy's final score indicates she was generally unhappy and dissatisfied with herself.

Table 4.6: Izzy's Piers-Harris Scores



4.2.2.3 Teacher Questionnaire

Izzy's earth and space science, short stories, economics, and nutrition and wellness teachers completed surveys at the beginning and end of the semester. Izzy was a well-behaved student who was never a behavior problem in class. Izzy's teachers noted that she always spoke to them in a positive manner. Izzy was attentive in class and frequently worked well with others.

Although Izzy's teachers believed she engaged in positive interactions with her peers, her short stories teacher noticed that she often did not prefer to work with her peers. In her initial survey, Izzy's short stories teacher wrote:

She will work with others, but I get the feeling she prefers to work alone.

Although she doesn't seek negative attention, she doesn't really seek attention at all. She has friends, but she doesn't interact too much with the students who are in my class with her.

At the end of the semester, her short stories teacher continued to notice Izzy's lack of interaction with her peers. "Izzy prefers to work alone. She seeks attention from adults and tries to be a helper to younger students." At the end of the semester, she also noticed that Izzy was less easily discouraged and was more confident in her work abilities but was completing assigned work less frequently.

Izzy's nutrition and wellness teacher noted that Izzy was frequently discouraged. She also noted that the amount of assigned work Izzy turned in decreased over the course of the semester. Izzy's earth and space science teacher did not note any large changes. She was more positive with her peers at the end of

the semester, was more interested in school, and was less easily discouraged. At the end of the semester, Izzy's economics teacher believed she was more attentive in class and completed more assigned work but was more frequently absent, less confident in her work abilities, and was less likely to try to improve.

4.2.2.4 School Performance

In the semester prior to the art buddies program, Izzy had a cumulative GPA of 2.466 and a semester GPA of 3.112. Izzy did not have any teacher comments on this report card. At the end of the semester in which Izzy was in the control group, she had a semester GPA of 2.782. This raised her cumulative GPA to a 2.52. Izzy did not have any teacher comments on this report card either. Although Izzy's cumulative GPA improved, her semester GPA was lower during the semester she served in the control group when compared to the previous semester. Izzy explained her grades would be "about the same since I worked really hard."

Izzy exhibited excellent school attendance. In the semester prior to the program, Izzy was absent for one day. This absence was due to illness and was excused. In the semester of the program, Izzy was absent once. This was also an excused absence due to illness. Izzy was not tardy to class in either the semester before or the semester of the art buddies program. Izzy was not a behavior problem at school and did not have any discipline reports in either semester.

4.2.3 Case 7: Phil

Phil was a well-liked twelfth-grade student. He was a multi-sport athlete and was a member of the basketball, baseball, football, and cross country teams. He was a standout on each team he participated in. Phil set a good example for his teammates by always exhibiting a positive attitude and by working hard to improve his skills. He was respectful of his teachers and popular amongst his peers.

4.2.3.2 Piers-Harris Children's Self-Concept Scale

At the beginning and end of the semester, Phil completed the Piers-Harris Children's Self-Concept Scale. Phil had an initial raw score of fifty-five. This score aligns with the eighty-sixth percentile. Phil's score at the end of the semester was a fifty-eight, a ninety-seventh percentile score. Both of these scores are in the high range. This indicates Phil was confident in his abilities in many different areas.

On the Behavioral Adjustment (BEH) scale, Phil had a raw score of thirteen at the beginning of the semester and a fourteen at the end of the semester. Phil's initial score was in the sixty-sixth percentile and his final score is in the eighty-eighth percentile. Phil's initial score was in the average range. His final score is considered above average and shows that Phil was able to follow the rules and expectations at school and at home.

Phil had a raw score of sixteen at the beginning and end of the semester on the Intellectual and School Status (INT) scale. A sixteen is in the ninety-third

percentile and is an above average range score. This score indicates that Phil saw himself as well-behaved and generally capable of all academic tasks.

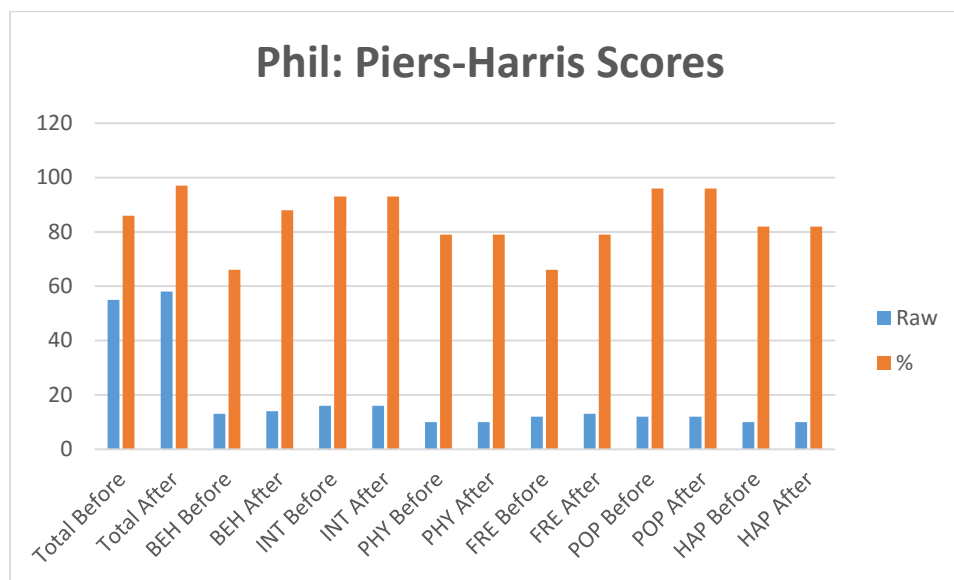
Phil had a raw score of ten at the beginning and end of the semester on the Physical Appearance and Attributes (PHY) scale. This score is in the seventy-ninth percentile and is in the above average range. Phil believed he was accepted by his peers and was happy with his appearance.

On the Freedom From Anxiety (FRE) scale, Phil initially scored a twelve, a sixty-sixth percentile score. At the end of the semester, Phil's score was a thirteen, aligning with the seventy-ninth percentile. Phil's initial score was in the average range. Phil's final score was above average, showing he was happy with his appearance, social standing, and other personal attributes.

On the Popularity (POP) scale, Phil scored a twelve at the beginning and end of the semester. A score of twelve is in the ninety-sixth percentile and is in the above average range. This score indicates Phil believes he was well-liked by his peers and was satisfied with his friendships.

Phil had a raw score of ten on the Happiness and Satisfaction scale (HAP) at the beginning and end of the semester. This score is in the eighty-second percentile and is in the above average range. Phil's score of ten indicates he was generally happy and satisfied with his life.

Table 4.7: Phil's Piers-Harris Scores



4.2.3.3 Teacher Questionnaire

Phil's themes in literature, agricultural mechanics 2, and economics teachers completed surveys at the beginning and end of the art buddies semester. Phil's physical education teacher also completed a survey at the beginning of the semester. Phil was attentive in class and interacted with his teachers in a positive manner. He worked well with others and respected his peers. Phil's physical education teacher noted that he sometimes lacked confidence in his abilities but worked to improve.

Phil's themes in literature teacher noted positive changes over the course of the semester. He improved in his attentiveness in class and interest in school and was less easily discouraged. At the beginning of the semester, she wrote, "Phil usually completes assignments as long as they do not require reading. He has a

great attitude and shows respect to teachers.” Phil completed more work as the semester progressed, was more confident in his abilities, and was working hard to improve. At the end of the semester, she noted, “Phil is a good student. He always completes work on time, volunteers in class, and is well liked by his peers. The respect he shows me as a teacher is a rarity among many students today.”

Phil’s economics teacher also believed Phil was more attentive in class, was more interested in school, and was less easily discouraged. He also believed that Phil was completing more assigned work and was trying to improve. Phil’s agriculture mechanics teacher did not note improvements in any areas besides being well liked by his peers but did note that he more frequently sought negative attention from other students. However, he was overall respectful and paid attention in class. She wrote, “This class is an all-hands-on class working with everything you could imagine. He has shown a lot of interest in this class.”

4.2.3.4 School Performance

Prior to the art buddies program, Phil had a cumulative GPA of 1.922. In the semester directly before the program, Phil had a GPA of 2.146. At the end of the art buddies program semester, Phil had a semester GPA of 3.336, raising his cumulative GPA to 2.087. In his end of the semester questionnaire, Phil said his GPA improved because “I did and tried harder.”

Phil regularly attended school. In the semester prior to the program, he was absent a half day, and it was excused. During the art buddies program, he was

absent once, and it was also excused. Phil was well behaved at school and did not have any discipline reports in the semester prior to or the semester of the program.

4.2.4 Case 8: Pam

Pam was a shy, friendly twelfth-grade student. She largely kept to herself at school but did have a group of friends. Pam did not participate in any school activities and was new to Fieldworth High in the previous school year. Pam was well behaved at school but lacked confidence in her academic abilities.

4.2.4.2 Piers-Harris Children's Self-Concept Scale

Pam completed the Piers-Harris Children's Self-Concept Scale at the beginning and end of the art buddies semester. Pam's initial raw score was a thirty-eight, a twenty-fourth percentile score. At the end of the semester, Pam scored a fifty, a sixty-second percentile score. These are both average range scores and show that Pam had a balanced assessment of her self-esteem.

At the beginning of the semester, Pam had a raw score of thirteen on the Behavioral Adjustment (BEH) scale. A thirteen equates to a percentile score of sixty-six. At the end of the semester, Pam had a raw score of fourteen, which is in the eighty-eighth percentile. Pam's score at the beginning of the semester was in the average range and her final score was above average. A perfect score of fourteen can indicate denial of behavior problems, but in Pam's case the score was accurate. She was not a behavior problem at school.

Pam's score on the Intellectual and School Status (INT) scale improved over the course of the semester. Her initial raw score was an eight, which is the sixteenth percentile. Her final score was a fourteen, at the sixty-sixth percentile. Although both scores are in the average range, Pam's increase in score suggests she gained confidence in her academic abilities over the course of the semester.

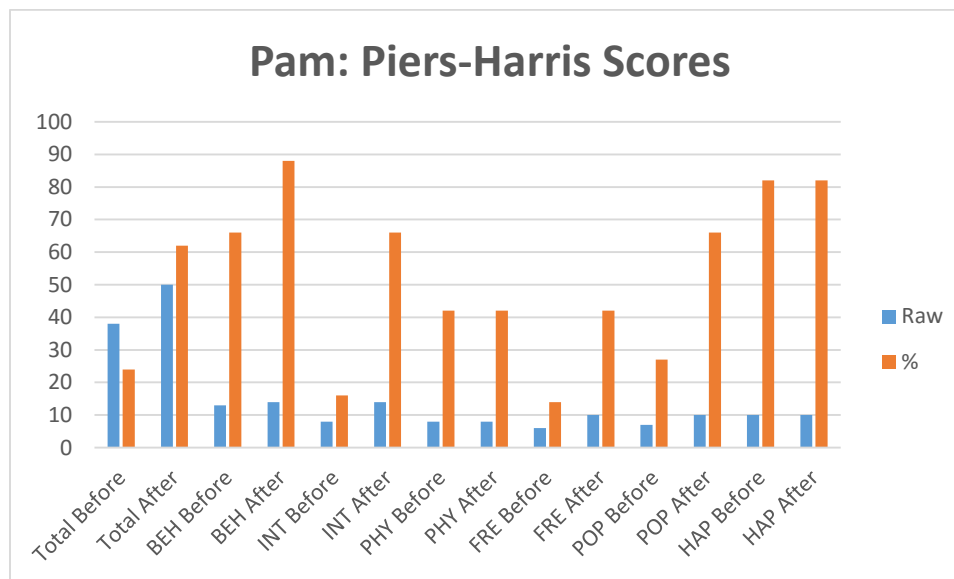
Pam had a raw score of eight at the beginning and end of the semester on the Physical Appearance and Attributes (PHY) scale. This score is in the forty-second percentile and is in the average range. This score indicates Pam was generally happy with her appearance.

