

**ANXIETY REDUCING DRAWING ACTIVITIES IN SECONDARY  
EDUCATION**

A Master's Degree Thesis by

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to

Moore College of Art & Design

In partial fulfillment of the requirements for the degree of  
MA in Art Education with an Emphasis in Special Populations

Philadelphia, PA

August 2018

Accepted:

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### Abstract

The purpose of this study was to explore the anxiety and stress-reducing effects of drawing, using different drawing materials by promoting the development of student confidence. The drawing activities were designed to foster the exploration of identity, emotion, and sense of self, while encouraging the exploration of materials and mark making. Researcher interests included theories surrounding the therapeutic effects of drawing, the aspects of art therapy that can be utilized in art education, the effects of anxiety and stress on adolescents during development, and the promotion of art-making as a stress management tool. Through an inductive case study, a series of daily drawing warm-up activities, the theme of which changes weekly, were implemented over an eight-week period during the student participants' regularly scheduled art class periods. High school students, whose ages ranged from sixteen to eighteen, were chosen based on the self-evaluation of their stress and anxiety levels and did not need to have a diagnosed anxiety disorder. Data was collected through observation field notes, student pre and post-activity self-anxiety-rating-scales, student journal responses, audio recordings, interviews, and artwork. Data was coded by the following themes: stress and anxiety; reduction of stress; and improvement in self-confidence, as assessed by the student. The study concluded that the implementation of anxiety-reducing drawing warm-up activities into an art education curriculum could foster improvement in student confidence, as well as the exploration of drawing materials and methods; which positively impacted student stress levels.

*Key Terms:* anxiety, art therapy, expressive therapies continuum, generalized anxiety disorder, social anxiety disorder, panic disorder, phobia, stress-management techniques, co-morbidity, mandala, zentangle®

### Acknowledgments

To my family and my partner, for supporting me through this process.

To my students, who inspire me.

To Amanda Newman-Godfrey and Lauren Stichter, for their patience and mentorship, and Samantha Varian for supporting me through the writing process. This would not have been possible without them.

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## **Chapter I: Introduction**

### **Background to the Problem**

Art has always helped me to reduce my anxiety, and I have often immersed myself in drawing when I feel overwhelmed. Drawing is one of the most accessible art forms because it requires little in materials and can be portable. Symptoms of anxiety are often invisible, and teachers are not always able to see when students are struggling. Individuals with anxiety often struggle to communicate their needs, and the arts can allow students to communicate or express themselves visually. Art education shares some qualities with art therapy, in that both fields understand that art involves expression and can serve as a visual language. Art educators can highlight the aspects of their lessons that are therapeutic, without taking on the role of an art therapist, by understanding how students will react to materials and prompts, and by engaging in conversation with students about their work. This interaction with students can foster an environment in which they can build the confidence to create.

### **Problem Statement**

Anxiety is a growing problem, particularly among adolescents. The New York Times recently released an article entitled, “Why Are More American Teenagers Than Ever Suffering From Severe Anxiety?” (Denizet-Lewis, 2017). The article explains that anxiety has become the most common psychiatric disorders among adolescents and young adults in the past decade. The American College Health Association has found that anxiety levels have increased from fifty to sixty-two percent of undergraduate college students since 2011. The National Institute of Mental Health has reported that

anxiety affects approximately one-third of adolescents and adults in the United States, and high school administrators are increasingly reporting cases of over-anxious students (Denizet-Lewis, 2017).

The majority of high school students are reaching a point in their development in which they are being put under more pressure as a result of an increase in demands from school, which leads to an increase in anxiety symptoms (Csikszentmihalyi, 1984). High school students need to be taught to manage their anxiety symptoms, in order to prevent the development of an anxiety disorder, the worsening of their anxiety symptoms, and the development of other psychiatric disorders (Costello, 2003). Art-making has been proven to reduce anxiety symptoms by researchers such as Girija Kaimal, Kendra Ray, and Juan Muniz (2016), Amanda Chambala (2008), and N. A. Curry and T. Kasser (2005). Art educators can teach anxiety reducing art activities by integrating them into their curriculum.

In tracking the prevalence of psychiatric disorders in children and adolescents, researchers E. Jane Costello, Sarah Mustillo, Alaattin Erkanli, Gordon Keeler, and Adrian Angold (2003) found that children who experience anxiety symptoms are at a higher risk of developing psychiatric disorders such as generalized anxiety disorders, specific anxiety disorders, depression, and substance abuse disorders. These students are at a significantly higher risk of developing other psychiatric disorders that exist co-morbidly with their anxiety. Drawing can be promoted as a stress management technique in art classes, through the implementation of stress-reducing drawing activities.

While not introducing or implementing art therapy, art teachers still have the unique ability to teach coping mechanisms for anxiety through their curriculum. Art

therapists have studied the mood-enhancing effects of art-making, and have found that it can reduce anxiety in people. Researchers Girija Kaimal, Kendra Ray, and Juan Muniz (2016) measured the cortisol levels of adults before and after art-making and found that the art-making process significantly reduced anxiety symptoms. Amanda Chambala (2008) and N. A. Curry and T. Kasser (2005) have studied the effectiveness of art-making on the anxiety levels of people, and their results support the theory that art-making can reduce anxiety. Each of the studies included drawing activities that vary in their level of structure or expressiveness, as well as their use of drawing medium, which indicates that varying drawing prompts can reduce stress. Art educators can utilize the findings of art therapists in developing projects and activities for their art classes that facilitate creative expression and exploration of self, which can indirectly reduce stress.

It is important to note, however, that some art therapists have found that art-making can induce anxiety in some cases. Elizabeth Burns (2008) theorizes that drawing can increase anxiety in people due to the misconception that people need to have specialized skills to engage in art-making. It is likely that the conditions of art therapy studies, as well as the stigma behind art-making, contribute to the induction of stress in some people; while a limited amount of art-making time, the nature of the prompt, and the lack of choice in materials can contribute to the induction of anxiety in people. Although anxiety can increase as a result of making art for some people, studies have shown that the vast majority of participants saw a decrease after making art.

As an artist and educator, with generalized and social anxiety symptoms, I have struggled in the past with managing my anxiety, much like some of my students. Students who internalize their anxiety symptoms are significantly less likely to receive

the support they need to help them manage their anxiety symptoms (Costello, 2003). Verbal communication can be difficult for students with anxiety symptoms, which can impact not only their ability to ask their teachers for help, but impact the ability to converse with their peers, and their ability to express their feelings and experiences as well. Many of the symptoms experienced by students with anxiety can be misinterpreted as social issues, academic issues, or behavioral issues when in reality their behavior is a result of their anxiety symptoms (Csikszentmihalyi, 1984).

This study focuses on the utilization of drawing materials to promote the stress-reducing effects of the arts. Drawing is one of the most accessible and portable art forms because one only needs a pen or pencil and a surface to draw on to participate in drawing. This study investigated which drawing materials and methods can be the most effective in reducing student anxiety levels through the utilization of warm-up activities in the classroom. Student participants were asked to keep a journal reflecting on their experiences with art methods and materials presented, which were collected and used as qualitative data upon the completion of the study. Students also completed pre and post activity questionnaires assessing their anxiety symptoms, which were used to compare and contrast the effectiveness of materials and activities in reducing anxiety symptoms in students. Questionnaires were used to assess which activities and materials induced anxiety symptoms in students. Throughout the study, I collected data to investigate which drawing materials and prompts can have effects on high school students' classroom anxiety.

## Research Questions

*With the above in mind, I ask the following research questions:*

- o Given that anxiety can be prevalent in high school students, and Chambala (2008) and Burns (2009) suggest that drawing can significantly reduce anxiety, how might art teachers best incorporate anxiety reducing drawing activities in their curriculum in a high school art classroom?*
- o Furthermore, how might the implementation of these activities promote art-making as a support strategy for high school students when addressing adolescent challenges such as anxiety?*

## Theoretical Framework

Implementing anxiety-reducing activities and projects into an art education curriculum can help to encourage students who have difficulty verbalizing their struggle with anxiety symptoms, in developing healthy and productive ways to manage their anxiety. Art educators can foster an environment in which students feel comfortable expressing themselves and making art, by utilizing aspects of the Expressive Therapies Continuum (ETC). Many art educators already utilize aspects of the ETC, because they know that students will react differently to different materials. Art educators can also foster student confidence in creating by engaging in conversations with them about their work, which can contribute to empowering them in creating (Dunn-Snow, 2000). The focus of this study was on the anxiety-reducing effects of drawing for high school students, and the implementation of drawing activities in a high school art classroom that promote the stress-reducing effects of art-making. The study focused on which drawing prompts and materials were the most effective in fostering a stress-free environment

while giving students a space to freely express themselves. Drawing prompts were based on themes that aimed to foster students' reflection on their identity, sense of self, the exploration of materials, composition, and mark making, and the development of student confidence.

### **Significance of the Study**

Students begin to experience less emotional support as they transition from middle school to high school, because of the desire to prepare students for life after graduation. This transition to the expectations of high school can be difficult for many students (Csikszentmihalyi, 1984). Art-making can significantly reduce anxiety symptoms, and can, therefore, be promoted as a stress management tool for students (Kaimal, Muniz, & Ray, 2016). Art educators can use anxiety reducing drawing prompts in their curriculum, to promote the development of student confidence. Mandalas, zentangles®, and other nonobjective drawing activities are examples that can be implemented in the classroom, and activities that students could enjoy creating outside of the classroom. This study showed that stress-reducing drawing activities, as well as journaling, can be implemented into an art curriculum to give students a space to express themselves.

### **Limitations of the Study**

There were several limitations to the study due to the classroom setting in which it took place. I had an existing rapport with my students, which helped students to feel comfortable with me, but they also saw me as their authority figure. Seeing me as an authority figure could have potentially induced some anxiety in some students. I was

also required to grade student work. This case study, therefore, utilized warm-up activities, instead of graded projects, to eliminate anxiety induced by grading. The study was limited to my classroom, and not all students were taking part in the study, which could have induced anxiety in my students who were taking part.

Students who were taking part in the study completed journals and questionnaires reflecting on their experiences before and after making art. It could have induced anxiety if they saw that other students were not participating in these activities. To reduce this anxiety, all students engaged in journaling, but only the journals of participants were collected. Self-anxiety-rating-scales were included in the journals of all students, to reduce further anxiety provoked by seeing that nonparticipants were not completing the rating scales. The struggle some students with anxiety have with verbal communication could have impacted the data collected through interviews, because they may not have been comfortable with verbally communicating responses to me.

Class periods lasted approximately fifty-seven minutes, and I had ten to twenty-six students in a class during each period. The number of students in a class each period and the amount of time allotted to each class period limited the individualized attention I could give to participants because I still needed to give attention to students who were not participating. Having participants and nonparticipants in the room at the same time limited my ability to ask students more personal questions. Interviews needed to be conducted outside of class, and which limited my ability to interview students outside of their regular class period.

Lastly, I was limited by the subjectivity of the questionnaires and journal entries. Although these provided an insight into the experiences of my students, their responses

could have been subjectively analyzed. Coding was created to analyze data more objectively. I could not measure the changes in cortisol levels, or perform other invasive tests, to physically see the changes in my students' anxiety levels. I had to rely on what they were telling me verbally, through their writing, and through their questionnaires.

### **Definitions of Terms**

**Art Therapy.** The American Art Therapy Association describes art therapy as a form of mental health services that utilizes art-making and creative processes with psychological theory to support the improvement of “cognitive and sensorimotor functions, foster self-esteem and self-awareness, cultivate emotional resilience, promote insight, enhance social skills, reduce and resolve conflicts and distress, and advance societal and ecological change” (American Art Therapy Association, 2017).

**Anxiety.** There are many forms of anxiety disorders, all of which involve excessive worry and fear in non-threatening situations. Symptoms of anxiety can include irritability, restlessness, feeling tense, feeling apprehensive, feeling dread, an anticipation of the worst, racing heart, shortness of breath, upset stomach, sweating, headaches, fatigue, and insomnia (National Alliance on Mental Illness, 2017).

**Expressive Therapies Continuum.** The ETC indicates that art materials can have different psychological effects on people when compared to others (Dunn-Snow, 2000).



**Generalized Anxiety Disorder.** People who experience generalized anxiety disorder experience excessive worry about everyday life, which can negatively impact concentration and the ability to complete simple daily tasks (National Alliance on Mental Illness, 2017).

**Social Anxiety Disorder.** People who experience social anxiety can have difficulty with social engagement as a result of an intense fear of social humiliation. People with social anxiety struggle with verbal communication and tend not to take part in conversations or contribute to class discussions. Social anxiety can cause one to become isolated due to a lack of social interaction and can cause one to have a panic attack in social situations (National Alliance on Mental Illness, 2017).

**Panic Disorder.** Panic disorder is “characterized by panic attacks,” which can be described as a sudden feeling of intense fear or terror. Panic attacks can often come on suddenly and without warning. Symptoms of a panic attack include “chest pain, heart palpitations, dizziness, shortness of breath,” and an upset stomach. People with panic disorders often avoid social engagement, as well as visiting specific places (National Alliance on Mental Illness, 2017).