Pam's score at the beginning of the semester on the Freedom From Anxiety (FRE) scale was a six. This is in the fourteenth percentile. A score of six is a low range score and typical of children who acknowledge problems with their mood. At the end of the semester, Pam scored a ten, which is the forty-second percentile. That is an average range score with positive moods outweighing the negative.

On the Popularity (POP) scale, Pam scored a seven at the beginning of the semester and a ten at the end of the semester. Those scores correspond to the twenty-seventh and sixty-sixth percentiles. Pam's initial score was in the average range and her final score was above average. This improvement to the above average range shows Pam was happy with her social functioning with her peers.

On the Happiness and Satisfaction scale (HAP), Pam scored a ten at the beginning and end of the semester. This score is in the eighty-second percentile and is in the above average range. Pam's score is typical of children who are generally happy with their lives.

Table 4.8: Pam's Piers-Harris Scores



4.2.4.3 Teacher Questionnaire

Pam's economics, Algebra 2, and short stories teachers completed surveys at the beginning and end of the art buddies semester. Pam's economics teacher primarily noted negative changes over the course of the semester. He believed Pam was less attentive in class, was completing less assigned work, was less confident in her work, and was less likely to work to try to improve. A positive change noted was being less likely to seek negative attention from her peers.

Pam's Algebra 2 teacher noted her struggles with confidence at the beginning of the semester. "Pam lacks self-confidence in math, and it is very evident. However, she usually seeks the help she needs. She's a very respectful young lady – just insecure." At the end of the semester, Pam's Algebra 2 teacher noticed that Pam improved her confidence, was less easily discouraged, and was more respectful of her peers. Her final observations of Pam were:

She's easily discouraged, but she really seems to try hard. It is 'hit and miss' (goes in spurts) with regard to her seeking help from me; however, she is a student aide for a math teacher and I believe she asks him questions frequently. She is a very pleasant young lady.

Pam's short stories teacher did not note any changes over the course of the semester. At the beginning of the semester, she wrote, "Pam is tentative, but I think part of that stems from being unsure of expectations in a new class." At the end of the semester, Pam's short stories teacher stated, "She works well with others, although she would obviously prefer to work with her friends."

4.2.4.4 School Performance

Before the art buddies program, Pam had a cumulative GPA of 2.403. In the semester directly before the program, Pam had a semester GPA of 2.191. At the end of the art buddies program, Pam had a semester GPA of 2.253. This lowered her cumulative GPA to 2.389. On her end-of-the-semester questionnaire, Pam believed her semester GPA was going to be higher but did not attribute the potential change to any particular reason.

Prior to the semester of the art buddies program, Pam exhibited regular attendance. She was absent only a half day, and it was excused for a doctor's appointment. The semester of the art buddies program, Pam was absent four days. Two of the absences were excused due to illness. The remaining two absences were unexcused. Pam was well-behaved at school and did not have any discipline referrals in the semester prior to or the semester of the art buddies program.

4.3 Cross Case Analysis

In addition to examining each individual case, it is important to understand the cases as a collection of information. According to Stake (2006), this collection of cases is known as the quintain. The quintain is the phenomenon being studied and, in a multicase study, is the target collection. This cross case analysis will attempt to understand the quintain and what is common across each case as well as what makes each case unique.

4.3.2 Discussion and Findings of Piers-Harris Children's Self-Concept Scale

The Piers-Harris Children's Self-Concept Scale was a tool used to detect changes in self-esteem over the course of the semester. The art buddies treatment group began the semester with an average score of 48.2 and ended the semester with an average of 46.8. Emily was the only student in the art buddies group to have an improvement in her score (table 4.10). In the control group, the average score at the start of the semester was a 47.7. The control group ended the semester with an average score of 50.3 (table 4.9). Control group members Izzy and Phil had overall improvements while Pam's score went down.

Table 4.9: Average Piers-Harris Scores

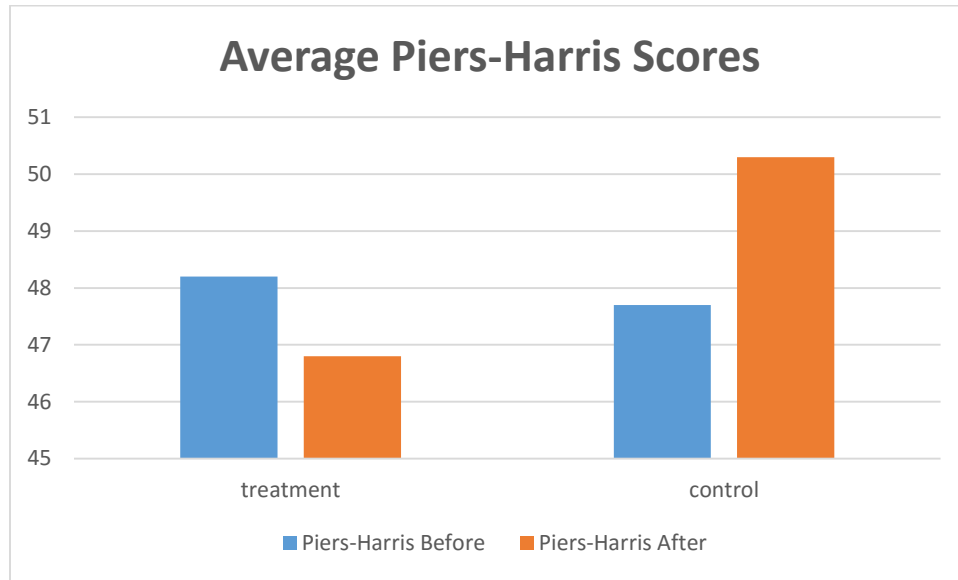
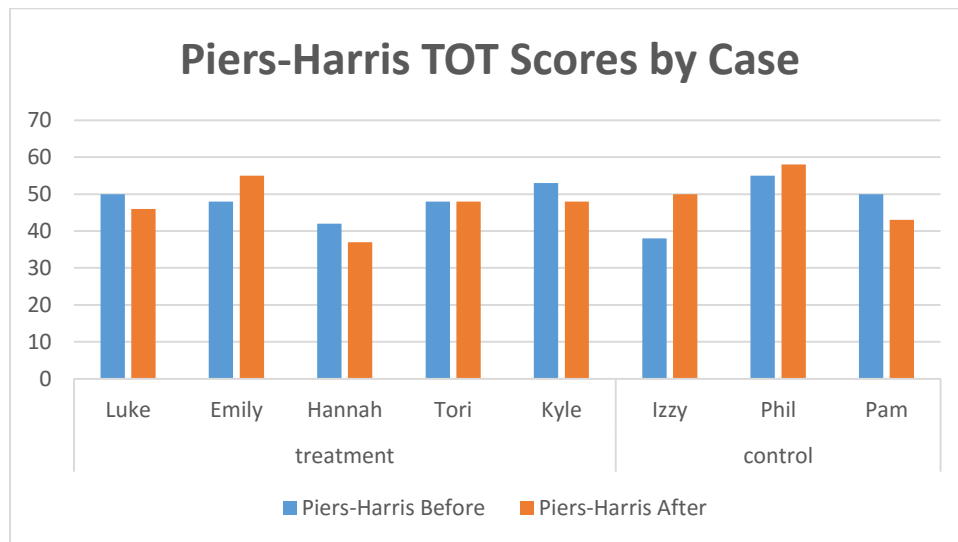


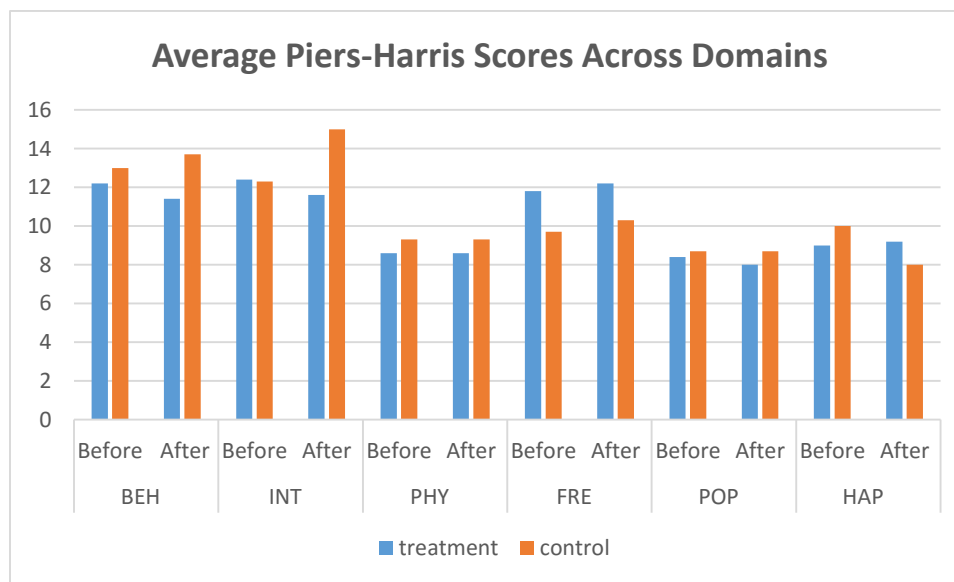
Table 4.10: Piers-Harris Total Scores



When averaged across each individual domain, the art buddies group either exhibited no change or declined slightly in every category except the Freedom From Anxiety (FRE) scale and the Happiness and Satisfaction (HAP) scale. The average FRE score improved from an 11.8 to a 12.2. The average HAP score improved from

a 9 to a 9.2. The control group improved in the Behavioral Adjustment (BEH), Intellectual and School Status (INT), and Freedom From Anxiety scales. The control group BEH made a small gain from an average of 13 to a 13.7. INT scores improved from a 12.3 to 15. FRE scales started at a 9.7 and ended at a 10.3. The control group average score remained the same on the Physical Appearance and Attributes and the Popularity scale. The control group score on the Happiness and Satisfaction domain went down over the course of the semester from a ten to an eight. The control group score averages were primarily due to the large increase in Izzy's scores. Izzy was relatively new to Fieldworth High, and her gain in scores could potentially be explained by settling in to the school and making additional friends over the course of the semester (tables 4.11 and 4.12).

Table 4.11: Average Piers-Harris Scores Across Domains



Although the art buddies had a lower Piers-Harris score over the course of the semester, they exhibited gains in self-esteem in other ways. Through their

journal entries and interviews, the art mentors all discussed positive changes over the course of the semester. Tori thought she gained social skills. Kyle discussed gaining skills to work with children and learning how to problem solve while Luke believed the experience helped him grow as a person. Because the Piers-Harris uses yes or no answers, it potentially did not pick up on the gains made by the art mentors. A 5-point Likert scale may have shown differences, but there is not a more sensitive test currently available that has been nationally normed.

Table 4.12: Chart of Average Piers-Harris Scores Across Domains

		Treatment	Control
Total	Before	48.2	47.7
	After	46.8	50.3
BEH	Before	12.2	13
	After	11.4	13.7
INT	Before	12.4	12.3
	After	11.6	15
PHY	Before	8.6	9.3
	After	8.6	9.3
FRE	Before	11.8	9.7
	After	12.2	10.3
POP	Before	8.4	8.7
	After	8	8.7
HAP	Before	9	10
	After	9.2	8

4.3.3 Discussion and Findings of Parent and Teacher Questionnaires

Parents and teachers of each participant received a survey at the beginning and end of the semester. The parents of Phil, Pam, and Kyle did not return either survey. Emily's, Hannah's, Luke's, Tori's, and Izzy's parents returned the initial

survey only. As a result, no comparisons were able to be made based on parent feedback.

A total of forty-four teacher surveys were sent to the teachers of study participants at the beginning and end of the semester. Twenty-three initial surveys were returned and twenty final surveys were returned. Surveys had questions such as the following: Is the student attentive in class? Does the student work well with others? Possible responses were always, frequently, seldom, and never. Changes from the initial survey were quantified as either positive or negative changes. The art buddies group showed an average positive change of .28 over the course of the semester while the control group had an average positive change of .08.

Of the art buddies, all had a positive average change except Kyle. Kyle's attendance problems plagued him throughout the semester and impacted the quality of his work at school. He was constantly struggling to make up for what he had missed. Kyle struggled tremendously in his short stories class. He fell behind on the reading assignments and was never able to catch up. His teacher noted that his poor attendance impacted his work. Kyle's average change was -.29 over the course of the semester.

Art buddy Luke exhibited a positive change of .14 over the course of the semester. Luke's Algebra 2 teacher was the only teacher to complete both surveys. She noted many positive gains in Luke including his work ethic and focus, maturity, and confidence. Art buddy Hannah had an average positive change of .55. Her choir, English, and earth and space science teachers all noted positive overall changes.

Hannah improved in her attentiveness in class, patience with other students, and interest in school.

Art buddy Emily had a positive change of .43. Her animal science teacher was the only teacher who completed both surveys. She noted positive changes in her attentiveness in class, ability to work with her peers, completion of assigned work, and confidence in her abilities. Art buddy Tori's Algebra 2 teacher was the only teacher who completed both surveys. Tori had a positive change of .55. Tori's teacher noted improvements in her peer interactions and speaking positively towards teachers.

On average, the art buddies had negative changes in being well liked by their peers, absences, and completion of assigned work (table 4.13).

Table 4.13: Negative Teacher Assessments of the Art Buddies Group

Question	Change
well liked by peers	-0.06
frequently absent	-0.22
complete assigned work	-0.5

The art buddies group as a whole improved in the majority of the categories their teachers responded to. Gains in positive interactions with the teacher and interest in school were notable (table 4.14). In addition, teacher comments in the open-ended section of the survey were primarily positive.

Table 4.14: Positive Teacher Assessments of the Art Buddies Group

Question	Change
attentive in class	0.22
positive toward teacher	0.56
works well with others	0.13
respects peers	0.22
seeks negative attn. from peers	0.33
is positive with peers	0.22
lack of interest in school	0.63
easily discouraged	0.5
frequently tardy	0.22
lacks confidence in work ability	0.17
tries to improve	0.44

Control group students did not exhibit as large of changes in their teacher surveys. Control group student Izzy had almost no change with an average improvement of .03. The four teachers that completed both surveys for her were her short stories, economics, nutrition and wellness, and earth and space science teachers. Positive changes were noted in her completion of assigned work and positive interactions with her peers, but negative changes were noted in her confidence in her work abilities.

Control group student Pam's economics, short stories, and Algebra 2 teachers completed both surveys for an average change of -.07. Pam's short stories and Algebra 2 teachers noted small positive changes in the areas of being less discouraged and confidence in her abilities. Pam's economics teacher primarily noticed negative changes such as less attentiveness in class and less completion of assigned work. Control group member Phil had an average positive change of .29. His literature, economics, and agriculture mechanics teachers completed both

surveys. His teachers noted positive changes in the areas of attentiveness in class, less easily discouraged, and attempts to improve.

The control group exhibited an average of very little change on their teacher surveys. There was zero change in their positive interactions with teachers, respects peers, well-liked by peers, and tries to improve questions. The control group had small positive gains in several categories with more notable gains in the categories of interest in school and easily discouraged (table 4.15).

Table 4.15: Positive Teacher Assessments of the Control Group

Question	Change
attentive in class	0.2
is positive with peers	0.1
lack of interest in school	0.5
easily discouraged	0.6
frequently tardy	0.1
lacks confidence in work ability	0.3

The control group had negative changes in four categories, with the areas of seeking negative attention from peers and frequently absent showing the most change (table 4.16).

Table 4.16: Negative Teacher Assessments of the Control Group

Question	Change
works well with others	-0.05
seeks negative attn. from peers	-0.3
frequently absent	-0.3
complete assigned work	-0.1

Teacher comments in the control group, as listed in the individual case studies, were a mixture of positive and negative comments.

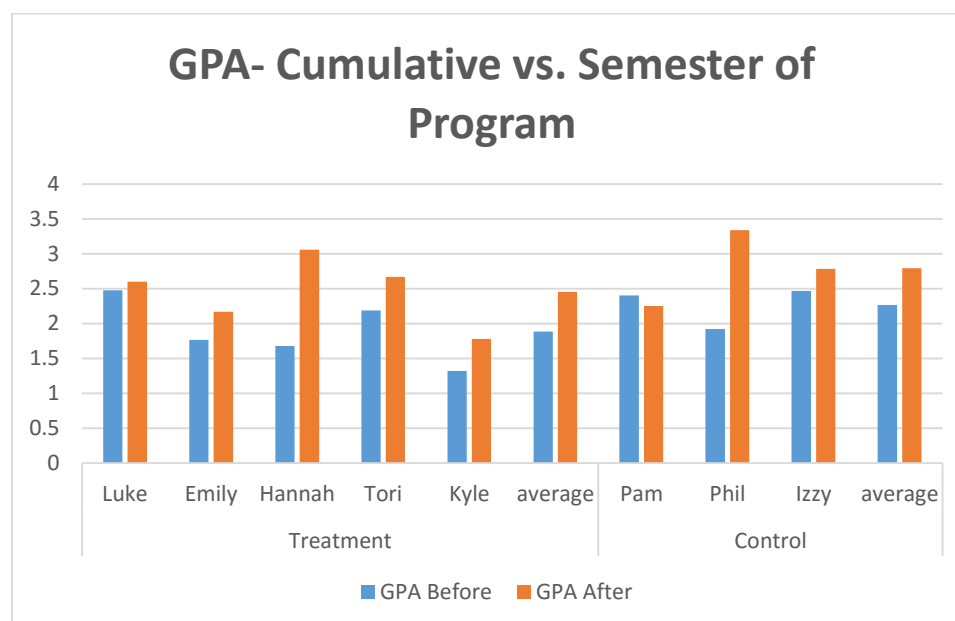
4.3.4 Discussion and Findings of School Performance

Changes in school performance were examined by tracking GPA, discipline referrals, tardies to class, and attendance.

4.3.4.1 GPA

Cumulative GPA was compared to the GPA earned in the semester of the art buddies program. The initial mean cumulative GPA of the art buddies was 1.886. The semester GPA of the art buddies during the semester of the program was a 2.4548. This was an improvement of .5688 on a four-point GPA scale (table 4.17). A paired sample one-tailed t-test results in a statistically significant p-value of .027. The control group had an initial mean cumulative GPA of 2.26. The mean semester GPA during the art buddies program was a 2.79. This was an improvement of .5267. A paired sample one-tailed t-test reveals this was not a statistically significant difference with a p-value of .19. Because the control group consisted of only three students, Phil's extremely large increase in GPA greatly impacted the results. His GPA increase was 1.414 and could be considered to be an outlier. If Phil is removed from the control group, the average change in GPA was a .08.

Table 4.17: Cumulative GPA vs. Semester of Program GPA



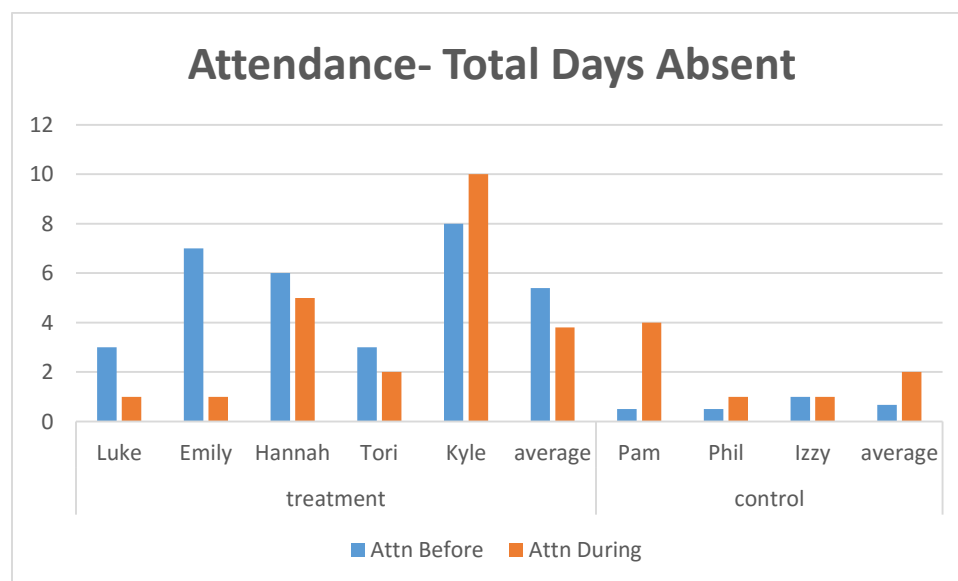
4.3.4.2 Discipline Referrals

Discipline referrals were recorded for both the art buddies group and the control group. The control group students did not have any recorded discipline referrals in either the semester before or the semester of the art buddies program. None of the art buddies had any discipline referrals the semester before the program. During the semester of the program, Luke had three discipline referrals. They all occurred in September before Luke started the art buddies program. One referral was for horseplay in class, and the other two referrals were for cell phone use. Because the discipline referrals all occurred before Luke was an art buddy, they do not accurately reflect the gains he made over the rest of the semester. Luke did not receive any referrals once he became an art buddy, and his Algebra 2 teacher noted positive changes in his attitude over the course of the semester.

4.3.4.3 Attendance and Tardies

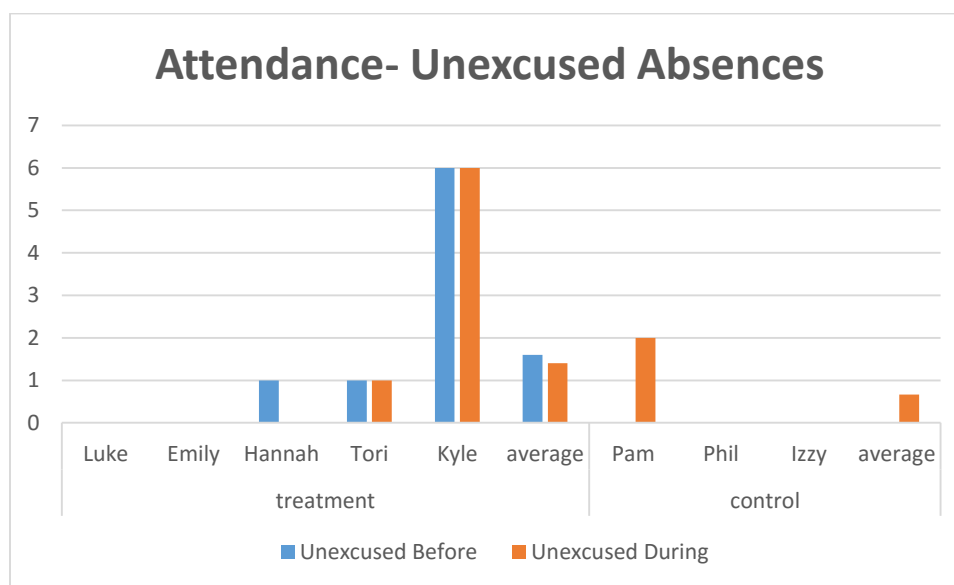
School attendance and whether a student was tardy to class were recorded the semester before and the semester of the art buddies program. In the control group, the participants were absent an average of .67 days in the semester before the program. During the program, the participants were absent an average of two days (table 4.18). A paired sample one-tailed t-test reveals this was not a statistically significant difference with a p-value of .09. In the art buddies group, the average number of days absent in the semester before the program was 5.4. In the semester they served as art buddies, the average total number of absences was 3.8 (table 4.18). A paired sample one-tailed t-test reveals this was not a statistically significant difference with a p-value of .30. However, the art buddies group did exhibit better attendance than the control group. An independent one-tailed t-test had a statistically significant p-value of .04.