**Phobia.** Phobias can be described as a strong irrational fear caused by events, objects, or certain places. People who have a phobia can often experience panic attacks that are triggered by their irrational fear, and often avoid anything that could trigger a panic (National Alliance on Mental Illness, 2017).

**Stress Management Techniques.** Stress management techniques are techniques that can help reduce anxiety symptoms in those who have anxiety disorders (National Institute of Mental Health, 2017).

**Co-morbidity.** Co-morbidity can be described as the presence of multiple distinct conditions in a person. Conditions that can co-occur include disorders, diseases, illnesses, or health problems (Valderas, J., Starfield, B., Sibbald, B., Salisbury, C., & Roland, M., 2009).

**Mandala.** A spontaneous artistic composition created within a circle that often includes repetition of lines, shapes, and colors (Drozdikova-Zaripova & Kostyunina, 2016). The creation of the complex, repetitive, symmetrical form of a mandala can be meditative (Curry & Kasser, 2005).

**Zentangle®.** An intuitively created design that is made up of repeating lines and shapes. Zentangles are meant to be therapeutic and relaxing (Zentangle, 2017).

**Assumptions to be Debated:**

- o Given that many drawing activities can reduce anxiety symptoms in people, whether or not structured line drawings or expressive and unstructured drawing activities are more effective in reducing anxiety will be debated because results will show which style of drawing is most effective in reducing anxiety symptoms.

- o Given that many drawing materials can reduce anxiety symptoms in high school students, the effectiveness of different drawing materials will be debated to show which drawing material is the most effective in reducing anxiety symptoms.
  
- o Given that not all students have an anxiety disorder, but all students in the study have experienced anxiety, the effectiveness of drawing on anxiety symptoms for students with and without anxiety symptoms will be debated, because art therapists theorize that art-making can reduce anxiety symptoms for most people.
  
- o Given that some students have more art experience than others, the effectiveness of drawing on reducing or inducing anxiety levels in students with more or less experience will be debated, because students with less art-making experience may be affected differently by drawing activities.
  
- o Given that some students may need more time than others to experience a decrease in anxiety symptoms, the length of time spent on art activities will be debated because some students may benefit from having more time to work on their drawings.
  
- o Given that art education and art therapy share some similar techniques, and that art educators can learn from the work of art therapists, the art therapy techniques that apply to art education will be debated.

**Assumptions not to be Debated:**

- o Given that many art forms can reduce anxiety symptoms, art forms that may be more effective in reducing anxiety symptoms than drawing will not be debated, because my study focuses on which drawing activities and materials are most effective in reducing anxiety symptoms.
  
- o Given that I am limited to the students I currently have in my classroom, and that I am limited by parental consent, whether or not my study accurately represents all high school students will not be debated. One group of high school students in an urban high school cannot represent the United States adolescent population.
  
- o Given that it would be unethical for me to collect cortisol samples from my students, whether or not I can provide scientific evidence of changes in anxiety levels will not be debated, because I am limited to assessing the questionnaire and journal responses from my students.
  
- o Given that art education and art therapy are different professions and fields of study and that I am not an art therapist and have no qualifications to try to heal anxiety in my students, whether or not I am implementing art therapy techniques from an art therapist role will not be debated.

**Summary**

Many art educators are aware that art-making can be therapeutic. Knowing that drawing can reduce stress, art educators can implement anxiety-reducing activities into their curricula, by understanding how students may respond to materials and prompts. Giving students a space to talk about their experiences, through journaling or conversations about their artwork, can empower them to explore their sense of self. The following chapters examine the therapeutic aspects of drawing, and how art educators can highlight this characteristic, without taking on the role of an art therapist.

## **Chapter II: Literature Review**

### **Introduction**

Anxiety symptoms can have a negative impact on the emotional, social, and academic growth of adolescents. Students who learn to manage their anxiety can prevent the future development of other psychiatric disorders, and decrease the chances of a negative overall mental wellbeing (Csikszentmihalyi, 1984). Previous studies in the field of art therapy have shown that art-making can be used to help people manage their anxiety. Studies conducted by experts such as Girija Kaimal, Kendra Ray, and Juan Muniz (2016), Amanda Chambala (2008), and N. A. Curry and T. Kasser (2005) have shown that various forms of art-making, including drawing, can significantly decrease anxiety symptoms.

Many art educators and art therapists believe that art therapy techniques can easily be integrated into art education curricula. These programs often integrate projects that help students to explore and reflect on their identity and build a stronger sense of self (Dunn-Snow, 2000). The aforementioned art therapists have also theorized that art can help people to reflect on their emotions, communicate through visuals, and work through their feelings. The promotion of art-making in a high school classroom, using projects and activities that allow for self-reflection and expression, as well as choice, can help students to develop healthy ways to manage and decrease their anxiety symptoms.

### **Key Terms**

There are many forms of anxiety disorders, all of which involve excessive worry and fear in non-threatening situations. Symptoms of anxiety can include the following;

irritability, restlessness, feeling tense, feeling apprehensive, feeling dread, anticipating the worst, racing heart, shortness of breath, upset stomach, sweating, headaches, fatigue, and insomnia. Different types of anxiety disorders include generalized anxiety, social anxiety, panic disorders, and phobias.

People who experience generalized anxiety disorder experience excessive worry about everyday life, which can negatively impact concentration and the ability to complete simple daily tasks. Social anxiety can cause difficulty with social engagement as a result of an intense fear of social humiliation. People with social anxiety struggle with verbal communication and tend not to take part in conversations or contribute to class discussions. Panic disorder is “characterized by panic attacks,” which can be described as a sudden feeling of intense fear or terror (National Alliance on Mental Illness, 2017). Panic attacks can often come on suddenly and without warning.

Symptoms of a panic attack include “chest pain, heart palpitations, dizziness, shortness of breath,” and an upset stomach (National Alliance on Mental Illness, 2017). People with panic disorders often avoid social engagement, as well as visiting specific places. Lastly, phobias can be described as a strong irrational fear caused by events, objects, or certain places. People who have a phobia can often experience panic attacks that are triggered by their irrational fear, and often avoid anything that could trigger a panic (National Alliance on Mental Illness, 2017).

Anxiety, as well as other disorders, diseases, or health problems, can occur co-morbidly with other disorders. Co-morbidity can be described as the presence of multiple distinct conditions in a person (Valderas, J., Starfield, B., Sibbald, B., Salisbury, C., & Roland, M., 2009). Early intervention can be crucial in preventing the development of

co-morbid psychological disorders (Costello, E. J. & Mustillo, S., 2003). Stress management techniques, or techniques that can help reduce anxiety symptoms in those who have anxiety disorders (National Institute of Mental Health, 2017), can be taught to help adolescents learn to cope with their anxiety.

The American Art Therapy Association describes art therapy as a form of mental health services that utilizes art-making and creative processes with psychological theory to support the improvement of “cognitive and sensorimotor functions, foster self-esteem and self-awareness, cultivate emotional resilience, promote insight, enhance social skills, reduce and resolve conflicts and distress, and advance societal and ecological change” (American Art Therapy Association, 2017). Art educators such as Lowenfeld and Kramer strongly believed that art therapy techniques could be implemented into the classroom to address the emotional issues of students, and to help students explore their sense of self (Dunn-Snow, 2000). This exploration of self can help adolescents develop better self-esteem and resilience, which can help maintain positive mental wellness as they navigate their transition to adulthood (Csikszentmihalyi, 1984).

There are many techniques utilized in art therapy that can be implemented into art education curricula, including the Expressive Therapies Continuum (ETC). The ETC indicates that some art materials may have different psychological effects from others (Dunn-Snow, 2000). Many art teachers already unconsciously integrate this knowledge into their teaching, when they adapt or modify lessons for their students. Student participants in this study were given a choice in their use of drawing materials and were asked to reflect on their experiences using the materials in their journals. Students also



received suggestions for materials to try, based on their responses, exposing them to materials for which they may not have normally reached.

There are a variety of drawing techniques and prompts that can reduce anxiety, including mandalas and zentangles®. Mandalas can be described as a spontaneous artistic composition created within a circle that often includes repetition of lines, shapes, and colors (Drozdikova-Zaripova & Kostyunina, 2016). The creation of the complex, repetitive, symmetrical form of a mandala can be meditative (Curry & Kasser, 2005). A zentangle® can be defined as an intuitively created design that is made up of repeating lines and shapes. Zentangles® are meant to be therapeutic and relaxing (Zentangle, 2017). Mandalas and zentangles® are examples of two drawing prompts that were utilized in this case study, because of their therapeutic nature. Both styles of drawing can cause students to focus on their use of lines and shapes, rather than on their stress, which can increase their overall focus (Drozdikova-Zaripova & Kostyunina, 2016).

### **Anxiety and Adolescence**

High School students are at the stage in their life in which they have to learn to be an active member of society, “acquire habits to live by”, manage their time, learn to function as adults, and “learn to allocate attention to various activities in a manner acceptable to adults” (Csikszentmihalyi, 1984, p. 4). Adolescents experience emotional cognitive, and social transitions that result in their definition of self. Confidence and self-esteem are built as they gain their sense of self, and it is during this development that adolescents can develop stress and anxiety (Csikszentmihalyi, p. 8).

Csikszentmihalyi (1984) notes that adolescents have reached a point in their life in which they must begin to make difficult decisions about their future. There are vast amounts of possibilities of life goals, many of which involve learning skills that are most meaningful in the context of that field. High school students are asked to navigate these possibilities and make complicated decisions that will have an impact on their future. This series of difficult decision-making adds to their stress because they must balance this navigation with new adult responsibilities that they are taking on (Csikszentmihalyi, p. 12).

The transition from childhood to adulthood requires students to restructure their energy. They must learn how to concentrate on tasks that are not enjoyable, or immediately rewarding. Csikszentmihalyi (1984) states that “Maturation is not a preprogrammed process that unfolds automatically; a young person has to learn habits of thought, action, and feeling that are often difficult and unnatural” (Csikszentmihalyi, p. 12). The stress of maturation can contribute to the development of psychiatric disorders in adolescents (Csikszentmihalyi, p. 14-16).

Adolescents are faced with pressure to conform to societal expectations and behavior norms, attend school, and take on adult responsibilities, and often struggle to prioritize their decisions because adult expectations may conflict with their personal needs. This conflict can lead to negative mood disorders, exhaustion, or inability to focus (Csikszentmihalyi, p. 20-21). Students who experience this struggle can develop anxiety symptoms, which can develop into a psychiatric disorder. These symptoms can prevent or slow the rate of cognitive expansion and growth in adolescents, which can negatively impact their ability to function as an adult (Csikszentmihalyi, p. 22).

Adolescents are consistently overwhelmed by the demands of school, demands from their parents, and their expectations of themselves, which often results in the development of anxiety. Csikszentmihalyi (1984) theorizes that the resulting anxiety is due to a lack in skills necessary to carry out life goals and expectations that adolescents set up for themselves, as well as the inability to gauge realistic goals, expectations, and limitations (Csikszentmihalyi, p. 234).

### **Recognizing Anxiety in School**

Campbell and Headly explain that between three and twenty-four percent of children below the age of twelve develop “anxiety problems” that impede their ability to function because they have not developed a way to manage their anxiety symptoms (Campbell & Headly, 2011, p. 78). Two and a half to five percent of the aforementioned children have a diagnosable anxiety disorder. Children who do not receive intervention to help them manage or cope with their anxiety often develop anxiety disorders in adolescence, which can affect their academic and social life. The academic and social issues caused by anxiety disorders can lead to the development of other mental health disorders when in late adolescence or early adulthood (Campbell & Headly, 2011, p. 78).

Children and adolescents who experience anxiety are at a significantly higher risk of developing anxiety disorders and other mental health disorders as they transition into adulthood. Although early intervention is crucial in preventing children and adolescents from developing a mental health disorder, many parents and teachers fail to recognize anxiety in students (Campbell & Headly, p. 79). Students who internalize their anxiety are typically well behaved, which can lead to their struggle with anxiety being

overlooked. Students who externalize their anxiety symptoms can often be mistaken for having behavior issues, which prevents them from receiving treatment for their anxiety. Teachers are more likely to identify anxiety symptoms in students who externalize their anxiety, or in students who have more severe forms of anxiety (Campbell & Headly, p. 80).

Many high school teachers are aware that the transition to high school can be a stressful time for adolescents. Campbell and Headly's (2011) study investigates primary school teachers' ability to recognize and refer children with anxiety disorders for mental health services. Participants of their study included sixty-four males and two hundred and thirty-four females, ranging from twenty-one to seventy-one years old, with an average of sixteen years of teaching experience. They gave out questionnaires in faculty meetings at schools and mailed out questionnaires to participants. The questionnaires included a description of a primary school student and asked the teachers to rank the necessity of referring the child for mental health services. Mental health experts had diagnosed each child whose description was included in the study based on the severity of their anxiety levels. Teachers also completed a qualitative portion of the questionnaire that asked them to reflect on the need for referral for each student, and on previous experiences, they have had with similar students (Campbell & Headly, p. 81).