Table 4.18: Total Days Absent Semester Before and Semester of Program



When looking specifically at unexcused absences, the average number of unexcused absences in the control group in the semester prior to the program was zero. The average during the program was .67 (table 4.19). A paired sample one-tailed t-test reveals this was not a statistically significant difference with a p-value of .21. The art buddies group had an average number of unexcused absences of 1.6 in the semester prior to the program and an average of 1.4 during the program (table 4.19). Although this was a small improvement, it was not statistically significant. A paired sample one-tailed t-test reveals a p-value of .18.

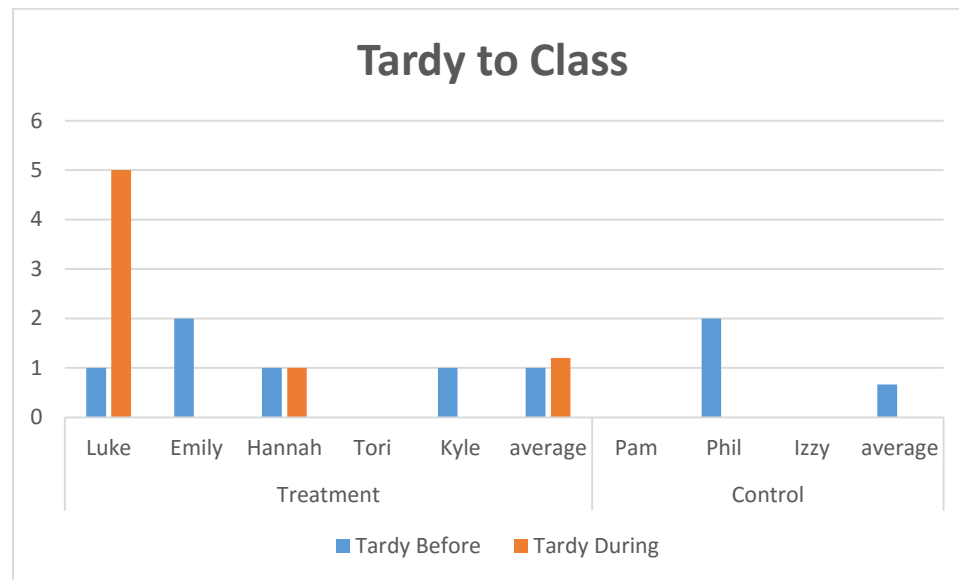
Table 4.19: Unexcused Absences Semester Before and Semester of Program



In addition to attendance records, tardies to class were recorded. In the semester prior to the program, the control group had an average of .67 tardies. During the semester of the program, the control group had zero tardies (table 4.20). This was not a statistically significant improvement. A paired sample one-tailed t-test reveals a p-value of .21. The art buddies group had an average of one tardy in the

semester prior to the program and an average of 1.2 during the program (table 4.20). This was not a statistically significant change. A paired sample one-tailed t-test reveals a p-value of .43.

Table 4.20: Tardy to Class Semester Before and Semester of Program



4.3.5 Discussion and Findings of Student Interviews and Questionnaires

At the end of the semester, the control group filled out a questionnaire with these questions: What do you think your grades are going to be this semester? Better or worse than in the past? If there is a change in your grades, what has caused this change? Izzy believed her grades were going to remain about the same while Phil and Pam believed their grades were going to improve. In reality, Phil's grades improved dramatically, Pam's grades dropped, and Izzy's improved slightly. Izzy believed she "worked harder and better" over the course of the semester. Pam

did not know what would cause a change in her grades. Phil believed his grades improved because he “tried harder.”

In their interviews at the end of the semester, the art buddies were primarily positive about their experiences in the program. All of the art buddies would have elected to continue the program with the exception of Hannah. Although Hannah was sometimes negative about the program, she did enjoy working with her mentees and described that part of the experience as great. Kyle thought it was a fun experience and enjoyed spending time with his mentees. Kyle said, “I wish I had a study hall next semester so I could do this again.” Luke greatly enjoyed serving as an art mentor. In his final interview, Luke said, “It was fun working with them. And I probably wouldn’t hesitate to do it again if I was given the opportunity.” Emily also enjoyed working with her mentees and thought the experience was fun. Tori thought it was a good experience because “I got to work with the kids and see who they were and just become friends with them. It helped me because I’m thinking about working with kids when I get older.”

Most of the art buddies believed their grades had improved or stayed the same over the course of the semester. Hannah believed she would be getting As and Bs and attributed the change to wanting to graduate mid-term. She was paying attention in class, staying awake, and completing assigned work. Kyle expected a small improvement in his grades but knew he was not going to pass all of his classes. Luke anticipated much higher grades than normal and believed he would be earning all As and Bs for the first time since middle school. Luke was motivated to improve because he wanted to be accepted into a quality college. Emily believed her

grades were going to remain about the same. She had a friend help her with chemistry homework, she hired a tutor for geometry, and she paid more attention in her Spanish class. Tori thought her grades would be higher because she was trying harder. The art buddies' predictions were primarily correct as they all improved their grades over the course of the semester.

CHAPTER 5. SUMMARY OF FINDINGS

This study focused on understanding what impact an art mentoring program would have on academically struggling students. The literature has indicated involvement in the visual and performing arts strengthens academic success, improves emotional development, and reduces inappropriate behavior (Barry, Taylor, & Walls, 1990; Boldt & Brooks, 2006; Catterall, 1997; Respress & Lufti, 2006; Wallace-Digarbo & Hill, 2006; Weitz, 1996). Literature has also indicated mentoring and tutoring programs can be just as beneficial to the mentor/tutor as they are to the mentee/tutee (Benard, 1990; Gensemer, 2000; Lee, Murdock, & Paterson, 1996) and that struggling students can benefit from mentoring and tutoring relationships (Giesecke & Cartledge, 1993; Lazerson, Foster, Brown, & Hummel, 2001). Only one study has focused on struggling students serving as mentors in the visual arts (Rhyan, 1995), and no studies have focused on academically struggling secondary student serving as art mentors. This chapter begins by presenting the findings of the study in relation to the guiding research questions.

1. What effect does the art mentoring program have on self-concept?
2. What effect does the art mentoring program have on academic success and delinquent behavior?

And one other question is included, using information on the program impact on self-concept, academic success, and delinquent behavior:

3. How does an art mentoring program impact academically struggling students?

5.1 Research Questions

5.1.1 Impacting Self-Concept

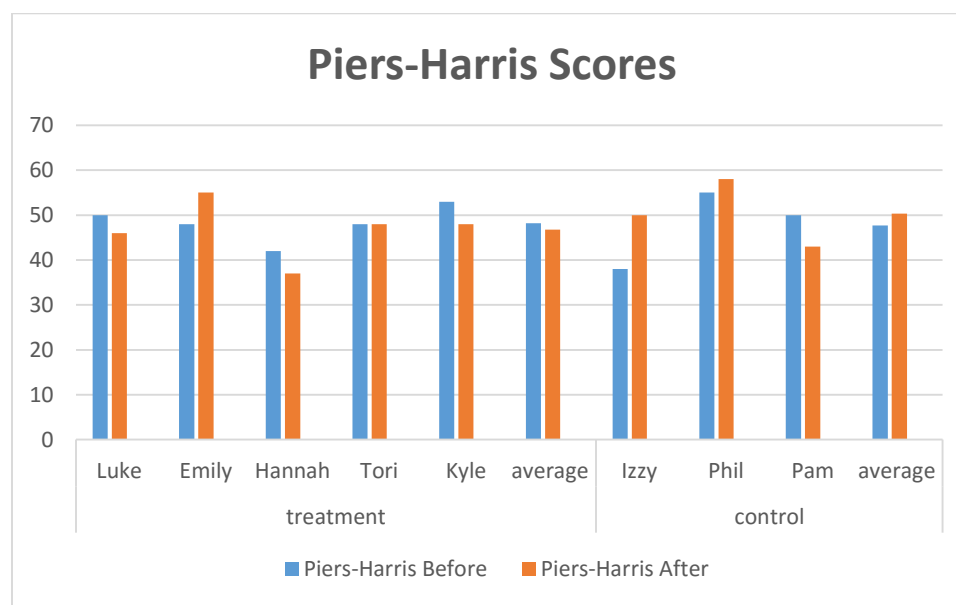
Identifying changes in self-concept is a difficult task but has been addressed in both art and mentoring research (Rosal et al, 1997; Wallace-DiGarbo & Hill, 2006; Karcher, 2005; Cohen et al, 1982). This study attempted to identify changes in self-concept using weekly mentor journals, mentor interviews, teacher surveys, and the Piers-Harris Children's Self-Concept Scale (Piers & Harris, 2002). This 60-item self-report questionnaire is designed to be used with students ranging in age from seven to eighteen. The Piers-Harris was normed on a sample population of 1,387 students from across the United States and was designed to mirror the current U.S. population. Questions consist of yes and no answers to statements such as "I am smart" and "it is hard for me to make friends."

5.1.2. What Effect Does the Art Mentoring Program Have on Self-Concept?

The results of this study do not conclusively answer this research question but do indicate that the complexity of understanding the impact on self-concept should be studied further. Over the course of the semester, the average total Piers-

Harris score of the art buddies dropped from an average of 48.2 to an average of 46.8 (table 5.1). A paired sample one-tailed t-test reveals this was not a significant change with a p-value of .29. The control group had an average score of 47.7 at the beginning of the semester and ended the semester with an average of 50.3 (table 5.1). A paired sample one-tailed t-test reveals this was not a significant change with a p-value of .34.

Table 5.1: Piers-Harris Scores



Because Piers-Harris scores did not reveal a significant change in scores at the conclusion of the art buddies program, teacher surveys, mentor journals, and interviews were examined for evidence of a change in self-concept. Teacher surveys showed the art buddies program participants made positive changes in the following areas related to self-concept: less likely to seek negative attention from peers, less easily discouraged, confidence in work ability, and attempts at improvement.

Although mentor journal prompts did not specifically address self-concept, the high school mentors did make comments that suggest improvements in self-concept. Art mentor Tori believed she gained the ability to “interact a little better.” In his journal, Kyle wrote that the program helped him develop a relationship and work through problems. Art buddy Luke believed the program helped him “grow as a person.”

Similar to the weekly journal entries, mentor interviews did not directly address self-concept. Although the high school mentors all described the development of their mentoring relationships and the enjoyment of spending time with their mentees, none of the mentors discussed changes in self-concept. Based on the lack of significant evidence from the Piers-Harris Children’s Self-Concept scale, teacher surveys, and mentor journals and interviews, no conclusions on a change in self-concept can be made. While a positive change in self-concept was possible, this change was not definitive and requires further research.