Campbell and Headly's study found that most teacher participants struggled to differentiate between students with moderate and severe anxiety. Teachers were able to identify which students needed to be referred for mental health services but showed that they were less likely to refer students with moderate anxiety symptoms (Campbell & Headly, p. 84). This unlikelihood that teachers will refer students with moderate anxiety

symptoms indicates that teachers have more difficulty recognizing anxiety symptoms that require intervention in students who have moderate symptoms, and students who internalize their symptoms. Teachers were more likely to refer students who externalize their anxiety to counselors. Most of the teachers who participated thought many of the moderate anxiety symptoms were social development issues. This misinterpretation of anxiety symptoms as social maladjustment can prevent students from receiving the help that they need (Campbell & Headly, p. 84).

Anxiety is also a familiar feeling for most people, and many teachers may not see anxiety as being an issue that impedes the social and academic growth of students. Teachers also often assume that students are socially maladjusted when they are quiet, but in reality, their lack of social engagement is a result of their anxiety symptoms. Campbell and Headly's (2011) article shows that many teachers have similar difficulties with recognizing anxiety symptoms in their students, which is, therefore, preventing students with moderate and internalized anxiety from getting the mental health services that they need. These students have difficulty advocating for themselves, and expressing their need for help, and are therefore at a significantly higher risk of developing other mental health disorders.

### **Anxiety and the Development of Other Psychiatric Disorders**

Many adolescents are not taught to cope with their stress and anxiety, which can contribute to the development of an anxiety disorder. Costello, Erkanli, Mustillo, Keeler, and Angold's (2003) study investigates the prevalence of psychiatric disorders in children and adolescents, as well as how likely children with psychiatric disorder develop multiple

disorders co-morbidly. Their study included one thousand four hundred and twenty children, ranging in age from nine to thirteen years old, who were assessed annually for psychiatric disorders described in the DSM-IV until they reached the age of sixteen (Costello, p. 837). The children were all from different counties in North Carolina and were nine, eleven, or thirteen at the beginning of the study. The participants were divided up into three cohorts, one of which consisted of the nine and ten-year-old children, and two of which consisted of eleven to thirteen-year-olds. Data was collected from them when they began the study, and when they reached ages fourteen, fifteen, and sixteen. Throughout the study, interviewers who received a month of training conducted a series of interviews with parents and children in their home, recording their responses and symptoms of psychiatric disorders (Costello, p. 838).

Different interviewers interviewed parents and their children separately. Symptoms were recorded if the children exhibited it within three months of the interview and if the parent, child, or both reported the symptom. Interviewers reported when each symptom started, the duration of the symptom, and the severity of the symptom to diagnose each child after each interview (Costello, p. 838). The results of the study show that individuals in middle adolescence saw an increase in panic disorders and generalized anxiety disorders. Thirty-six percent of the participants who had reached the age of sixteen “met the DSM-IV criteria for one or more disorders” (Costello, p. 840). The results also indicate that girls are more likely than boys to develop anxiety and depression disorders. Adolescents with anxiety and depression are likely to develop co-morbid psychiatric disorders, such as behavioral disorders, substance abuse disorders, social phobias, and specific anxiety disorders. Female participants showed a higher likelihood

of developing depression, psychosis, generalized and specific anxiety disorders, and phobias, co-morbidly with their anxiety symptoms (Costello, p. 840).

The study shows that one in five children will have a psychiatric disorder at some point in their childhood. Although children typically see a decrease in psychiatric disorders until around the age of twelve, adolescents see a significant increase in the development of psychiatric disorders until they transition into adulthood (Costello, p. 841). An average of approximately thirteen percent of children are diagnosed with a psychiatric disorder at some point in their childhood, and approximately “three times that number had one or more disorders” throughout the study (Costello, p. 842). The study indicates that one in six children and adolescents will develop a psychiatric disorder, and one in three will develop one or more by the age of sixteen. As children continue to develop, they are more likely to be negatively impacted in their function by their psychiatric disorder. Children who develop symptoms of a psychiatric disorder are at a high risk of developing worsening symptoms over time, as well as a high risk of developing other disorder co-morbidly. Specific anxiety, depression, and substance abuse disorders become the most prevalent psychiatric disorders in people by mid-adolescence (Costello, p. 843).

The study does not provide a solution to the prevalence of anxiety and other psychiatric disorders in children and adolescents. It does, however, support my claim that anxiety is a prevalent problem among high school students that needs to be addressed to ensure their successful social, emotional, and intellectual development. Students can be taught to manage and cope with their anxiety, which can reduce the negative impact of their symptoms (Costello, 2003). This case study showed that drawing could reduce

anxiety symptoms, and can be promoted as a stress management tool for high school students.

### **Art-making and Cortisol Levels**

Art therapists have long studied the positive impact art-making can have on a person's mental wellness. Kaimal, Muniz, and Ray (2016) state that "art-making is an enjoyable or relaxing experience for some, whereas for others it is associated with freedom of expression, evokes a flow experience, stimulates insight, and provides a way to learn about ones' self." (Kaimal, Muniz, & Ray, p. 79). They theorize that the openness of choice based art-making process can significantly reduce cortisol levels in healthy adults, resulting in reduced anxiety and stress levels (Kaimal, Muniz, & Ray, 2016). To test their theory, they used the cortisol found in human saliva to test the reduction in anxiety and stress levels in adults after forty-five minutes of art-making. Cortisol is considered to be a marker of stress, and changes in cortisol levels correlate with changes in stress levels. Kaimal, Muniz, and Ray (2016) chose to use the cortisol found in saliva because it is the least invasive way to obtain samples of cortisol from people (Kaimal, Muniz, & Ray, p. 74).

Kaimal, Muniz, and Ray's study was conducted in a large urban university over the course of four months, with adults who do not have a history of mental illness. The thirty-nine participants of the study consisted of adults ranging in age, from eighteen to fifty-nine, and were staff members, faculty, and students of the university. The number of female participants was disproportionate to the number of male participants, comprising of thirty-three women and six men. The diversity in ethnicity or race was



also disproportionate. The study comprised of two African American, thirteen Asian American, thirteen white, and three multiracial individuals. Eighteen participants considered themselves to have little prior art-making experience. Thirteen participants identified themselves as having some experience, and eight considered themselves to have advanced experience (Kaimal, Muniz, & Ray, p. 75).

Each session conducted over the four-month period was one hour in length, fifteen minutes of which were dedicated to the collection of consent information and data, as well as the collection of pre-session and post-session saliva. Participants were given forty-five minutes to create art using the media of their choice. The authors provided clay, markers, and collage materials for the art-making process. Participants were given a choice in how they used their materials and could use them by themselves or mix media. Their prompt was choice-based and allowed for them to create any imagery. Participants were allowed to use the art therapist that was present during their session to aid them in coming up with ideas or figuring out how to use materials, but they did not have to utilize the therapist. Some participants asked the art therapist questions, and some chose to work in silence (Kaimal, Muniz, & Ray, p. 75).

After the conclusion of the art-making process, participants were given the opportunity to verbally share their artwork and reflect on their experience before post session saliva was collected. They were then asked to provide a short written response to their experience with art-making, and the imagery they chose to create. The saliva was then tested in a lab at the university in which the study took place, and data was collected to compare the changes in cortisol levels before and after the art-making session. Saliva samples were duplicated for testing to prevent possible errors in the data collection

process. The saliva test results showed an overall significant reduction in cortisol levels in the majority of participants (Kaimal, Muniz, & Ray, p. 76). Written responses to demographic questions and post-session experience reflection were converted into numerical data so that the authors could document the correlations between changes in cortisol levels and the demographics, media choice, prior experience with art-making, and description of experience after the completion of the study. The data collected showed that a part of the authors' hypothesis was correct, and a part was incorrect. The data shows that art-making can in fact significantly reduce anxiety levels in adults. The data does not, however, show a correlation between changes in cortisol and gender, race or ethnicity, age, choice in media, and prior experience with art-making (Kaimal, Muniz, & Ray, p. 77).

Changes in stress levels were measured through changes in cortisol levels in the participants of the study. Data from the study shows a significant decrease in cortisol in participants after forty-five minutes of art-making (Kaimal, Muniz, & Ray, p. 76). After the study's completion, they found that there was no correlation between gender, age, media choice, race or ethnicity, and level of artistic experience and the changes in cortisol levels. These findings indicate that the art-making process can reduce cortisol levels in people regardless of their demographic, experience level with art-making, or art media utilized (Kaimal, Muniz, & Ray, p. 78). The authors did find a small correlation between changes in cortisol levels and the time of day in which individuals participated in the study. It is known that people's cortisol levels tend to be higher earlier in the day and decrease throughout the day. The difference in peoples' cortisol levels at different times of the day contributed to the correlation found during the study, and the authors

describe this correlation as a “moderate positive relationship between the time of day that cortisol was collected and the difference in cortisol scores before and after art-making” (Kaimal, Muniz, & Ray, p. 77). Their findings indicate that this correlation may have affected the amount that cortisol increased or decreased after the art-making process.

Cortisol levels lowered for approximately seventy-five percent of participants. Approximately twenty-five percent of participants either experience no change in cortisol levels, or an increase in cortisol levels after making art. The authors theorize that the level of engagement, amount of time given to make art, and the level of comfort of participants could have contributed to the aforementioned results. The authors noted that the small number of participants, and the lack of balance of the genders, race, and ethnicity in participants, the lack of a control group, and the use of post-study narrative writing instead of a stress-based questionnaire could have affected the results of the study. This study is considered a pilot study, that should be used to further understanding of how art-making can affect stress levels in people. The overall results of the study show that art-making can reduce anxiety in anyone, and can be effectively used as a coping mechanism for all individuals (Kaimal, Muniz, & Ray, p. 79).

Kaimal, Muniz, and Ray’s (2016) pilot study is a step in the right direction to help our understanding of the connections between art-making and stress levels. The study utilized sound methods of collecting data through the use of testing cortisol found in saliva. The disproportion in gender and ethnicity is concerning because the results of the study were based on a small group that lacked in diversity. The study also lacked in a control group, and participants all interacted differently with the art therapist. The difference in interaction with the art therapist could have affected the results of the study

because participant interaction with the therapist could have eased some of the participant's art-making related anxiety. The study also would have benefited from the use of a post-session questionnaire in which participants would more effectively rank their anxiety levels after making art. The results of the study aligned with my hypothesis about the correlation between art-making and stress reduction, which affirmed my decision to study this correlation as it relates to art education.

### **Art-making and Mood**

Both art exposure and art-making can reduce anxiety levels in people. Bell and Robbins theorize that it is art-making rather than art exposure that is therapeutic for people. Their study shows that individuals who engage in art-making are significantly more likely than those who view and experience art in reducing their anxiety and negative mood levels (Bell & Robbins, 2007).

Bell and Robbins' (2007) study randomly divided fifty adults into two groups, the art production, and art-viewing groups, and asked individuals to engage in a twenty-minute art activity. The activities were meant to reduce the anxiety and negative mood levels of participants. Using the "Profile of Mood States" questionnaire, which assesses people's current mood levels, and the state and trait anxiety versions of the "State-Trait Anxiety Inventory" questionnaire, which assesses people's current short-term and long-term anxiety levels, the authors assessed changes in anxiety and mood levels following the art activities (Bell & Robbins, p. 73). Bell and Robbins had participants engage in a negative mood inducing activity before the beginning of the art activities, to raise anxiety

levels and increase negative moods before attempting to reduce these levels in participants (Bell & Robbins, p. 73).

After completing the list of ten concerns, and the POMS and STAI questionnaires, participants were evenly divided randomly into two groups, the art production group, and the art-viewing group. The twenty-five individuals in the art production group were given twenty minutes to complete a choice-based art activity. All participants were provided with eight and a half inch by eleven-inch sheets of blank white paper and colored pencils, oil pastels, crayons, and charcoal pencils. They were given a choice in the medium used and were told to draw whatever they wanted without limitation on the amount of paper they used. The twenty-five individuals in the art-viewing group were asked to sort through and observe sixty prints of well-known artworks. Their task was to categorize the prints based on the content of the imagery in the artwork. Participants were asked to categorize the prints to both ensure that they were genuinely observing the images, and giving them a time-limited task similar to the level of demand given to the art production group. After the completion of the twenty-minute art production or view activities, participants completed another POMS and STAI questionnaire and were then asked to create a list of ten pleasant memories to reduce anxiety (Bell & Robbins, p. 73).

The group that was assigned to draw showed a significant decrease in their anxiety and mood levels on all three questionnaires, after having drawn for twenty-minutes. The art-viewing group showed minimal or no change in anxiety and negative mood levels after their twenty-minute activity. Neither of the groups showed an increase in their anxiety or negative mood levels after making or viewing art for twenty minutes. The data from the study indicates that producing art is more likely to decrease anxiety and negative

mood, than viewing and experiencing art. The data collected showed that art production resulted in significantly high levels of anxiety reduction than art exposure. The data from the study indicates that the art-making process is an effective way to reduce anxiety and improve an individual's mood (Bell & Robbins, p. 73).

The authors note that although the art-viewing group experience a small decrease in anxiety and negative mood levels, it is possible that the format of their activity induced some anxiety, which could have affected their results in the study. Some participants may have felt as though the categorization of art prints was like a test, which could have induced some stress. The study also did not aim to show an increase in negative mood before the commencement of the art activities. Authors, therefore, did not assess changes in mood or anxiety levels before and after the negative mood inducing activity. The authors note that they are unsure if the negative mood inducing activity played a role in the reduction of negative mood and anxiety levels (Bell & Robbins, p. 74).

Bell and Robbins' (2007) study shows that art production is an effective means to reduce anxiety levels. The way that Bell and Robbins' set up the drawing activity reduced the chance that the activity itself would induce anxiety. Participants could choose from a range of materials, allowing them to use a material with which they felt comfortable. They were also not limited to a single piece of paper, which reduces participants' feelings regarding making mistakes in their artwork. Giving them the option to use multiple pieces of paper also encourages experimentation with materials and mark making. Participants could choose how they created their drawing, giving them a choice between more controlled or more expressive art-making techniques. Their

experience was meant to feel free, and the set up of the activity left room for that result to occur (Bell & Robbins, 2007).

The study shows that drawing can significantly reduce anxiety, after as little as twenty minutes. The results may have differed if there was some structure in the prompt for the drawing activity. The drawing prompts in this case study were structured, but were open to interpretation and included elements of choice. The case study compared the effectiveness of expressive and structured drawing techniques in reducing anxiety in high school students through the improvement in student confidence.

### **Focusing on Experiences While Making Art**

Art-making can provide an opportunity for participants to reflect on their experiences. This aspect of art-making can be therapeutic and is commonly utilized in art therapy to help people come to realizations about the source of their emotional distress. Art-making can serve as a distraction from the source, but can also force people to reflect on the experience. Using collage and drawing methods, Krista Curl desires to discover whether focusing on a negative experience or a positive experience while making art will result in a decrease in stress levels for young adults (Curl, 2008).

Curl's study focuses on assessing the reduction of stress as a "function of positive versus negative cognitive focus during the art-making process" (Curl, p. 166). The study included four treatment groups, two of which focused on negative thoughts while creating art and two of which focused on positive thoughts while making art. One positive and one negative focus group used collage during the art-making process, and one positive and one negative focus group used drawing to make art. Participants in the

negative focus groups were asked to focus on a stressful situation that they have experienced while making art, and participants in the positive focus group were asked to focus on a pleasant experience. The study aims to discover which type of cognitive focus would cause high levels of short-term stress reduction (Curl, p. 166).

Curl theorized that if participants in the negative focus group saw a more significant reduction in stress levels, then art-making while focusing on a stressful situation can help individuals to problem solve as a result of a focus on finding problems. If participants in the positive focus group experienced a more significant reduction in stress levels, then the therapeutic benefits on art more likely derive from focusing on the positive or distraction from the negative. Unsurprisingly the participants in the positive focus groups experience a decrease in stress levels, and participants in the negative focus group experienced a slight increase in anxiety after the art-making sessions. The findings of the study support the second hypothesis that Curl introduced, indicating that short-term stress reduction during art-making is connected to focus on positive emotions. The increase in stress levels among participants in the negative focus group likely occurred as a result of a focus on stressful experiences. Both drawing and collage reduced stress for participants in the positive focus group and increased stress in the negative focus group. The lack of effect of the materials on stress levels indicates that it is not the material, but rather the emotional focus that affects stress levels during art-making (Curl, p. 168).

Curl notes that the study is limited to short-term stress reduction due to the lack of long-term assessment of changes in anxiety levels. Participants of the study were not considered to have stress or anxiety disorders, which limits the study in its ability to reflect the effectiveness of art-making for people with psychological disorders. Allowing



participants to choose their medium may have increased the reduction in stress levels for participants. The participants in the study were limited in the materials from which they could choose. Giving participants more options for materials may have further contributed to the reduction of anxiety as a result of art-making. Allowing choice of material reduces stress caused by the material itself (Curl, p. 169).

For this case study, students were asked to try different materials, and the effectiveness of different materials in reducing anxiety was assessed. Students were, however, given a choice in when they experimented with materials, and with which prompt they used their chosen material. Similar to Curl's study, some drawing prompts asked students to focus on prior experience. Given that negative experiences could likely induce anxiety, students were only asked to focus on pleasant experiences for these prompts.

### **The Effectiveness of Different Art Materials on Anxiety Levels**

Different art materials can affect the moods of people differently. Burns (2009) studied which art materials provoke or decrease anxiety symptoms in adults who have an average level of anxiety. In the study, Burns uses clay, drawing, and photography in three art therapy sessions, after which participants are asked about their experience with materials and given a questionnaire to assess changes in their anxiety levels (Burns, p. 1).

Burns describes that drawing is an accessible art form and in theory an art form that lends itself as a coping mechanism for anxiety. Drawing only requires a drawing utensil and paper. Individuals who choose to draw to help them manage their anxiety can easily

access the materials necessary to participate (Burns, p. 14-15). Drawing is also a more familiar art form for most people. People begin drawing in their early childhood and are familiar with most drawing materials. This familiarity with materials can ease some anxiety that people may experience when using a new material (Burns, p. 14). Drawing can also increase anxiety in people because of the stigma that drawing requires an advanced skill set. Allowing participants time to become familiar with materials and processes can ease some of the anxiety associated with the aforementioned drawing stigma (Burns, p. 15).

For her study, Burns (2009) included fifteen adult participants, ranging from ages nineteen to sixty-six (Burns, 33), who experience normal anxiety levels (Burns, p. 24). Seven of the participants were female, and eight were male (Burns, p. 33). All of the participants were members of a church in Florida (Burns, 34), and the ethnicity or prior art experience levels of participants is not discussed. Individuals participated in three group sessions and were divided up into six smaller groups of two to three people (Burns, p. 24). The study was completed over the course of three months, one month of which was dedicated to the art therapy sessions (Burns, p. 30). Each group was given the same prompt and was asked to use a different material in each session. During the drawing session, participants were asked to use oil pastels to create an image of their choosing (Burns, p. 24). Participants were provided with two sheets of nine inch by twelve-inch pieces of drawing paper and a sixteen pack of oil pastels. They were first given time to experiment with the oil pastels to familiarize themselves with the material, before creating an image. They were then given twenty-five to thirty minutes to create an artwork using the provided materials (Burns, p. 26).

Participants completed four questionnaires throughout the study. The first questionnaire was given before the art therapy session and aimed to identify anxiety levels experienced by participants in their daily life. The other three questionnaires were given after each art-making session and asked participants to reflect on their experiences with the art-making process, materials, and changes in anxiety levels during the sessions (Burns, p. 28). The questionnaires were given in two parts and questions were separated into the two parts that included six quantitative and three qualitative based questions (Burns, p. 29). The quantitative questions were multiple-choice, and the qualitative questions were short answer questions. Data from the questionnaires was divided into groups based on the material used in the session and reflected on in the questionnaire (Burns, p. 30).

After the completion of the questionnaires, participants were asked to engage in a five to ten-minute relaxation exercise to reduce any anxiety that may have been induced during the art-making session (Burns, p. 34). When asked whether or not they felt anxious during the art-making process, four participants agreed that drawing made them feel anxious, one participant was neutral, and ten participants felt that drawing reduced their anxiety. When asked whether or not they felt relaxed by the art-making process, three participants agreed that they did not feel relaxed when drawing, four participants were neutral, and eight participants felt relaxed after their drawing session (Burns, p. 40).

Burns theorizes that the fluidity of the material would engage participant's sensory and kinesthetically, allowing them to further engage in expressive art-making techniques, which intended to reduce anxiety (Burns, p. 26). The majority of the participants felt that drawing reduced their anxiety and made them feel relaxed. Some participants that

had their anxiety increased expressed a desire for more time and were described as hesitant to begin their drawings. Many participants also described having some difficulty adjusting the using oil pastels, which could have contributed to an increase in anxiety levels. Despite the challenge of becoming familiar with a new material, most participants described their experience as enjoyable overall. Some participants also struggled with deciding what to draw (Burns, p. 46-51).

The lack of structure in the drawing prompt may have also contributed to the increase in anxiety levels of some participants. Despite having found the material frustrating, and being hesitant to begin drawing, no participants saw a significant increase in their anxiety levels. Only twenty-six percent of participants experienced an increase in anxiety from drawing. The other participants either experience no change in anxiety, or a decrease in their anxiety levels. The results of the study indicate that art-making can decrease anxiety symptoms in the majority of adults (Burns, p. 59).

The results of Burns' study indicate that the majority of people can experience decreased anxiety symptoms after art-making. The results of the drawing sessions conducted in the study show that the majority of participants did enjoy drawing, and felt more relaxed after the session (Burns, 2009). Those who experience an increase in anxiety may have benefitted from having more time to draw, as well as more time to become comfortable with materials. Had participants been given a choice in drawing materials, they may have experienced less of an increase in anxiety. Participants also would have benefitted from more structure to their prompt. Giving a drawing prompt that gives some guidance, which still leaving room for participant choice, may have reduced the amount of anxiety experienced by participants. Some structure also could

have reduced hesitation, giving them more time to work on their artwork. The post-session questionnaires also did not feel like an accurate indication of anxiety levels for participants. Although asking participants about the experiences with materials is important, very few of the questions asked them to reflect on their anxiety symptoms.

### **Using Drawing to Reduce Anxiety Symptoms**

In Amanda Chambala's article, *Anxiety and Art Therapy: Treatment in the Public Eye*, she theorizes that drawing and painting can reduce anxiety symptoms, as well as help individuals to clarify the source of their anxiety. She explains that art therapists often use expressive art techniques when teaching coping mechanisms for stress and anxiety. She believes that the visual arts engage people in creative expression and the explorations of oneself, which allows for individuals to reflect on their feelings. This self-expression through the art-making process leads to self-reflection, which may lead to a greater understanding of the cause of one's anxiety. Understanding the cause of one's anxiety can lead to a reduction in anxiety symptoms, and an increase in overall mental wellness (Chambala, p. 187).

Chambala conducted an eight-week art therapy driven study with young to older adults who experience anxiety co-morbidly with various mental disorders, such as depression and bipolar disorder (Chambala, p. 187). The participants of the study were divided into groups of four to eight people for each session and were asked to complete a questionnaire upon the commencement of each session, assessing their anxiety levels and describing their symptoms. Chambala and a rehabilitation therapist then conducted an anxiety educational portion of the session, during which time participants could share

their personal experiences with anxiety. Participants were then asked to draw or paint their anxiety, their symptoms, or their coping mechanisms for anxiety. Chambala describes the artwork produced by participants as expressive and vigorous in mark making. Participants were particularly enthusiastic in their use of material when portraying their anxiety or their anxiety symptoms (Chambala, p. 189). Upon the completion of the art-making portion of the sessions, participants were asked to share their art voluntarily. Chambala ended each session with a discussion relating to the prevalence of anxiety. She notes in her article that participants appeared to be less anxious at the end of the sessions. Chambala's utilization of art therapy and expressive drawing techniques shows that drawing can reduce anxiety symptoms in adults (Chambala, p. 188).

Chambala's theory that art-making can help people to pinpoint the source of their anxiety is subjective. While art-making may provide clarity to those who are engaging in art therapy and stress reduction techniques, it may not help everyone discover the source of their anxiety if they are not creating art under specific conditions. Drawing can, however, distract people from their anxiety symptoms and help them to focus on a positive and productive activity, which can then lead to a reduction in anxiety symptoms. Participants in Chambala's study were prompted to focus on their anxiety while making art, with the intent of helping them to find the source of their anxiety (p. 188). Many of the participants may not have found clarity about the source of their anxiety, had they not been prompted to focus on their symptoms. Chambala claims that participants appeared to be less anxious after the sessions, but her study lacks a post-session questionnaire that provides evidence that supports her claim (Chambala, 2008).

Chambala's article, *Anxiety and Art Therapy: Treatment in the Public Eye*, affirms my theory that drawing can reduce anxiety symptoms. Her focus is on the utilization of art-making in clarifying the source of anxiety in adults. The focus of my study, in contrast, will be on the mood enhancing effects of drawing on high school students. Drawing is an easily accessible form of art-making that can help distract people from their anxiety symptoms, therefore reducing their anxiety.

Chambala's arbitrary speculation of subsequent positive effect regarding her participants' anxiety levels is at best uncertain, given that similar studies can provide strong supporting evidence of their claims, relating to the mood-enhancing effects of art-making, through scientific methods. Unlike Chambala, this study utilized questionnaires before and after the art-making process, as well as personal journal entries from participants in which they could reflect on their experiences. This form of data collection provided more authentic results that are supported by evidence, rather than informal observation.