5.1.3 Impacting Academic Success and Delinquent Behaviors

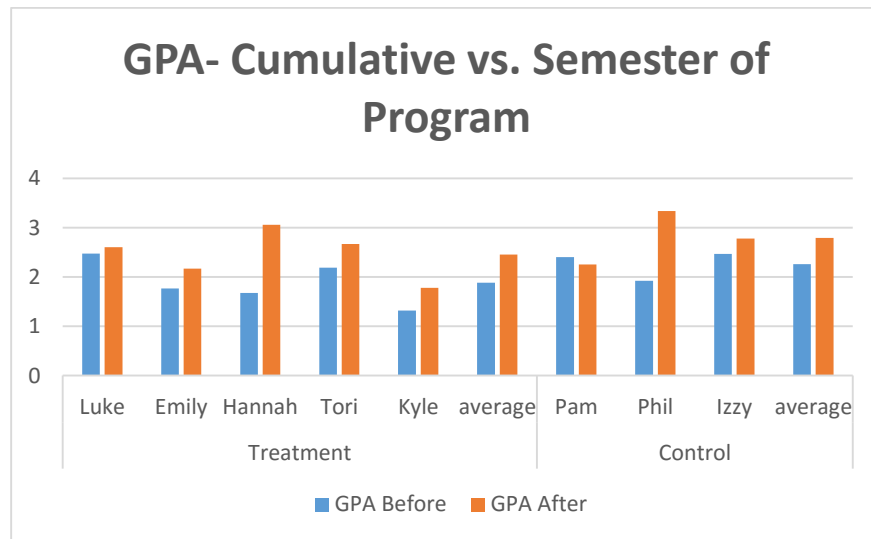
Research has shown the arts are linked to academic success (Catterall, 1997; Fowler, 1996; Vaughn & Winner, 2000; Catterall & Waldorf, 1999) and the reduction of delinquent behaviors (Wallace-DiGarbo & Hill, 2006). In addition, serving as a mentor has positive academic impacts (Darrow, Gibbs, & Wedel, 2005; Leland & Fitzpatrick, 1993) and behavioral impacts (Karcher, 2005; Giesecke & Cartledge, 1993). Art mentoring programs have been created (Morrison & Smith, 1991; Kelehear & Heid, 2002; Rhyan, 1995) but have either not tracked the link to

academic success or lacked an experimental design. Unanswered in prior research is the question of how an art mentoring program would impact academically struggling high school students.

5.1.3.1 What Effect Does the Art Mentoring Program Have on Academic Success and Delinquent Behavior?

The evidence in this study suggests the art mentoring program had a positive impact on the academic success of the mentors. This assertion is supported by an increase in GPA and positive gains and comments in teacher surveys. All of the students who served as art mentors ended the semester with higher GPAs. The art buddies had an initial mean cumulative GPA of 1.886. In the semester of the program, their semester mean GPA was .5688 higher, with an average semester GPA of 2.4548 (table 5.2). A paired sample one-tailed t-test results in a statistically significant p-value of .027. Although the control group had an average increase of .5267, this was due to an increase of 1.414 in Phil's GPA. If he is removed from the control group, the average change was .08.

Table 5.2: GPA- Cumulative vs. Semester of Program



Teacher surveys completed at the beginning and end of the program revealed positive academic changes in the art mentors. Surveys were sent to a total of forty-four teachers. Twenty-three initial surveys and twenty final surveys were returned. On a four-point Likert scale, the art mentors improved by an overall average of .28 while the control group had an average positive change of .08. The teachers noted positive improvements in the art mentors' attentiveness in class, interest in school, confidence in their work abilities, and attempts to improve (table 5.3).

Table 5.3: Positive Teacher Assessments of the Art Buddies Group

Question	Change
attentive in class	0.22
positive toward teacher	0.56
works well with others	0.13
respects peers	0.22
seeks negative attn. from peers	0.33
is positive with peers	0.22
lack of interest in school	0.63
easily discouraged	0.5
frequently tardy	0.22
lacks confidence in work ability	0.17
tries to improve	0.44

Classroom teachers also had the opportunity to provide written comments on the surveys. With the exception of Kyle, whose teachers commented on his attendance problems, all comments noted positive changes over the course of the program. Luke's teacher wrote, "He shows a lot of improvement from last school year to this school year in his maturity and work ethic/focus." Hannah's teacher noted she "has shown a great deal of patience first semester with several other students who have the potential of behavioral problems. She excelled in keeping her cool."

What impact the art mentoring program would have on delinquent behaviors was not able to be answered by this study. None of the students participating in either the control group or the art mentoring group were considered to be behavior problems in their classes nor did they exhibit any signs of delinquent behavior in the semester before the program or during the program.

5.1.4 Mentoring and the Arts

Because research has suggested that both involvement in the arts (Barry, Taylor, & Walls, 1990; Boldt & Brooks, 2006; Catterall, 1997; Respress & Lufti, 2006; Wallace-Digarbo & Hill, 2006; Weitz, 1996) and mentoring programs (Benard, 1990; Gensemer, 2000; Lee, Murdock, & Paterson, 1996) can have positive benefits, this study sought to explore what impact an art mentoring program would have.

5.1.4.1 How Does an Art Mentoring Program Impact Academically Struggling Students?

The results of this study indicate the art mentoring program had a positive impact on the academically struggling students. The mentors enjoyed working with their elementary mentees, made an effort to be at school on mentoring program days, had an overall increase in their academic performance, and spoke positively about the program. This assertion is confirmed through an increase in GPA, positive teacher surveys, a decrease in excused and unexcused absences, the artwork created as a part of the program, and by positive comments made by the mentors in their journals and in interviews.

In addition to the increase in GPA and positive teacher surveys discussed previously, the art mentors had a decrease in excused and unexcused absences. The art mentors were absent an average of 5.4 days in the semester before the program. During the semester of the program, the average total number of absences was 3.8 (table 5.4). A paired sample one-tailed t-test reveals this was not a statistically significant difference with a p-value of .30. The art mentors had a small improvement in their number of unexcused absences. They averaged 1.6 unexcused

absences in the semester before the program and 1.4 during the program (table 5.5). Although this was a small improvement, it was not statistically significant. A paired sample one-tailed t-test reveals a p-value of .18.

Table 5.4: Total Days Absent Semester Before and Semester of Program

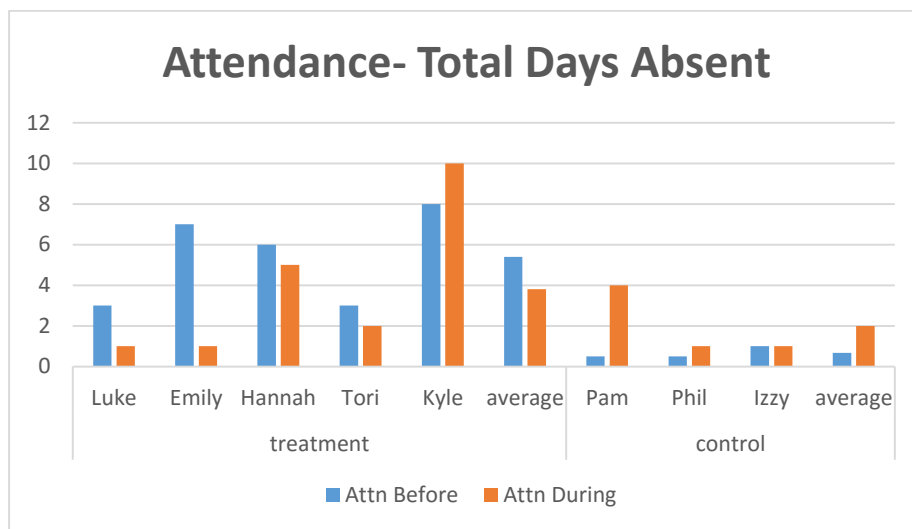
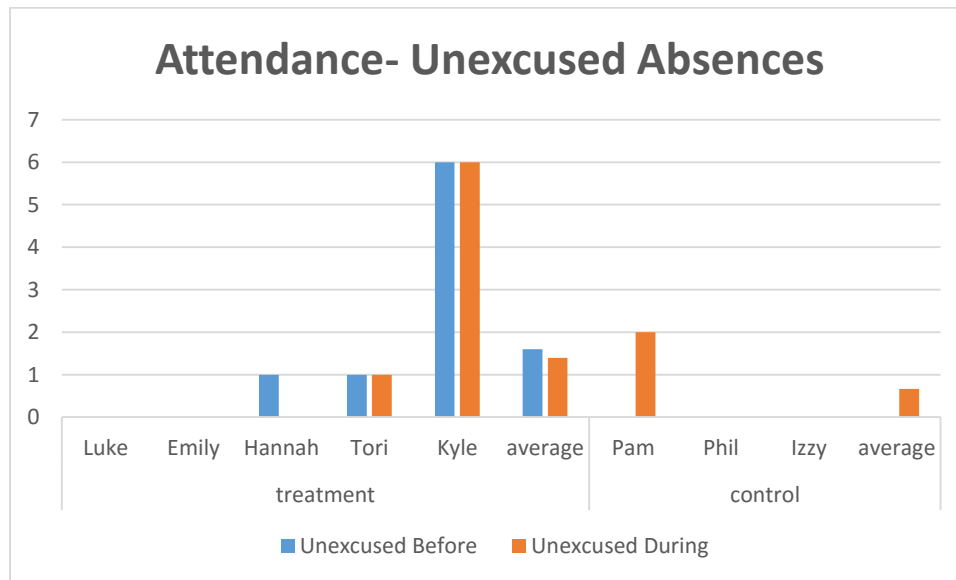


Table 5.5: Unexcused Absences Semester Before and Semester of Program



The artwork created as a part of the program is also evidence of the positive impact of the program. Both the elementary mentees and the high school mentors reported enjoying working on the art projects. Art mentor Hannah even spent additional study hall time coming in and working on her ceramic tile mural. The pride both the art buddies and their mentees had in their work was evident when their art was on display at a local library. The elementary mentees happily explained how they made the ceramic tiles to their parents and posed to take pictures with their creations during the art show. Parents and community members who viewed the work were impressed with the level of skill and dedication evident in the artwork. When asked what she thought about being an art mentee, Amy wrote, "I would love to be an art buddy again because I love art." Art buddy Tori stated what she liked most about being an art buddy was, "being able to do art projects."

Perhaps the most compelling evidence about the positive impact of the program comes from the mentors themselves. All of the high school mentors reported enjoying the time they spent with their elementary mentees. The growth in their relationships with their art mentees over the course of the semester was apparent to the researcher and the art buddies themselves. Each group began the semester with awkward conversations and large gaps in conversation. As the semester progressed, each art group conversed freely and talked about a variety of subjects ranging from what they did over the weekend to what they were learning at school to their favorite sports teams. When asked to talk about the development of their mentoring relationship, Hannah stated, "Well you know, Tony he didn't want to talk at all. Kristi, I think she was a little shy too. But as time progressed they started to warm up to me. They wanted to actually talk." Art mentor Luke noted a similar

change in the mentoring relationship. Luke said, “The kids seemed to really come out of their shells at the end. It was fun working with them. And I probably wouldn’t hesitate to do it again if I was given the opportunity.”

The high school mentors were highly positive about the entire art buddy program. Art mentor Luke wrote in his journal, “This is beginning to become a great experience. I like doing this and would like to continue doing it.” Art mentor Emily wrote, “I enjoy working with the kids and getting to know them better.” In her final interview, Hannah stated, “Working with the kids was great.” Art buddy Kyle also had positive experiences to share in his final interview: “I enjoyed spending time with them because I like spending time with people not just my own age.” Tori thought being an art buddy was enjoyable because “It was just fun to help children do projects and listen to them and stuff.”

5.2 Conclusion

Although there are more areas to explore to understand the impact of an art mentoring program on academically struggling students, what was evident within this study was the enjoyment both the mentors and mentees gained from the experience. The high school mentors enjoyed working with the elementary students and appreciated getting to create artworks independently that were outside the normal range of school art projects. The elementary mentees had fun with their high school buddies and appreciated the opportunity to create additional artwork they would not otherwise have been exposed to. The high school mentors and their elementary mentees built relationships with each other that stretched beyond the bounds of the

program. The mentoring teams continued their friendships after the art buddies program ended. The bonds built during the art buddies program are powerful evidence of the impact an art mentoring program can have on both the mentor and the mentee.