### **Coloring Mandalas to Reduce Anxiety**

Both structured and unstructured drawing methods can reduce anxiety in students. Curry and Kasser's (2005) study aims to address anxiety through the use of coloring therapy, an art therapy form that is meant to ultimately distract individuals from their negative thoughts and feelings during the process of coloring in geometric shapes (Curry & Kasser, p. 81). The authors chose to have participants color in mandalas because they are made up of repeated shapes. They theorize that coloring mandalas can reduce anxiety because mandalas and coloring are meditative. Coloring therapy is also thought to

engage participants in a form of artistic expression that can reduce anxiety symptoms (Curry & Kasser, p. 81).

The anxiety of participants in the study was measured upon immediate arrival, after a short anxiety-inducing experience, and after coloring for a twenty-minute period. The authors hypothesized that coloring a mandala for twenty minutes would significantly reduce anxiety levels in participants. They also requested that one of the groups color a plaid, geometric pattern, instead of the mandala, and theorized that those who colored a mandala would experience higher levels of anxiety reduction after twenty minutes of coloring. They also theorized that if coloring geometric shapes are the key to color therapy, then both the mandala and plaid designs would result in a significantly higher decrease in anxiety levels than individuals who color using a free-form method (Curry & Kasser, p. 82).

Curry and Kasser's study comprised of fifty-five females and twenty-nine males, most of which were Caucasian and between the ages of eighteen and twenty-two, totaling eighty-four participants. The participants were all undergraduate students from a Midwestern college. The study was completed in a classroom, and participants were divided into smaller groups two to seven (Curry & Kasser, p. 82).

Upon arrival, participants rated their anxiety using a nine-point scale. They then participated in an exercise that was meant to induce anxiety symptoms. During this stage, participants were asked to complete four minutes of writing reflecting on a time in which they felt most fearful. They were then given the anxiety scale again to measure changes in their anxiety. Participants were then randomly given one of three possible activity directives, to color a mandala, color a plaid, geometric design, or color using a



free-form method. Participants were divided into groups based on their assigned activity. Thirty of the participants were given the mandala prompt, twenty-seven were given the plaid, geometric design, and twenty-seven were given the free-form color prompt. Participants who engaged in the mandala directive were given an outline of a pre-drawn mandala. The plaid, geometric design group, was given an outline of an irregular plaid design, and the free-form coloring group was given a blank piece of paper. All participants were provided with six different colored pencil colors (Curry & Kasser, p. 83) and were then prompted to color the paper provided for twenty minutes (Curry & Kasser, p. 82). All individuals again completed the nine-point anxiety scale after twenty minutes of coloring (Curry & Kasser, p. 83).

Upon analyzing the data from the anxiety scales, Curry and Kasser noted that all individuals showed an increase in anxiety levels from when they arrived, to after the four-minute anxiety-inducing writing exercise. When analyzing the final scale that was given after the coloring exercise, they found that both the mandala and plaid coloring groups showed lower anxiety levels than those who colored using a free-form method, after twenty minutes of coloring. They also found that the anxiety levels of the mandala group and the plaid group were not significantly different. The authors then compared the anxiety levels after the writing portion of the study to the anxiety scores acquired after the color portion of the study. The results again showed that the mandala and plaid coloring groups both showed more significant decreases in anxiety than the free-form coloring group and an insignificant difference in the decrease of anxiety levels of the mandala and plaid color groups. The results of the study also showed that coloring the mandala and plaid designs for twenty minutes decreased anxiety levels below the levels

of individuals when they first arrived. When comparing entry anxiety scores to exit anxiety scores, the mandala group showed a more significant decrease in anxiety levels than the plaid coloring group (Curry & Kasser, p. 83).

The result of Curry and Kasser's (2005) mandala coloring study supported their hypothesis that coloring a mandala for twenty minutes would result in a more significant decrease in anxiety levels than free-form coloring for twenty minutes. Participants that colored a blank piece of paper showed no decrease in anxiety, indicating that a more structured exercise is needed to reduce anxiety levels. The anxiety of those who colored a mandala fell below their initial anxiety score that was taken upon arrival. Those who colored the plaid design also saw a significant reduction of anxiety levels, and their change in anxiety levels differed little from the mandala group. Curry and Kasser (2005) theorize that this similarity in results is because the plaid design had a similar level of complexity when compared to the mandala design. Both designs provided a sense of structure and caused the participant to focus on the coloring activity more easily. Anxiety can often make individuals feel as though they are losing control, and the plaid and mandala designs bring a sense of structure to the chaos. The free-form drawing activity may have failed to help individuals decrease their anxiety symptoms because they were not given structure. The structure and complexity of the mandala and plaid designs allowed participants to enter a meditative state, leading to their reduced anxiety levels (Curry & Kasser, p. 84).

The results of Curry and Kasser's (2005) study indicate that a sense of structure is needed in drawing activities to help participants achieve reduced anxiety levels. However, twenty minutes may not have been enough time for the free-form coloring

participants to achieve reduced anxiety levels. These participants may have shown some decreased anxiety levels, had they had more time to plan out their artwork. It is likely that these individuals were experiencing more pressure because they were given a short period of time to construct an artwork with no pre-determined direction (Curry & Kasser, 2005).

Curry and Kasser's (2005) study relies on participants accurately reporting and ranking their anxiety levels throughout the study. This reliance on the participants could have impacted the overall results of the study. Although the study does not accurately represent the general population, its results support my theory that art-making can reduce anxiety levels in people. Its results also align with the results of other studies that have measured changes in anxiety levels after art-making. The study also supports my theory that some structure is needed in art-making to help individuals reduce anxiety levels, and that repetition of shapes and lines can reduce anxiety (Curry & Kasser, 2005).

### **Connections Between Art Therapy and Art Education**

People often state that the difference between art education and art therapy is that art education focuses on product, and art therapy focuses on process. Edith Kramer (1980) suggests that art education is more than product oriented. Although art therapy produces a product less often, both fields require the process of art-making (Kramer, p. 16).

Kramer suggests the art therapist must understand when to offer different materials when to get involved, and when to "refrain from interfering" (Kramer, p. 16). Art therapists also need to be able to understand the meaning behind a child's artwork, to

gain insight into the child's feelings. Art therapy differs from art education in that it requires training in psychotherapy. Both art educators and art therapists focus on helping students to make progress, although art educators may focus more heavily on helping students to make progress in their mastery of techniques and materials. Kramer also suggests that art is about expression, and creating a visual language, regardless of whether a product is produced (p. 16). Art therapy and art education both share the quality of exploration in the creative process. Art can be beneficial to a person's mental wellness, regardless of whether or not therapy is the goal (Kramer, p. 17).

Kramer's (1980) article suggests that art education shares some qualities with art therapy. It primarily shares the quality of creative expression and process with therapy. Although the focus of art education is not mental wellness, art education can benefit the mental wellness of students by allowing them to engage in creative exploration. Art can benefit one's mental wellness, both in and out of the context of therapy (Kramer, p. 16-17). Many of the projects students have worked on within my classes asked students to explore their sense of self, because the theme of their project had to come from within them. The goal of these projects was never to help students improve their mental wellness, but rather to help them take ownership of their work by integrating things they care about into their artwork. This development of a sense of ownership contributes to students' self-esteem, which can affect their mental wellness. Art educators and art therapists both give people the opportunity to explore themselves and their creativity, although art therapists focus more on helping people to improve their mental wellness.

### **Highlighting the Therapeutic Aspects of Art Education**

Dunn-Snow and D'Amelio (2000) explain that art therapy is rooted in art education, and theorizes that art teachers can enhance the therapeutic aspects of their lessons by incorporating elements of art therapy into their curricula. Victor Lowenfield, who was a notable art educator in the 1940s and 50s, advocated a “therapeutic approach to art education with children and adolescents” (Dunn-Snow, p. 47). Art teachers recognize the power of the art-making process in helping students to progress. Students with disabilities often engage in art classes, regardless of whether or not they remain in special education classrooms for the rest of their day. Art educators are not usually trained in special education, but can often be most effective in catering to children with special needs (Dunn-Snow, p. 47).

Dunn-Snow and D'Amelio (2000) suggest that there are four ways in which art teachers can “enhance the therapeutic aspects of their lessons” (Dunn-Snow, 48). These methods include the recognition of the “similarities between therapeutic and creative processes,” the ability to speak empathetically about students’ artwork, having an understanding of the Expressive Therapies Continuum, and they can collaborate with school counselors to develop art-making activities that can address specific student issues (Dunn-Snow, p. 48). These four methods connect to the practice of art therapy, without asking the art teacher to take on the role of an art therapist.

The creative process includes three stages, “the encounter stage, the destructive stage, and the reconstruction stage” (Dunn-Snow, 48). Art therapy and art education share these stages of the creative process. During the encounter stage, students are given the opportunity to discover a new idea, which can be influenced by a teacher’s prompt,

the environment surrounding students, or the materials available to students. During the encounter stage of the creative process, students are asked to solve a problem through creative processes (Dunn-Snow, p. 48). The destruction and reconstruction stages follow the encounter stage. The destruction stage occurs when students are presented with the limitations of the art-making process. During this stage, students get rid of old ideas and replace them with new ones, based on the limitations they encounter. The destruction stage naturally leads to the reconstruction stage, during which students can use insight to “reconstruct new forms from that which had been destroyed” (Dunn-Snow, p. 49). Dunn-Snow and D’Amelio (2000) note that art therapists utilize insight in their practice to help people gain a better understanding of themselves or the world around them, through the use of creative expression in the visual arts. Art teachers can help students to use insight similarly when fostering students’ creative and artistic growth, by helping them to gain a better understanding of their ideas (Dunn-Snow, p. 49).

Dunn-Snow and D’Amelio (2000) suggest that speaking to students about their artwork empathetically can further enhance the therapeutic aspects of art education. The art teacher can achieve this empathetic form of conversation with students by asking students to explain the subject or theme of their artwork without interpreting the meaning for them. This conversation with art students can help them to develop the ability to speak about their artwork, as well as give them the opportunity to explore their creative thinking skills. Conversing with students about their work also shows genuine interest in their ideas and work, which can contribute to a student’s confidence, and gives students a sense of purpose when they create. Art therapists use a similar technique when discussing a client’s work but focus more on the feelings that are expressed during the

creating process. Dunn-Snow and D'Amelio (2000) suggest using “overt and associative” levels of content when discussing artwork with students (Dunn-Snow, p. 50). Conversations about the overt meanings in artwork focus on describing what can be seen when looking at the artwork and associative meanings include “conscious associations to feelings, memories, wishes, or dreams” (Dunn-Snow, p. 50). Art therapists are trained to include a third form of conversation with clients to address what may be unconsciously communicated through the work of a client. Art educators can focus on conversations about the overt and associative in student artwork to engage in dialogue with students that questions their decision-making process, which can lead to deeper thinking about their work (Dunn-Snow, p. 50).

Dunn-Snow and D'Amelio's (2000) article include the Expressive Therapies Continuum, which indicates that some art materials may have different psychological effects from others, in their suggested therapy based techniques that can be used by art educators. They explain that more fluid materials, such as paints, oil pastels, or clays can evoke a more emotional response when used by students because their fluidity can be more expressive. Resistive materials such as markers, colored pencils, or pencils, can give students more control over their mark making but can be less expressive. The ETC also categorizes materials based on their level of complexity, which involves the number of steps necessary to use a material, and their level of structure, which involves the amount instruction given by a teacher or therapist (Dunn-Snow, p. 51).

Art educators can benefit from understanding how students will respond to different materials. For example, some students with special needs may prefer resistive materials instead of fluid ones, if they are sensitive to messier materials. Some students with

special needs will also benefit from a structured classroom that leaves room for elements of choice, because mastering new materials may be more difficult (Dunn-Snow, p. 51). An understanding of ETC can help art teachers to know when it is appropriate to give direction, and when it is more appropriate to step back and let students direct their learning. Dunn-Snow and D'Amelio (2000) state that "Art teachers and art therapists alike can develop more therapeutic art activities when they are more cognizant of the psychological impact that choices in art media and the structure and complexity an art lesson have on their students" (Dunn-Snow, p. 52). Art educators can strengthen their lessons and highlight the therapeutic effects of the art-making process by utilizing the ETC to gain a better understanding of how students will react to different art materials or prompts (Dunn-Snow, p. 52).

Lastly, Dunn-Snow and D'Amelio (2000) suggest that collaboration with other staff members can help art educators to enhance the therapeutic effects of the lessons. The visual arts can serve as a nonverbal form of communication, which other faculty members often do not have access too. The article suggests that art teachers communicate with other staff members, such as a counselor or administrator, when concerning imagery appears in a student's artwork. Taking this step can help staff members work together to address an issue a student may be having. Art teachers can also work with counselors or administrators in developing assignments that can address a more significant issue that is important to students. For example, art teachers could create projects surrounding issues of diversity, or projects that address social issues. Students' artwork could then become an outlet for them to express their concerns about these larger issues (Dunn-Snow, p. 52).



Many art educators can recognize the therapeutic effects of art-making. Although therapy is not the intent of an art educator, and although the art therapy and art education fields differ greatly, art educators can utilize aspects of art therapy to strengthen their lessons. Art educators can benefit the most from having an understanding of how students may respond to different materials or prompts. This understanding of student response can help art teachers to troubleshoot issues that could arise in the classroom and can help them to have adaptations and modifications prepared. Students can benefit greatly from having an art teacher who can facilitate their use of insight, as well as facilitate empathetic conversations about their work. Art teachers can better facilitate the growth of students' ideas if they have an understanding of their students' intent. Art teachers can utilize this knowledge that can be obtained through conversations with students to push students to develop their ideas (Dunn-Snow, 2000) further.

This study focused on the effects that different drawing materials and prompts can have on the anxiety levels of my students. This aspect of the study relates to Dunn-Snow and D'Amelio's (2000) theory that art teachers can enhance the therapeutic aspect of their curricula by understanding how different materials and prompts may affect students. The study explored which art materials were the most effective in reducing anxiety, as well as which styles of drawing were the most effective. Students explored both structured, and unstructured drawing prompts, as well as fluid and resistive materials when completing their drawing warm-ups.

## Gaps

Many of the sources I found focus on anxiety, adolescent development, the effects anxiety can have on people, and the effectiveness of art-making on anxiety symptoms. A few sources have been found that touch on the effects of anxiety on high school students. Sources that focus on the effectiveness of art-making on the anxiety of high school students have not been found. Most of the literature I have read focuses on adults, and some focus on children. This case study addressed this gap by focusing on the implementation of anxiety-reducing drawing warm-ups in high school level art classes. The study related my findings to the findings of those included in my literature review.

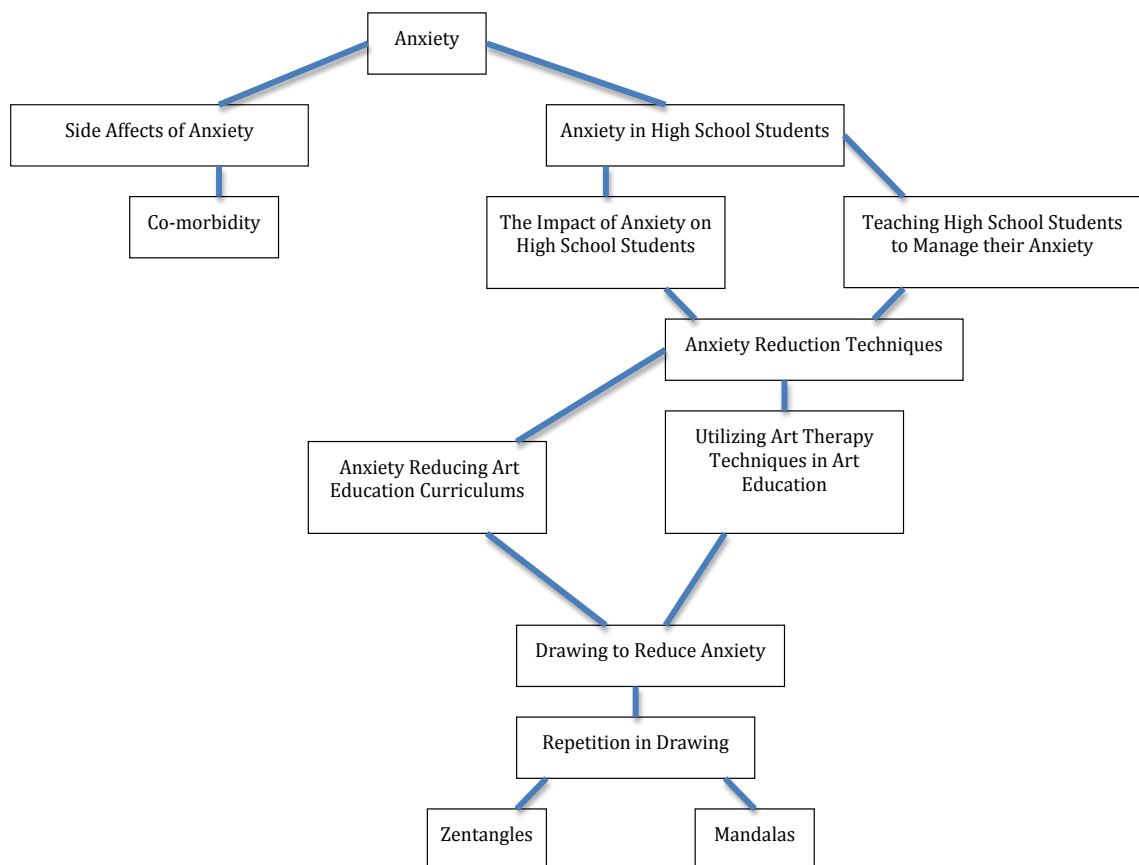


Figure 1. Concept Map of Key Terms.

## Summary

The above literature focuses on how anxiety can affect high school students, how art-making can reduce their stress, and what aspects of art therapy art educators can implement into their curricula to create a stress-free environment. Csikszentmihalyi (1984), Campbell and Headly (2011), and Costello, Erkanli, Mustillo, Keeler, and Angold (2003) theorized that anxiety is a growing problem within the United States, and that a lack of attention to anxiety problems in adolescents can lead to the development of other psychiatric problems in adulthood. Kaimal, Muniz, and Ray (2016), Bell & Robbins (2007), Curl (2008), Burns (2009), Chambala, (2008), and Curry and Kasser (2005), each conducted studies that show evidence that the majority of people can experience a reduction in anxiety or stress symptoms as the result of making art. Art therapists such as Kramer (1980) and Dunn-Snow and D'Amelio (2000) have suggested that art educators can highlight the therapeutic aspect of their curricula to promote art-making as a stress-management tool. This study was influenced by each of the aforementioned authors and aimed to develop drawing activities that art educators can easily implement into their curricula. The results of the study showed that the developed activities could increase students' confidence in their art-making abilities, which encouraged participants to draw more frequently outside of the classroom.

### **Chapter III: Methodology**

#### **Design of the Study**

**Setting.** The research was conducted at NFCS, a Title I public charter school for grades kindergarten through twelve, located in Northeast Philadelphia, Pennsylvania. When the school opened in 2000, it catered to students in grades kindergarten through eighth, and later added the high school in 2010. The primary and secondary schools are split into two buildings, the kindergarten through eighth-grade students in one, and the secondary school students being across the street in another building. Prospective students are accepted through a lottery system, although preference is given to siblings of current students.

This study took place in the art room of the high school building at NFCS. The high school building has three stories, and my classroom was located on the second floor. The art room had five large tables, each of which was accompanied by six stools for students. There were two sinks in the room that were surrounded by cabinets for art supplies, and a large closet that was used for still life objects and large drawing paper. Connected to the supply cabinets were open shelves for students to store their in-progress projects. There was also an additional table that was used as a materials table, which contained the materials students were actively using for their current projects. Students were given large bins to store their sketchbooks. There were two dry-erase boards in the classroom, one of which was used for the projector and demonstrations of techniques, and the other of which was used to describe daily objectives. Students who take art classes also had access to a variety of art supplies, such as acrylic paint, watercolors, drawing pencils, charcoal, oil pastels, and collage materials.

The art program at NFCS included two Introduction to Art courses, a 2D Art and Design course, and an Art 2 course. Art courses were offered as an elective class and primarily consisted of the tenth, eleventh, and twelfth-grade students. Introduction to Art was a prerequisite for Art 2, although students with advanced drawing skills were able to be admitted to take Art 2 without having first passed Introduction to Art by showing previously made artwork. Introduction to Art and 2D Art and Design typically had twenty-five to thirty students enrolled per class. The Art 2 course, in contrast, was typically a smaller class of ten to fifteen students, many of which had an interest in a career in the arts.

**Participants.** Participants of the study were students who were enrolled in an art elective course. Students did not need to have a diagnosed anxiety disorder to participate in the study and self-identified as a student who struggled with stress or anxiety. Twelve students participated in the study and ranged from ages sixteen to eighteen. The study took place within my art classes, which took place every day of the school week, for fifty-seven minutes. There was an existing rapport between the students and myself, due to art electives being full year courses, and students had already had me for approximately half of the school year. Students in my Art 2 course had me as their teacher for approximately a year and a half prior to the beginning of the study.

**Researcher Role.** As the art teacher at NFCS, my students viewed me as their authority figure, due to the structured nature of the school environment. However, I had previously built positive relationships and rapport with my students, which provided a possible supportive comfort. As their teacher, I facilitated stress-reducing drawing activities that were meant to facilitate an exploration of creative expression as well as

their sense of self. The lessons were implemented as ungraded warm-up activities, to reduce anxiety induced by graded assignments. I also facilitated journal prompts, pre and post-activity anxiety-rating-questionnaires, and interviews in order to record the effects of the drawing activities on the anxiety or stress levels of students.

**Research Procedure.** For the purpose of this study, I set aside time within the first ten to twenty minutes of each class period for specifically designed warm-up drawing activities. Students were given time before and after each activity to complete a short questionnaire self-assessing their anxiety levels, as well as time after the conclusion of the activity to reflect on their experiences with the materials and the prompt in their journals. Frequent student check-ins occurred during the warm-up periods, during which time I discussed their drawings, reactions to the warm-ups, and their feelings about different drawing materials.

**Ethical Considerations.** Students were provided with consent forms and a description of the study and provided informed consent to participate. Students who wished to partake in the study were then asked to acquire permission from one of their parents or guardians to be eligible to participate. Informed consent was also acquired from the principal of the school. The names of all participants in the study were changed to protect their privacy. Participants did not receive any form of payment for participating in the study. Students and parents were able to revoke their consent at any time, in which case all questionnaires and student information of the student participant would have been destroyed. All information was stored in a secure computer, and hard copies of information were locked away.

**Biases.** The existing rapport I had with my students could have impeded the study if I began to allow my understanding of my students to cause me to make assumptions about how they would react to the study. To prevent personal bias, I needed to approach the study from an objective standpoint by creating a separation between what I knew about my students, and what I measured through research. There was also the possibility of personal bias due to my connection to art-making reducing my anxiety symptoms. I separated my personal experiences with my subject and took into consideration that not every student would react the same way to anxiety-reducing art activities.

Many of my students have told me on a fairly regular basis that my class has been therapeutic for them. They felt that my class has been a break from the stress of their academic coursework and that it has allowed them to be creative and learn using an active and hands-on approach. The students who have expressed these feelings to me have inspired me to investigate what it is about drawing that can reduce stress in my students, and how I could implement drawing activities that further promote a stress-free art-making environment. In order to possibly help reduce stress and anxiety symptoms for my students, I developed a series of daily drawing activities that any art educator could implement into their art curricula. Drawing activities ranged from structured drawings that included repetition, such as mandalas and Zentangles®, to expressive and nonobjective drawings using loose and unpredictable materials. Many of the prompts also focused on identity, emotions, and sense of self. Students were encouraged to experiment with using different materials to complete prompts, on different days, and were given the opportunity to reflect on which material was most effective for each

prompt. Expressive drawing activities were based on different prompts that asked students to reflect on their experiences.

***Limitations.*** As a teacher-researcher, and an individual who has experienced the effectiveness of art-making on anxiety symptoms, I faced biases because I believe that drawing can benefit students with anxiety symptoms. These biases have been affirmed through the research findings included in the literature review, which showed positive results when using drawing to reduce anxiety symptoms. I therefore continually acknowledged this bias throughout the course of the study and approached the study from an objective stance in order to refrain from affecting the results of the study.

The study was limited to the structured nature of the school environment in which it took place. Many of the limitations included time constraints because the school hours were from 7:00 am to 1:50 pm and each class period lasted approximately fifty-seven minutes. The hours of the school day limited my ability to schedule interviews with students. I, therefore, limited interviews to three times throughout the study, and primarily scheduled them during the students' homeroom, to avoid scheduling conflicts. Participants' daily attendances to school also limited my ability to collect data on days in which students were absent. The school environment also required that I grade student assignments, and the activities of the study were ungraded. The drawing activities for the study were therefore limited to no more than twenty minutes and took place at the beginning of each art period. Student self-anxiety-rating-scales and journal reflections took place daily, and students were limited to approximately three minutes for each pre and post-drawing-activity rating-scale, and five minutes for post-drawing-activity journal



reflections. Observations and drawing activities for the study took place daily in each student participant's scheduled art class, over the course of eight weeks.

Participation was also limited, as I was limited to the students in my classroom. The study was limited to students whom both exhibited symptoms of anxiety or struggled with stress. There were also limitations to the demographics of the study because I was limited to the demographics of the students who were currently a part of my art classes. The majority of my students were in the eleventh and twelfth grade, although I did have a few students who were in the tenth grade. The demographics of the study were therefore limited to students between the ages of sixteen and eighteen. It is important to note that this study does not reflect all high school students in all settings.