CHAPTER 6. IMPLICATIONS AND FURTHER RESEARCH

6.1 Implications

Serving as art mentors appeared to have a positive impact on the academically struggling high school students who participated in the program. Both the high school art mentors and their elementary mentees enjoyed the relationships that developed over the course of the semester and enjoyed the opportunity to create artwork with materials not typically used in a school setting. The art mentoring program provided the high school mentors with an additional reason to be at school and a sense of being needed and important. Classroom teachers noted positive changes in the art mentors, and both excused and unexcused absences decreased. The most important finding of this study was that the mentors all exhibited an improvement in their GPA, with a mean change of .5688. With all of these positive changes in mind, an art mentoring program could be a force for positive change in the academic performance, school engagement, and self-concept of academically struggling students.

The implications of this study reach beyond the fields of art education and mentoring and could impact discourse in the broader field of education about helping struggling students. The results of this study indicate the academic performance and attendance of struggling students can be improved with an art mentoring program.

Instead of placing struggling students in additional study halls the students are ill-equipped to take advantage of, art mentoring programs could be started. One of the greatest concerns in education is the 29% of America's high school students who drop out (Conklin, Currna, & Gandal, 2005). An art mentoring program could be a potential solution to the impersonal, rigid, and alienating school environments described in *An Action Agenda for Improving America's High Schools* (Conklin, Currna, & Gandal, 2005). The art mentoring program also has the potential to address the typical problems of struggling students noted by Kaufman and Bradby (1992), including absenteeism, tardiness, poor behavior, and substandard academic performance.

Although the evidence in this study suggests the art mentoring program had a positive impact on the academic performance and attendance of the academically struggling students, many questions remain. What type of and time length for an art mentoring program would have the largest positive impact on academically struggling students? Can an art mentoring program have a definitive impact on self-concept? Is an art mentoring program effective at reducing behavior problems? What other impacts can an art mentoring program have, and can it have a positive impact on all student? Whether in the field of art education, mentoring, or the broader field of education in general, this study calls for additional inquiry into the effects an art mentoring program can have on the student participants.

6.2 Further Research

6.2.1 Setting and Subjects

The variety of directions this research can take offers many exciting opportunities. I will continue examining the impact an art mentoring program can have on academically struggling students. One of the shortcomings of this study was the small number of student participants in a single environment. I would like to address this by sampling a much larger student population in a variety of school systems. Would similar positive results occur regardless of the student population and school environment? This study focused on students in a rural environment. I would like to expand the study to include students in urban and suburban as well as additional rural schools to see if similar results are produced.

In addition to using a variety of school environments, I would like to repeat the study with a variety of age levels. Sophomores and juniors with established GPAs were the primary focus of this study. If struggling middle school students or freshmen had the opportunity to serve as art mentors, could they start their high school careers in an academically stronger position? In addition, what impact could the program have on elementary students given the opportunity to serve as art mentors? In addition, I would like to investigate different mentee ages. If an academically struggling high school student serves as a mentor to a peer (another high school student), is the impact the same? What age level of the mentor and the mentee has the greatest impact on the mentor? Finally, this study did not examine the impact of

the art mentoring program on the elementary mentees. How does an art mentoring program affect the mentee?

6.2.2 Length of Program

Determining the ideal length of an art mentoring program is another dimension of this study that requires further exploration. In a meta-analysis of sixty-five tutoring programs, Cohen, Kulik, and Kulik (1982) found larger effects in more structured, short programs. In this study, mentoring interactions took place over the course of four months in the fall semester. This time frame was chosen to meet the needs of the school corporation it took place in. High school students at Fieldworth High changed schedules at the end of each semester, and the mentors engaged in the program did not all have a study hall period during the second semester. Because four of the five mentors wanted to continue to serve as art mentors, I would like to explore longer mentoring relationships and the impact that could have on the mentor. Is a semester an ideal program length or would a full-year mentoring program have a greater impact? What impact would a multi-year art mentoring relationship have on the mentor?

6.2.3 Student-Driven Art

As part of this art mentoring program, students were assigned each of the art projects they completed. Projects were determined by the researcher based on past successful elementary and high school projects. However, a growing body of

research in art education focuses on student choice and teaching for artistic behaviors (Jaquith & Hathaway, 2012; Douglas & Jaquith, 2015). Within my own art classroom, I switched the curriculum away from a teacher-driven methodology to a fully student-driven curriculum model with great success. This resulted in a high level of student engagement at every level, from elementary to high school. If each art mentoring team were free to choose what type of art they would like to create, what impact would it have on the mentoring relationship and what impact would it have on the mentor? If art mentoring teams chose the media and subject matter they would like to explore, would similar positive results occur?

6.2.4 Long-Term Effects

Barry, Taylor, and Walls (1990) found that involvement in the arts was an effective dropout prevention tool. Would the struggling students who served as art mentors be more likely to persist to graduation? In addition, would the struggling students who served as mentors maintain a higher GPA over an extended period of time? What is the effect on self-concept over an extended period of time? What impact does the program have on behavior over an extended period of time? Comparing data over a multi-year time period could yield valuable insights about how an art mentoring program could impact academic performance, attendance, self-concept, and behavior over time and the sustainability of the positive impacts this study produced.

6.2.5 A Case for Art Mentoring Programs

Sadly, in the continued era of high-stakes testing, the arts are all too often the programs on the chopping block (Hoffman Davis, 2008; Hetland et al. 2007). It is high time that we view involvement in the arts as a fundamental part of a child's education (Hetland et al., 2007). What would our schools look like if the often wasted time in study hall was replaced with art mentoring programs? Would the academic performance of all students improve? Would the culture of the school change? Would art mentoring programs create a more welcoming, inclusive environment for all students? The art mentoring program described in this study shows great promise as a flexible tool that can be adapted to meet the needs of a variety of schools and a variety of learners.

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APPENDICES

Appendix A

Assent and Consent Forms

Assent Form for Elementary Children

Project Title: Examining the Experiences of Academically Struggling Students Serving as Mentors in the Visual Arts

Investigator: Dr. F. Robert Sabol, Professor of Visual and Performing Arts

I am doing a research study. A research study is a special way to find out about something. I want to find out what it is like to become a mentor in the arts.

You can be in this study if you want to. If you want to be in this study, you will be asked to work with an older student to create works of art. I will watch your teams while you are working. You will be video recorded while you work with the older students. At the end of the study, I will ask you to write a few paragraphs about your experiences working with the older students.

I want to tell you about some things that might happen to you if you are in this study. You will create artwork with an older student. You will write a few paragraphs about your experiences working with the older students and creating artwork.

If you decide to be in this study, some good things might happen to you. You could have fun making artwork and find out what you like to do. But I don't know if these things will happen. I might also find out things that will help other children learn.

When I am done with the study, I will write a report about what I found. I won't use your name in the report or identify you in any way.

You don't have to be in this study. You can say "no" and nothing bad will happen to you. If you say "yes" now, but you want to stop later, that's okay too. No one will hurt you, or punish you if you want to stop. All you have to do is tell me you want to stop.

If you want to be in this study, please sign your name.

I, _____, want to be in this research study.
(write your name here)

Investigator signature

(Date)

Assent Form for Secondary Students

Project Title: Examining the Experiences of Academically Struggling Students Serving as Mentors in the Visual Arts

Investigators: Dr. F. Robert Sabol, Professor of Visual and Performing Arts

I am doing a research study. A research study is a special way to find out about something. I want to find out what it is like to become a mentor in the arts.

You can be in this study if you want to. If you agree to be in this study, you will be asked to work with a younger student to create works of art. You also will create works of art on your own. I will watch your teams while you are working. I will talk with you before, during, and after the study about your experiences as a mentor and ask you to keep a journal of your experiences. I will ask you to fill out a self-concept scale before and after the study. I will also ask to see your academic, behavior, and attendance records before and after the study. I will video record your mentoring sessions. Your parent/guardian and your teachers will answer questions about you in a survey. You will not be able to view the survey responses of your parents or your teachers.

I want to tell you about some things that might happen to you if you are in this study. You will be asked to meet with me before, during, and after the study. You will meet with the younger students once a week and with me once a week. You will create art on your own and with the younger students.

If you decide to be in this study, some good things might happen to you. You could have fun making artwork and working with younger students. You might also have an easier time learning things in your classes. But I don't know if these things will happen. I might also find out things that will help other children learn.

When I am done with the study, I will write a report about what I found. I won't use your name in the report or identify you in any way.

You don't have to be in this study. You can say "no" and nothing bad will happen to you. If you say "yes" now, but you want to stop later, that's okay too. No one will hurt you, or punish you if you want to stop. All you have to do is tell me you want to stop.

If you want to be in this study, please sign your name.

I, _____, want to be in this research study.
(write your name here)

Investigator signature

(Date)

Research Project Number _____

For IRB Office Use Only

SECONDARY STUDENT (18 or older)
RESEARCH PARTICIPANT CONSENT FORM
Examining the Experiences of Academically Struggling
Students Serving as Mentors in the Visual Arts
Dr. F. Robert Sabol, Professor of Visual and
Performing Arts
Purdue University

Art Education: Visual and Performing Arts/Curriculum and Instruction

Purpose of Research: To understand the experiences of students serving as arts mentors and to determine if being an arts mentor affects self concept, academic success, and behavior in academically struggling students.

Specific Procedures: You will be creating artwork with younger students and will serve as an art mentor. You child will be observed and video recorded while working on the art projects. You will take a self-concept test, will be interviewed before, during and after the study, will record reflections in a journal, and will create individual artwork. I will examine your academic, behavior, and attendance records at the start and conclusion of the study. You will serve as a mentor once a week and will meet with me once a week. Your parents will be asked to complete a short parent questionnaire at the start and conclusion of this study to gather information on you and your views toward school. Your teachers will also answer questions about you. You will not be able to see the results of the questionnaire filled out by your parents or your teachers.

Duration of Participation: January 2011-May 2011. You will meet with the researcher once a week during this time period for 40 minutes each session. In addition, you will serve as a mentor once a week for 30 minutes each session. You will participate in 2 interviews, each approximately twenty minutes in length. You will fill out 2 surveys which will take approximately 15 minutes each time.

Risks: The risks are minimal and are no more than you would encounter in everyday classroom life. Breach of confidentiality is a risk related to this research. Although the risk is a possibility, safeguards are in place as listed in the confidentiality section.

Benefits: During this project, you will work collectively and collaboratively on art projects. You will develop problem solving skills while working on the artwork. You will receive supplemental art instruction on art techniques including sculpture, mosaic making, and the creation of murals.

Compensation: There is no compensation for participating in this study.

Confidentiality: The project's research records may be reviewed by departments at Purdue University responsible for regulatory and research oversight. All personal information will be protected by the researchers, Dr. F. Robert Sabol and Amanda S. Fry, through secure storage of a locked file cabinet, a password coded computer, and the promise to uphold confidentiality in all cases. Audio and video tapes will be transcribed by the researcher. Following transcription, the audio and video tapes will be destroyed. All transcribed data will be de-identified. The transcriptions will be kept in a locked file cabinet in the principal investigator's office. At the conclusion of the study all data will be de-identified and stored in a locked file cabinet in the principal investigator's office for five years or more. At a future date if or when this data is no longer needed it shall be shredded. Until that time all data will remain securely locked and password protected. All notes, correspondence, electronic data and any other data collected in this study shall be included as confidential information. Names of participants, including the students, teachers, administrators, schools, towns, or districts shall not be revealed in any publication of this data in any way without informed consent of that person or institution. The data collected within this study shall be used in the writing of my thesis and subsequent publications about information relating to the use of an arts mentoring program. Note: Indiana law mandates the reporting of intent to harm others, child abuse, or abuse of vulnerable adults.

(initials) (date)

Research Project Number _____

Voluntary Nature of Participation

You do not have to participate in this research project. You understand that you may discontinue your participation in this study at any time without penalty or negative consequences. Participation in this study will not affect your grades. If you choose to discontinue your participation in this study, it will not affect your grades.