**Research Methods.** For the purpose this case study, I utilized qualitative research methods by assessing the journals, questionnaires, and artwork produced by student participants to assess their changes in anxiety levels, as well as the effectiveness of the drawing prompts and materials on reducing their anxiety symptoms. The purpose of these activities was not to heal students' anxiety or stress, but rather to introduce them to accessible art-making techniques that could benefit their overall mental wellness. Students used anxiety-scale-based questionnaires to self-rate their stress or anxiety levels before and after art-making activities and were also given time to reflect on the effectiveness of materials and prompts through a series of journal prompts. Students were able to utilize writing or visual journal techniques, based on their personal preference. Artwork, journal responses, and questionnaires were used to investigate which art materials and prompts were the most and least effective in reducing anxiety symptoms among student participants. Students were also given the opportunity to

discuss their past and current experiences with anxiety or stress and art-making through the interview processes.

### **Data Collection**

**Context.** Multiple forms of qualitative data collection were used throughout the study, including observations, interviews, visual materials produced by the student participants, and written documents in the form of journal entries and self anxiety-rating-scales. Each of these qualitative data collection methods contributed to a holistic approach to data collection. Observations were informal and were conducted throughout the regular art class periods each day. They were based on student interaction with their peers, the art materials, and their engagement in the drawing activities. Observations included students' ability to work through the challenges presented in the drawing prompts as well.

Interviews were conducted at the beginning, middle, and end of the study. Students had the opportunity to share their experiences with anxiety and art-making during the interviews and were also able to express their feelings about the art materials and activities used in the study. The interviews gave further insight into the stress and anxiety experienced by student participants. The first and third interviews were set up individually with each student participant and were conducted during each participant's homeroom period in the morning. The second interview was a small group interview, and students were grouped based on the period during which they had art. Interviews were no longer than fifteen minutes and included audio documentation of participant responses. Students who struggled with verbal communication as a result of their anxiety

symptoms were given the option to provide written responses. One student provided written responses for her third interview due to scheduling conflicts. All other participants chose to provide verbal responses.

Throughout the course of the study, students produced visual artifacts in the form of drawings, which were the results of the drawing warm-up activities. Written documentation was combined with visual materials when assessing the effectiveness of drawing activities and different drawing materials in reducing anxiety and promoting improvement in confidence. Students were asked to reflect on their experiences in their journals and used self-anxiety-rating-scales to assess their anxiety or stress before and after each drawing activity. Students were able to refer to their anxiety scales when completing journal reflections, and often reflected on which materials and activities induced or reduced their anxiety the most.

Students began each class period by completing self-anxiety-rating-scales to assess their current anxiety symptoms. After completing the self-rating scales, students were introduced to their anxiety-reducing drawing activity. Students were given ten to twenty minutes to complete the drawing activity, after which they completed a post-activity self-anxiety-rating-scale. Students were then given an additional five minutes to respond to a short journal prompt, which asked them to reflect on their experience with the activity and the drawing material. Upon the completion of the warm-up, students resumed their graded art projects.

Each week of the study had a different theme, and different drawing prompts for each day of the week based on that theme. Students chose the drawing materials they wished to use for each prompt but were encouraged to experiment with using a variety of

drawing materials. They were given the option to continue working on a drawing from a previous day if they wished, instead of starting a new one, in the case that they were unable to finish a previous drawing. Students were given short demonstrations on structured drawing techniques, such as mandalas and Zentangles®. Expressive drawing activities were created through different drawing prompts that asked them to reflect on their sense of self and identity.

All of the students in my classes participated in the activities and had an opportunity to write journal reflections. Data was only collected from participating students. Participants may have felt less anxious about engaging in the activities because all of their peers were also working on the same activity. Students were given prompts that allowed for an element of choice, and personal creative expression and interpretation of the prompts was encouraged.

**Literature Sources.** Creswell (2007) explains that a qualitative case study involves the collection of data from multiple sources of information, such as observations, interviews, and audiovisual material (p. 129-130). Maxwell (2005) also suggests that data can include anything that is seen, heard, or communicated throughout a study (p. 93). This study included methods of data collection suggested by Creswell and Maxwell, including observations, pre and post-anxiety rating scales, journal responses, and photographs of student artwork.

**Methods of Data Collection.** Students participated in the activities every day for approximately twenty-five to thirty minutes of their daily art class, which ran five days per week, over the course of eight weeks. At the beginning of each period, students were given approximately three to five minutes to self-rate their anxiety or stress levels using

the self-anxiety-rating-scale provided for them. The drawing warm-up activity for the day was then introduced, and students were given the opportunity to choose their drawing material. Students then had ten to twenty minutes to draw, depending on the complexity of the prompt and were given a warning when there were five minutes left for the activity. Students were then given about five minutes to complete a post-drawing activity self-anxiety-rating-scale and a short journal reflection of their experience.

Informal observations took place throughout the drawing periods, as I walked around and observed students draw. Audio recordings were used to capture any interaction between the participants and myself, and I wrote reflections on my observations in a researcher's journal. I avoided taking notes during the drawing periods, as well as video recording, to prevent the induction of anxiety symptoms as a result of these data collection methods.

**Interviews.** The first and third interviews took place in my classroom during each of the participant's homerooms for approximately five to fifteen minutes, in a one-to-one ratio, between the participant and myself. The second interviews were conducted in a small group setting, based on the period of the day in which the students had art. Each interview followed a structured protocol, as described in Appendix B. The first interview primarily comprised of background questions relating to participants' experiences with anxiety symptoms, how their anxiety affects their social and academic life, their prior level of drawing experience, and how drawing made them feel. The middle and end interviews primarily focused on obtaining clarity about the participants' experiences with the study, including their feelings about the activities, materials, time constraints, journals, and changes in their anxiety or stress. Audio recordings were used to document

each interview, and students were given the option to have a guidance counselor present. All participants chose not to have a guidance counselor present during their interviews.

**Artifacts.** Artifacts of visual data included photographs of student artwork, lesson plans for each drawing activity, self-anxiety-rating-scales, and student journal responses. Artifacts of verbal data included audio recordings from interviews and interactions between students during the drawing activities. Photographs of student artwork were taken at the end of each art period and allowed me to assess which drawing activities and materials engaged student participants the most. Documentation of lesson plans was included in the study to provide examples of activities that art educators could implement into their curricula. Self-anxiety-rating-scales and journal responses were collected at the end of each week so that I could assess student responses, the data of which was used together to assess the effectiveness of the study. Audio recordings of interviews and peer interaction were acquired in the moment, which allowed me to assess later the feelings of each participant that had been verbally expressed, without inducing anxiety by assessing their words in front of them.

**Journals.** Students kept journals throughout the study so that they could reflect on their experiences with different drawing activities and materials. The journal entries were paired with the self-anxiety-rating-scales when assessing which materials or activities induced or reduced anxiety symptoms. Students were asked at the end of each art-making session to reflect on what they liked or disliked about each drawing material or activity, as well as on their feelings before and after each activity. The guidelines for journal prompts were loose so that students could include other information relevant to the activities. Journals were provided for students, and questions were created ahead of

time and included in their journals. Students wrote in their journals daily throughout the study. Journals were collected and logged using a journal matrix at the end of each week and organized based on induced or reduced anxiety symptoms. The effectiveness of each drawing material and activity was assessed based on the students' descriptions of the way they felt at the end of the art-making sessions.

### **Data Analysis**

**Organization of Data.** All data from the study was collected and organized by date and type of data, to show each student's progression throughout the study. Verbal data that was collected through interviews were transcribed, and coding was developed to make connections between similarly expressed concepts. Student data was organized by theme when comparing data from all students.

**Coding of Data.** Flick suggests using thematic coding to develop categories for data as data accumulates (p. 318, 2009). Once categories were developed, data was separated into manageable chunks based on date and theme. Data collected from journal entries and interviews were assessed alongside the self-anxiety-rating-scales completed after each activity. Themes included preferred drawing materials, preferred drawing prompts, and increased or decreased stress or frustration.

**Methods of Data Analysis.** Student artwork was assessed for frequent use of material, color, mark making, and theme, and was also compared to journal entries, self anxiety-rating-scales, and interviews. Data was assessed for the effectiveness of drawing materials or activities in reducing anxiety symptoms. Data was summarized using Flick's

suggested content analysis method, which categorizes and reduces materials for data analysis (p. 323, 2009).

### **Timeline for the Study**

Before the commencement of the case study, I presented my thesis proposal to the IRB review board on December 9th, 2017. The final proposal for the study was then submitted on December 14th, 2017. The site for this case study was then made aware of my desire to use my classroom for the study prior to the review of my proposal. After receiving official approval from the IRB review board, official approval from the principal of the site to conduct my case study was obtained. Materials for the case study were then developed and prepared, and I began seeking permissions from potential student participants.

Once I obtained permissions from student participants, I began sending home pre-study questionnaires to students and their families, to gather background information on students that related to my study. I then began my coursework to prepare me to enter the field and continued gathering materials to conduct the case study. Students each received a journal that contained a self-anxiety-rating-scale log and space for them to complete journal prompts. The first round of interviews were scheduled with student participants, and daily data collection began on January 29th, 2018. I finished conducting the first round of interviews in February. Journals were collected weekly for data collection and analysis. The second round of interviews were scheduled for March, and the third were scheduled for April through June. Daily drawing warm-ups were ongoing through March, and after the conclusion of in-class data collection, students were given a post-



study questionnaire to complete. The final participant interview took place on June 1, 2018, concluding the data collection process.

All participant journals and other visual data was collected for final analysis after the completion of the final questionnaire. Data was then coded and analyzed, and *Chapter 4: Overview of Data Collection Process* was completed by the beginning of May. *Chapter 5: Discussion and Implications for the Field* was completed by June.

Final touches were then put on the full thesis, which was presented on August 4th, 2018.

Month	Process	Steps Accomplished
December	Proposal Hearing	<ul style="list-style-type: none"> <li>○ Completed AEGR618 requirements and participate in proposal hearing on Dec 9, 2017</li> </ul>
	Gain IRB Approval	<ul style="list-style-type: none"> <li>○ Submitted full proposal, as requested, no later than Dec 14, 2017</li> </ul>
	Begin to seek site approvals	<ul style="list-style-type: none"> <li>○ After IRB was granted, contacted research site with initial letter- principal and CEO of NFCS</li> </ul>
	Ongoing literature review	<ul style="list-style-type: none"> <li>○ Continued to build and refine literature review</li> </ul>
	Prepare materials for research	<ul style="list-style-type: none"> <li>○ Developed and organized materials to implement stress-reducing drawing exercises</li> </ul>
	Seek participant permissions	<ul style="list-style-type: none"> <li>○ Distributed and collected IRB approved permissions to potential participants</li> </ul>
January	Prepare materials for research	<ul style="list-style-type: none"> <li>○ Continued to develop materials and lessons for data collection, and to collect IRB approved permissions from potential participants</li> </ul>
	Gather student information	<ul style="list-style-type: none"> <li>○ Sent home pre-study questionnaires to student participants to gather some background information</li> </ul>
	Prepare the launch field study	<ul style="list-style-type: none"> <li>○ Began coursework to ensure readiness to enter field</li> <li>○ Checked materials (prepared researcher journal, lesson prompts, student journals, self-anxiety-rating-scale logs, etc.)</li> <li>○ Tested audio recording and transcription process</li> </ul>
	Distribute Journals	<ul style="list-style-type: none"> <li>○ Distributed journals and self-anxiety-</li> </ul>

		rating-scale logs to participants
	First participant interviews	○ Scheduled interviews with student participants
	Data Collection Data Analysis	○ Began collecting data from daily warm-up sessions on January 29, 2018 ○ Daily and weekly data analysis pertaining to stress reduction and understanding of student reaction to materials and prompts
February	Data Collection Data Analysis	○ Daily warm-up sessions  ○ Daily and weekly data analysis pertaining to stress reduction and understanding of student reaction to materials and prompts ○ Collected and analyzed journals and self-anxiety-rating logs weekly.
	Finish Up First Interviews	○ Scheduled interviews with student participants
March	Data Collection Data Analysis	○ Daily warm-up sessions  ○ Daily and weekly data analysis pertaining to stress reduction and understanding of student reaction to materials and prompts ○ Collected and analyzed journals and anxiety rating logs weekly.
	Second Interviews	○ Scheduled second interviews
	Third Interviews	○ Started third interviews by the end of March.
April	Third Interviews. Final Questionnaires	○ Continued last round of interviews ○ Distributed post-study questionnaires to students
April - May	Third Interviews.	○ Continued last round of interviews.
April - May	Data Analysis	○ Collected journals, anxiety logs, and post-study questionnaires from participants ○ Analyzed and coded data ○ Worked on finishing up <i>Chapter IV: Results of the Study</i>
May - July	Finishing Up	○ Finished up last round of interviews on June 1, 2018, concluding the data collection process ○ Wrote <i>Chapter V: Conclusions and</i>

		<i>Implications for the Field</i> ○ Put finishing touches on full thesis
August 4, 2018	Thesis Presentations	○ Presented thesis
August 10, 2018	Thesis Exhibition	○ Thesis Exhibition

Figure 2. Timeline for the Study.