Contact Information:

If you have any questions about this research project, you can contact Dr. F. Robert Sabol, bohsabol@purdue.edu, (765)494-3058 or Amanda S. Fry, afry@purdue.edu, (765)494-3058. Contact Dr. F. Robert Sabol initially. If you have concerns about the treatment of research participants, you can contact the Institutional Review Board at Purdue University, Ernest C. Young Hall, Room 1032, 155 S. Grant St., West Lafayette, IN 47907-2114. The phone number for the Board is (765) 494-5942. The email address is irb@purdue.edu.

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research project and my questions have been answered. I agree to participate in this research study.

Participant's Signature

Date

Participant's Name

Researcher's Signature

Date

Research Project Number _____

For IRB Office Use Only

ELEMENTARY PARENT/GUARDIAN
RESEARCH PARTICIPANT CONSENT FORM
Examining the Experiences of Academically Struggling
Students Serving as Mentors in the Visual Arts

Dr. F. Robert Sabol
Professor of Visual and Performing Arts
Purdue University

Art Education: Visual and Performing Arts/Curriculum and Instruction

Purpose of Research: To understand the experiences of students serving as arts mentors and to determine if being an arts mentor affects self concept, academic success, and behavior in academically struggling students.

Specific Procedures: Your child will be creating artwork with an older student mentor who has struggled academically. Your child will be observed and video recorded while working on the art projects. At the conclusion of the study, your child will be asked to briefly write about their experiences in the study. You have the right to review the research materials prior to the child including the writing prompt at the conclusion of the study.

Duration of Participation: January 2011-May 2011. Your child will participate in the mentoring sessions once a week during this time period. Each session will last approximately 30 minutes. The written activity detailing their experiences at the end of the study will take approximately 20 minutes.

Risks: The risks are minimal and are no more than your child would encounter in everyday classroom life. Breach of confidentiality is a risk related to this research. Although the risk is a possibility, safeguards are in place as listed in the confidentiality section.

Benefits: Your child will work collectively and collaboratively on art projects. They will develop problem solving skills while working on the art projects. Your child will supplemental art instruction on art techniques including sculpture, mosaic making, and the creation of murals. Your child will participate in the creation of artwork to be permanently installed in the elementary building

Compensation: There is no compensation for participating in this study.

Confidentiality: The project's research records may be reviewed by departments at Purdue University responsible for regulatory and research oversight. All personal information will be protected by the researchers, Dr. F. Robert Sabol and Amanda S. Fry, through secure storage of a locked file cabinet, a password coded computer, and the promise to uphold confidentiality in all cases. . Audio and video tapes will be transcribed by the researcher. Following transcription, the audio and video tapes will be destroyed. All transcribed data will be de-identified. The transcriptions will be kept in a locked file cabinet in the principal investigator's office. At the conclusion of the study all data will be de-identified and stored in a locked file cabinet in the principal investigator's office for five years or more. At a future date if or when this data is no longer needed it shall be shredded. Until that time all data will remain securely locked and password protected. All notes, correspondence, electronic data and any other data collected in this study shall be included as confidential information. Names of participants, including the students, teachers, administrators, schools, towns, or districts shall not be revealed in any publication of this data in any way without informed consent of that person or institution. The data collected within this study shall be used in the writing of my thesis and subsequent publications about information relating to the use of an arts mentoring program. Note: Indiana law mandates the reporting of intent to harm others, child abuse, or abuse of vulnerable adults.

(initials)

(date)

Research Project Number _____

Voluntary Nature of Participation

You and/or your child do not have to participate in this research project. You may discontinue you and/or your child's participation in this study at any time without penalty or negative consequences. Participation in this study will not affect your child's grades. If you choose to discontinue your participation in this study, it will not affect your child's grades.

Contact Information:

If you have any questions about this research project, you can contact Dr. F. Robert Sabol, bobsabol@purdue.edu, (765)494-3058 or Amanda S. Fry, afry@purdue.edu, (765)494-3058. Contact Dr. F. Robert Sabol initially. If you have concerns about the treatment of research participants, you can contact the Institutional Review Board at Purdue University, Ernest C. Young Hall, Room 1032, 155 S. Grant St., West Lafayette, IN 47907-2114. The phone number for the Board is (765) 494-5942. The email address is irb@purdue.edu.

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research project and my questions have been answered. I also agree to give my child permission to participate in this research study.

_____	_____
Participant's Signature	Date

Participant's Name	
_____	_____
Participant's Signature	Date

Participant's Name	
_____	_____
Researcher's Signature	Date

Research Project Number _____

For IRB Office Use Only

SECONDARY PARENT/GUARDIAN
RESEARCH PARTICIPANT CONSENT FORM
Examining the Experiences of Academically Struggling
Students Serving as Mentors in the Visual Arts
Dr. F. Robert Sabol
Professor of Visual and Performing Arts
Purdue University

Art Education: Visual and Performing Arts/Curriculum and Instruction

Purpose of Research: To understand the experiences of students serving as arts mentors and to determine if being an arts mentor affects self concept, academic success, and behavior in academically struggling students.

Specific Procedures: Your child will be creating artwork with younger students and will serve as an art mentor. Your child will be observed and video recorded while working on the art projects. Your child will take a self-concept test, will be interviewed before, during and after the study, will record reflections in a journal, and will create individual artwork. I will examine your child's academic, behavior, and attendance records at the start and conclusion of the study. Your child will serve as a mentor once a week and will meet with me once a week. You will be asked to complete a short parent questionnaire at the start and conclusion of this study to gather information on your child and their views toward school. Your child's teachers will also answer questions about your child. Your child will not be able to see the results of the questionnaire filled out by you or their teachers. You have the right to review the research materials prior to the child including interview questions and questionnaires.

Duration of Participation: January 2011-May 2011. Your child will meet with the researcher once a week during this time period for 40 minutes each session. In addition, your child will serve as a mentor once a week for 30 minutes each session. Your child will participate in 2 interviews, each approximately twenty minutes in length. Your child will fill out 2 surveys which will take approximately 15 minutes each time. You will fill out 2 questionnaires, each lasting approximately 10 minutes.

Risks: The risks are minimal and are no more than your child would encounter in everyday classroom life. Breach of confidentiality is a risk related to this research. Although the risk is a possibility, safeguards are in place as listed in the confidentiality section.

Benefits: During this project, your child will work collectively and collaboratively on art projects. Your child will develop problem solving skills while working on the artwork. Your child will receive supplemental art instruction on art techniques including sculpture, mosaic making, and the creation of murals.

Compensation: There is no compensation for participating in this study.

Confidentiality: The project's research records may be reviewed by departments at Purdue University responsible for regulatory and research oversight. All personal information will be protected by the researchers, Dr. F. Robert Sabol and Amanda S. Fry, through secure storage of a locked file cabinet, a password coded computer, and the promise to uphold confidentiality in all cases. Audio and video tapes will be transcribed by the researcher. Following transcription, the audio and video tapes will be destroyed. All transcribed data will be de-identified. The transcriptions will be kept in a locked file cabinet in the principal investigator's office. At the conclusion of the study all data will be de-identified and stored in a locked file cabinet in the principal investigator's office for five years or more. At a future date if or when this data is no longer needed it shall be shredded. Until that time all data will remain securely locked and password protected. All notes, correspondence, electronic data and any other data collected in this study shall be included as confidential information. Names of participants, including the students, teachers, administrators, schools, towns, or districts shall not be revealed in any publication of this data in any way without informed consent of that person or

(initials) (date)

Research Project Number _____

institution. The data collected within this study shall be used in the writing of my thesis and subsequent publications about information relating to the use of an arts mentoring program. Note: Indiana law mandates the reporting of intent to harm others, child abuse, or abuse of vulnerable adults.

Voluntary Nature of Participation

You and/or your child do not have to participate in this research project. You understand that you may discontinue you and/or your child's participation in this study at any time without penalty or negative consequences. Participation in this study will not affect your child's grades. If you choose to discontinue your participation in this study, it will not affect your child's grades.

Contact Information:

If you have any questions about this research project, you can contact Dr. F. Robert Sabol, bobsabol@purdue.edu, (765)494-3058 or Amanda S. Fry, afry@purdue.edu, (765)494-3058. Contact Dr. F. Robert Sabol initially. If you have concerns about the treatment of research participants, you can contact the Institutional Review Board at Purdue University, Ernest C. Young Hall, Room 1032, 155 S. Grant St., West Lafayette, IN 47907-2114. The phone number for the Board is (765) 494-5942. The email address is irb@purdue.edu.

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research project and my questions have been answered. I also agree to give my child permission to participate in this research study.

_____	_____
Participant's Signature	Date

Participant's Name	
_____	_____
Participant's Signature	Date

Participant's Name	
_____	_____
Researcher's Signature	Date

Research Project Number _____

For IRB Office Use Only

TEACHER
RESEARCH PARTICIPANT CONSENT FORM
Examining the Experiences of Academically Struggling
Students Serving as Mentors in the Visual Arts

Dr. F. Robert Sabol
Professor of Visual and Performing Arts
Purdue University

Art Education: Visual and Performing Arts/Curriculum and Instruction

Purpose of Research: To understand the experiences of students serving as arts mentors and to determine if being an arts mentor affects self concept, academic success, and behavior in academically struggling students.

Specific Procedures: As a classroom teacher you will be asked to complete an initial questionnaire about the classroom performance of students participating in the study. This will take approximately 10 minutes to complete. At the end of the study, you will be asked to complete a follow up questionnaire on the classroom performance of students who have completed the study. This will also take approximately 10 minutes to complete. Based upon the questionnaire answers, some teachers who have noted differences in student performances will be asked to participate in an interview.

Duration of Participation: January 2011-May 2011. You will be asked to complete 2 questionnaires, each taking approximately 10 minutes to complete.

Risks: The risks are minimal and are no more than you would encounter in everyday classroom life. **Breach of confidentiality is a risk related to this research.** Although the risk is a possibility, safeguards are in place as listed **in the confidentiality section**

Benefits: There are no direct benefits for participating in this study.

Compensation: There is no compensation for participating in this study.

Confidentiality: The project's research records may be reviewed by departments at Purdue University responsible for regulatory and research oversight. All personal information will be protected by the researchers, Dr. F. Robert Sabol and Amanda S. Fry, through secure storage of a locked file cabinet, a password coded computer, and the promise to uphold confidentiality in all cases. Audio and video tapes will be transcribed by the researcher. Following transcription, the audio and video tapes will be destroyed. All transcribed data will be de-identified. The transcriptions will be kept in a locked file cabinet in the principal investigator's office. At the conclusion of the study all data will be de-identified and stored in a locked file cabinet in the principal investigator's office for five years or more. At a future date if or when this data is no longer needed it shall be shredded. Until that time all data will remain securely locked and password protected. All notes, correspondence, electronic data and any other data collected in this study shall be included as confidential information. Names of participants, including the students, teachers, administrators, schools, towns, or districts shall not be revealed in any publication of this data in any way without informed consent of that person or institution. The data collected within this study shall be used in the writing of my thesis and subsequent publications about information relating to the use of an arts mentoring program. Note: Indiana law mandates the reporting of intent to harm others, child abuse, or abuse of vulnerable adults.

Voluntary Nature of Participation

You do not have to participate in this research project. Participation in this study will not affect your employment. If you agree to participate you can withdraw your participation at any time without penalty.

_____ (initial here)

_____ (date)

Research Project Number _____

Contact Information:

If you have any questions about this research project, you can contact Dr. F. Robert Sabol, bobsabol@purdue.edu, (765)494-3058 or Amanda S. Fry, afry@purdue.edu, (765)494-3058. Contact Dr. F. Robert Sabol initially. If you have concerns about the treatment of research participants, you can contact the Institutional Review Board at Purdue University, Ernest C. Young Hall, Room 1032, 155 S. Grant St., West Lafayette, IN 47907-2114. The phone number for the Board is (765) 494-5942. The email address is urb@purdue.edu.

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research project and my questions have been answered. I am prepared to participate in the research project described above. I will receive a copy of this consent form after I sign it.

Participant's Signature

Date

Participant's Name

Researcher's Signature

Date

Appendix B

Questionnaires

Parent/Guardian Survey

Student Name:

Please circle Always, Frequently, Seldom, Never as the appropriate response.

- | | |
|---|---------|
| 1. My child looks forward to going to school. | A F S N |
| 2. My child is happy. | A F S N |
| 3. My child gets along well with others. | A F S N |
| 4. My child wishes he/she did not have to go to school. | A F S N |
| 5. My child is picked on at school. | A F S N |
| 6. My child picks on others at school. | A F S N |
| 7. My child is respectful of his/her teachers. | A F S N |
| 8. My child believes his/her teachers care about him/her. | A F S N |
| 9. My child is well-behaved in school. | A F S N |
| 10. My child enjoys studying. | A F S N |
| 11. My child completes his/her homework. | A F S N |
| 12. I am happy with the grades my child is earning in school. | A F S N |

Additional comments/observations:

Teacher Survey

Student Name:

Teacher Name:

Please circle Always, Frequently, Seldom, Never as the appropriate response.

- | | |
|--|---------|
| 1. Is the student attentive in class? | A F S N |
| 2. Does the student speak in a positive manner toward the teacher? | A F S N |
| 3. Does the student work together with others well? | A F S N |
| 4. Does the student respect his/her peers? | A F S N |
| 5. Does the student seek negative attention from peers? | A F S N |
| 6. Is the student well liked by their peers? | A F S N |
| 7. Does the student engage in positive interactions with peers? | A F S N |
| 8. Does the student exhibit a lack of interest in school? | A F S N |
| 9. Is the student easily discouraged? | A F S N |
| 10. Is the student frequently absent? | A F S N |
| 11. Is the student frequently tardy? | A F S N |
| 12. Does the student complete assigned work? | A F S N |
| 13. Does the student lack confidence in his/her work abilities? | A F S N |
| 14. Does the student try to improve? | A F S N |

Additional comments or observations:

Appendix C

Interview Questions

Initial Student Interview Questions

1. Tell me about yourself.
2. What is your favorite thing about school? Why?
3. What is your least favorite thing about school? Why?
4. What subject are you doing best in? Why?
5. What subject do you struggle with most? Why?
6. If you were not required to come to school, would you? Why?
7. How do you feel when you are at school?
8. Is there anything else you would like to tell me?

Final Student Interview Questions

1. Describe some of the projects you made with your buddy that went well.
2. What did you think of being a mentor to your art buddy?
3. Did you enjoy spending time with your buddy? Why?
4. Has being a mentor changed your views on school?
5. At the beginning of the semester, you told me your least favorite thing about school was . Is it still your least favorite? Why?
4. What subject are you doing best in? Why?
5. What subject do you struggle with most? Why?
6. If you were not required to come to school, would you? Why?
7. How do you feel when you are at school?
8. Is there anything else you would like to tell me?

VITA

VITA

Amanda S. Mayes

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Lafayette, IN 47905
765-490-6206 (H)
asmayes@purdue.edu

Education

Ph.D., Purdue University, Curriculum & Instruction, 2016
M.A., Purdue University, 2008
B.S., Indiana State University, 2001

Higher Education Employment

Research Project Manager

Dean's Office, College of Liberal Arts
West Lafayette, Indiana, 2014-2016

Managed an NIH R01 funded grant including recruitment of over forty sororities in the Midwest on forty different campuses, curriculum design of a two hour interactive program on media literacy and cancer prevention, intervention delivery including travel to eighteen different campuses in the Midwest, data analysis, and dissemination

Graduate Teaching Assistant

School of Visual and Performing Arts
Purdue University
West Lafayette, Indiana, 2009-2012

Teaching assignment- Art for the Elementary School Teacher

Instructor of record for the course, designed all lecture content and lab content

Research Assistant

School of Engineering Education

Purdue University

West Lafayette, Indiana, 2009-2012

Assignment included analyzing qualitative data including surveys, interviews, and video recordings. Assignment also included designing surveys, writing research reports, writing papers for publication, and presenting research at conferences.

Public School Experience

Elementary, Junior High & High School art teacher

Clinton Prairie Elementary School, Clinton Prairie Junior/Senior High

Clinton Prairie School Corporation,

Frankfort, Indiana, 2012-2014

Teaching assignment includes students in kindergarten through 6th grade, adaptive art, 8th grade, ceramics, advanced ceramics, digital design, advanced digital design, drawing, introduction to two dimensional design, advanced two dimensional design, introduction to three dimensional design, painting, photography, Moderately Mentally Handicapped, Mildly Mentally Handicapped, Autistic, Learning Disabled, Hearing Impaired, High Ability.

Assignment also included:

Coach, Fine Arts Academic Superbowl Team

Sponsor, Go-FOR (Friends of Rachel) Challenge Club

Department Chair

Initiated and led student trip to Italy with 20 participants

Elementary art teacher

Woodland Elementary School/Wea Ridge Elementary School,
Tippecanoe School Corporation
Lafayette, Indiana, 2008-2009.

Teaching assignment included students in 1st through 5th grade and Severe/Profound Mentally Handicapped, Moderately Mentally Handicapped, Mildly Mentally Handicapped, Autistic, Learning Disabled, Hearing Impaired, Visually Impaired, High Ability.

Assignment also included:

After school Homework Club

PL221 School Improvement Committee

Elementary art teacher

Clinton Prairie Elementary School
Clinton Prairie School Corporation,
Frankfort, Indiana, 2005-2008

Teaching assignment included students in kindergarten through 6th grade and Moderately Mentally Handicapped, Mildly Mentally Handicapped, Autistic, Learning Disabled, Hearing Impaired, High Ability.

Assignment also included:

Summer school band

High School marching band instructor

Middle School art teacher

Franklin Township Middle School
Franklin Township Community School Corporation
Indianapolis, Indiana, 2002-2005

Teaching assignment included students in 7th grade and Moderately Mentally Handicapped, Mildly Mentally Handicapped, Autistic,

Learning Disabled, Hearing Impaired, Visually Impaired, Physically Impaired, High Ability.

Assignment also included:

Related Arts Team Representative

Writing Rubric Committee

Pilot Teacher for Peer Evaluation Appraisal

Pilot Teacher for Student-led Conferencing

After school Art Club, grades 7-8

Summer School Music, grade 5, program for students learning stringed instruments

Head Coach, Girls Track

High School art teacher

New Beginnings Alternative High School

Indianapolis Public Schools

Indianapolis, Indiana, 2002

Teaching assignment included students in 9th through 12th grade.

Assignment also included:

School Improvement Committee

Master Schedule Committee

Higher Education Service and Involvement

National Art Education Association, Member, 2000-present

Art Cart Volunteer, Purdue University, 2011-2012

Senator and Student Government Representative for the Departments of Visual and Performing Arts, Purdue Graduate Student Government, 2008-2009

Program Reviewer, Higher Education Art Education Programs, Indiana Department of Education, 2008

Illustrator, *Nicky the Police Dog* Coloring Book, Purdue University, 2008

Head Designer and Illustrator, *You Have To Have a Plan* Fire Safety Coloring Book, Terre Haute Fire Department, 2000

Awards and Honors

Graduate Teaching Assistant Excellence in Teaching Award, Committee for the Education of Teaching Assistants, 2011

Graduate Teacher Certificate, Center for Instructional Excellence, Purdue University, 2011

Graduate Teaching Assistant Excellence in Teaching Award, Committee for the Education of Teaching Assistants, 2010

Art in Residence, President's Westwood Exhibition, Purdue University, 2008-2010

Student Mosaic Murals Featured in *Helen Magazine*, 2008

Student Scholarship Winner, Art Education Association of Indiana, 2001

Student Commencement Speaker, Indiana State University, 2001

Grants

Donorschoose.org, 2014, \$447 in classroom sculpture supplies

Clinton Prairie Schools Foundation, 2013, \$450

Student Grant Program for Community Service/Service Learning Projects, Purdue University Office of Engagement, 2011, \$480

Eli Lilly Teacher Creativity Grant, 2007, \$8,000

Picturing America Grant, 2007, supplied school with large reproductions of American Art

Clinton Prairie PTO Classroom Teacher Grant, 2007, \$800

National Consortium for Teaching about Asia Grant, 2003, \$500

Travel Grant, Indiana State University, 2000, \$1,000

Presentations and Workshops

Research Workshop- QSR NVivo

Purdue College of Liberal Arts

West Lafayette, IN September 2014

Getting Cappy

Art Education Association of Indiana Fall Convention
Indianapolis, IN, October 2013

Examining the Experiences of Struggling Students Serving as Mentors in the Visual Arts

Art Education Association of Indiana Fall Convention
Indianapolis, IN, October 2013

Examining an Art Mentoring Program

Art Education Association of Indiana Fall Convention
Columbus, IN, November 2012

Examining the Experiences of Struggling Students Serving as Mentors in the Visual Arts

Poster Presented at the Purdue College of Education Annual Graduate
Student Educational Research Symposium
West Lafayette, IN, March 2012

Examining the Experiences of Struggling Students Serving as Mentors in the Visual Art

Paper Presented at the Seminar for Research in Art Education Graduate
Research Session, Nominated Presenter
National Art Education Association Annual Convention
New York, NY, March 2012

Struggling Students Become Mentors in the Arts: Preliminary Results

Art Education Association of Indiana Fall Convention
Indianapolis, IN, November 2011

University Students' New Ideas in Art Education: A Lively Sampler

Art Education Association of Indiana Fall Convention

Indianapolis, IN, November 2011

Students Become Mentors

Art Education Association of Indiana Conference

Ft. Wayne, IN, November 2010

New Ideas in Art Education

Art Education Association of Indiana Conference

Indianapolis, IN, November 2009

Mini Monets

Art Education Association of Indiana Conference

Indianapolis, IN, November 2009

New Ideas in Art Education

Art Education Association of Indiana Conference

French Lick, IN, November 2008

Putting the Pieces Together Mosaic Workshop

Art Education Association of Indiana Conference

Indianapolis, IN, November 2007

Graduate Student's New Ideas in Art Education

Art Education Association of Indiana Conference

Indianapolis, IN, November 2007

Success Tips for First Year Teachers

Art Education Association of Indiana Conference

South Bend, IN, November 2002

The Rings Curriculum, (co-presenter)

National Art Education Association Conference

New York, NY, March 2000

Peer Reviewed Journal Articles

Rodgers, K., Horvath, A., Jung, H., Fry, A., Diefes-Dux, H. & Cardella, M. (2015). Students' perceptions of and responses to teaching assistant and peer feedback. *Interdisciplinary Journal of Problem-Based Learning*, 9(2), in press.

Peer Reviewed Conference Papers

Rogers, K., Fry, A., Diefes-Dux, H., & Cardella, M. (2012). First-year engineering students' peer feedback on open-ended mathematical modeling problems. Paper accepted for presentation at the *Frontiers in Education Conference*, Seattle, WA.

Fry, A., Cardella, M., & Diefes-Dux, H. (2011). Student responses to and perceptions of feedback received on a series of model-eliciting activities: A case study. Paper presented at the *American Society for Engineering Education Annual Conference*, Vancouver, British Columbia.

Cardella, M., Diefes-Dux, H., Fry, A., & Carnes, M. (2011) Work-in-progress: Using multiple methods to investigate the role of feedback in open-ended activities. Paper presented at the *Frontiers in Education Conference*, Rapid City, SD.

Offices & Service

Volunteer, Read to Success Program, 2014

Big Sister, Big Brothers Big Sisters, 2009-2010

Art Instructor, Twyckenham Overpass Mural, Cary Home for Children in Conjunction with the Tippecanoe Arts Federation, 2008

President, Indiana State University Student National Art Education Association, 2000-2001

References

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