## Chapter IV: Overview of Data Collection Process

### Research Questions

- *Given that anxiety can be prevalent in high school students, and Chambala (2008) and Burns (2009) suggest that drawing can significantly reduce anxiety, how might art teachers best incorporate anxiety reducing drawing activities in their curriculum in a high school art classroom?*
- *Furthermore, how might the implementation of these activities promote art-making as a support strategy for high school students when addressing adolescent challenges such as anxiety?*

### Introduction to Data Collection Process

Data collection took place over the course of nineteen weeks from January 29, 2018 through June 1, 2018 at the high school campus of NFCS, a public charter school in Philadelphia. The final participant interview of the study took place on June 1, concluding the data collection process. Twelve students participated in the study during their regularly scheduled art classes, every day at the beginning of class. Each day the students were guided through their daily self-anxiety-rating-scales, pre-journal prompt, a ten to twenty-minute drawing warm-up, their post-drawing self-anxiety-rating-scales, and their post-drawing journal entries. Students also completed pre and post-study questionnaires and participated in three interviews. Every day throughout the study, data was collected in the form of observations, artwork analysis, and through recording pre and post-drawing self-anxiety-rating-scales and journal entries. Audio was recorded daily for quality assurance and was referred to as needed when making daily observation notes.

The daily drawing warm-ups were prepared prior to the commencement of the study. During the study the daily drawing prompts were projected at the front of the classroom for students at the beginning of each class, over the course of an eight-week period from January 29, 2018 to March 23, 2018. The projections included the date, theme of the week, a pre-drawing journal prompt, and the drawing prompt of the day. Unplanned absences from school resulted in changes to the order of some drawing prompts, as well as some prompts being omitted. Students were also given the option to continue a previous drawing, instead of starting a new drawing, and reminded at the beginning and end of each day that this was an option.

Throughout the study, data was collected from the perspective of a teacher researcher. Casual conversations took place between the participants and me as they worked on their warm-ups. These conversations included encouraging remarks about their work, as well as questions about the subject of their drawings. Students who struggled to come up with an idea for their drawing were asked further questions to spark possible ideas. Throughout each drawing period, students were given ten, five, and one minute warnings. After students were given time to reflect in their journals, they were given the opportunity to share their work with one another. As the teacher-researcher, I facilitated these conversations among students.

Data is presented based on the type of data collected, including my analysis of participant artwork, observations made in the field, and data produced by student participants. Art therapists such as Amanda Chambala (2008) and Girija Kaimal, Kendra Ray, and Juan Muniz (2016) have found through studies that a variety of types of art-making can decrease stress and anxiety levels. Throughout the study, participants were

given a wide range of types of drawing prompts. When analyzing data, I assessed which types of drawing prompts, as well as which types of materials were the most effective in helping to reduce student anxiety levels. While I collected data on the effectiveness of the drawing prompts and materials in reducing stress and anxiety levels, I only participated in the role of a teacher-researcher and not as a mental health expert or specialist. The method of data organization allowed me as a researcher to see commonalities or differences in the data collected from each participant.

**Classroom Setup.** Before the implementation of the drawing warm-ups within the participants' regularly scheduled classes, a materials table was set up and organized (*figure 3*), a materials poster was created and hung, and warm-up paper was cut and prepared for students. Paper was cut to approximately 6" x 9" for participants and placed on the materials table. Black tape was used to divide the materials table into sections, and a label was placed within each section with the name of a drawing material. Students were provided with pencils, charcoal pencils, white charcoal pencils, vine and compressed charcoal, white chalk, chalk pastels, oil pastels, colored pencils, and markers. Every material, as well as a pile of paper, was accessible to students at all times during the daily warm-up activities. This accessibility made it easy for students to change materials, or obtain a new piece of paper, as they felt was necessary.

A materials poster (*figure 4*) was placed on the wall behind the materials table. It provided a list of materials to choose from, examples of ways to apply the materials to paper, and examples of different types of mark making. Students were encouraged to experiment with all of the materials, as well as different types of mark making, at least once throughout the course of the study.



Figure 3. Materials Table.

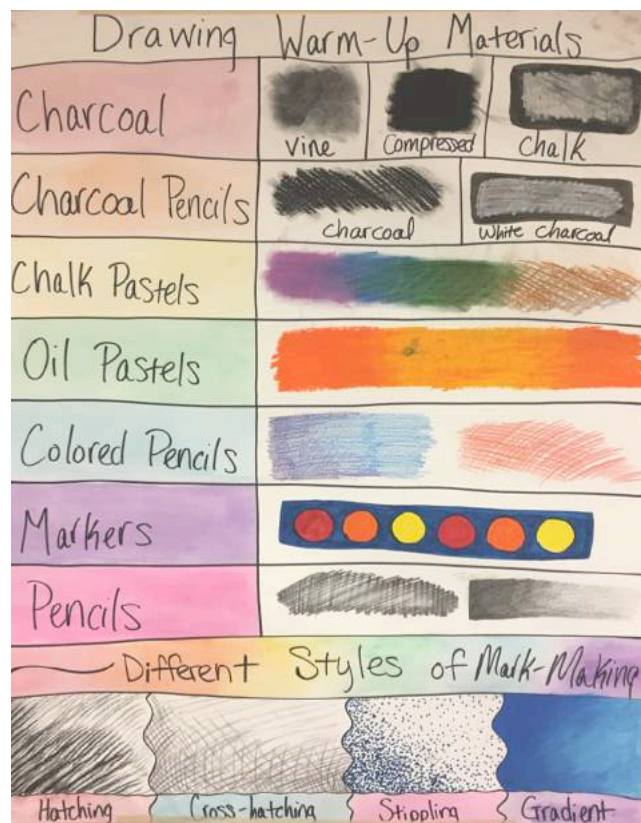


Figure 4. Materials Poster.

**Participants.** Twelve students participated in the study, ranging in age and grade level. Due to the limited racial variation of the school and the limited gender variation of my classes, the demographics of the study did not range widely. Students were given the option to opt out of sharing any demographic information. Of the twelve participants, two students were sixteen, three students were seventeen, and seven students were

eighteen. Two participants were identified as beginners regarding their level of artistic experience, four were identified as being moderately experienced in the arts, and six were identified as advanced. Six participants identified themselves as white, three identified themselves as Asian, two identified themselves as Hispanic, and one chose not to identify his race or ethnicity. Nine of the participants identified themselves as female, and three identified as male. A matrix of participant demographics can be seen in *figure 32*.

Participants chose their pseudonym for the study, and their pseudonyms were used for each data matrix and chart used throughout the study. Students were assigned color codes, which were also used for all data matrices later developed for the study. A list of participants' pseudonyms and color codes can be seen in *figure 5*.

Savanna	Helga	Sofia	Jenny
Angelica	Olga	Olive	Sophia
Amare	Emanon	Osewald	Daniel

*Figure 5.* Participants' Pseudonyms and Color Codes.

**Savannah.** Savannah was a sixteen-year-old Asian American student in the tenth grade who considered herself a beginner in the arts. During the study, she was taking my Introduction to Art course. This year was her first year taking art at NFCS High School. She had art class during the third period of the day, from 9:18 am to 10:15 am every day of the school week. Savannah sat next to Angelica during art class each day and often conversed with her while drawing throughout the class period. Although she considered herself a beginner, Savannah had previous experience with drawing in her free time. Her experience included drawing with her mother in her sketchbook or painting each week. She frequently drew with pencil and charcoal pencil in her sketchbook prior to the beginning of the study.



**Angelica.** Angelica was a sixteen-year-old Hispanic student in the tenth grade who considered herself to have advanced skills in the arts. Throughout the study, Angelica was taking my Introduction to Art class. Like Savannah, this year was her first year taking an art class at NFCS High School. Angelica took my class during the third class period of the day, which lasted from 9:18 am to 10:15 am each day of the school week. Angelica had considerable previous experience in the arts before the beginning of the study, including having taken weekend workshops and classes at local colleges. She frequently drew in her spare time, primarily with a pencil in her sketchbook.

**Helga.** Helga was an eighteen-year-old Albanian student in the twelfth grade who considered herself to be moderately experienced in the arts. This year was the first year I had the opportunity to teach Helga and was also her first year taking art at NFCS. Helga was taking Introduction to Art at NFCS High School throughout the study. She had art class during the fourth period each day, from 10:18 am to 11:15 am. She had little prior experience with drawing, apart from frequently drawing in her childhood. She also did not frequently draw in her free time before the study because she considered herself too busy.

**Olga.** Olga was an eighteen-year-old Caucasian student in the twelfth grade who considered herself to be moderately experienced in the arts. This year was the first year she took an art class at NFCS High School. She had art class with me during the fourth period of the day, which lasted from 10:18 am to 11:15 am daily. Olga had experience with making art and attending art camps as a child but stopped making art when she reached adolescence. She occasionally drew prior to the study. She noted that she

usually drew with a pencil in a sketchbook because it felt accessible and familiar to use. She most enjoyed drawing cartoons and on rare occasion used drawing as a way to relax.

***Amare.*** Amare was an eighteen-year-old Caucasian student in the twelfth grade who considered herself to be a beginner in the arts. This year was her first year taking an art class at NFCS High School. She had Introduction to Art during fourth period, from 10:18 am to 11:15 am every day of the school week. She had little prior experience with art, aside from the art class she took in middle school. She frequently doodled in her notebooks before the study and noted that she occasionally tried drawing human anatomy. Amare used whatever drawing materials or surfaces were readily available and easily accessible to her when doodling. She noted that prior to the study she frequently doodled in class, as well as at home. Amare shared a table in the art room with Helga, Olga, and three nonparticipants throughout the study. Amare, Helga, and Olga frequently spoke to one another while drawing throughout the study.

***Emanon.*** Emanon was an eighteen-year-old student in the twelfth grade who considered himself to have advanced skills in the arts. He chose not to identify his race or ethnicity for the study. This year was his second year taking an art class at NFCS High School and my second year having the opportunity to teach him. Last year he took Introduction to Art with me, and this year he was enrolled in 2D Art and Design. He had 2D Art and Design during the fifth period of the day. His period was unique because it was split into two halves. Emanon had art with me from 11:18 am - 11:45 am, lunch from 11:45 am - 12:15 pm, and art again from 12:18 pm – 12:45 pm, on a daily basis. He was the only student from his class period and subject that was participating in the study. Emanon described having had a few art classes at other schools before attending NFCS

High School and also had several family members who were artists. He frequently drew before the beginning of the study, most frequently with a pencil in his sketchbook. He described going on walks and drawing what he observed, usually architectural structures, and also kept journal entries in his sketchbooks about the subjects of his drawings. He frequently drew when he was having a bad day and often used drawing as a stress-management tool before engaging in the study.

***Daniel.*** Daniel was a seventeen-year-old Chinese and Cambodian student in the twelfth grade who considered himself to have advanced skill in the arts. This year was the second year that Daniel took art classes at NFCS High School, as well as my second year teaching him. Last year Daniel took Introduction to Art with me and was taking Art 2 this year while participating in the study. Daniel had Art 2 during the sixth, and final period of the day, from 12:48 pm – 1:50 pm daily. He described his family as having had an appreciation for the arts and took art classes in elementary school, before taking art classes at NFCS. He occasionally drew before the study and was primarily interested in drawing architecture and human anatomy. He primarily drew on scrap paper, with pencil, before the study. He also noted that when he was unhappy with a drawing, he frequently threw them out.

***Jenny.*** Jenny was an eighteen-year-old Caucasian student in the twelfth grade who considered herself to have advanced skills in the arts. This year was Jenny's second year taking an art class at NFCS High School and the second year that I had the opportunity to teach her. Last year Jenny had me for Introduction to Art, and this year Jenny was taking Art 2 throughout the study. Jenny had Art 2 during the sixth period of the day, from 12:48 pm – 1:50 pm every day of the study. She had considerable prior experience with

art-making before the study. Her experiences included taking classes outside of school at local art colleges, as well as an art internship at one of her summer camps. She frequently drew before the study and primarily focused on drawing mandalas because she felt they were relaxing. She also noted that she enjoyed materials that blend and finds blending the materials to be relaxing. She drew on pieces of paper, outside of a sketchbook, because she found the surface to be more accessible and easier to control. She also drew most frequently with pencil and chalk pastels and noted that she drew at least once per week before the study.

***Sophia.*** Sophia was an eighteen-year-old Caucasian student in the twelfth grade who considered herself to be moderately experienced in the arts. This year was Sophia's first year taking an art class at NFCS High School, as well as the first year that I had her as a student. She was enrolled in Art 2 throughout the study, which took place during sixth period from 12:48 pm – 1:50 pm daily. Sophia had prior experience with art, which allowed her to skip Introduction to Art and enroll in Art 2. She described having had started drawing in a sketchbook in elementary school, and drew almost daily prior to the study. She enjoyed drawing and designing her characters in her sketchbooks and also enjoyed using materials that were bright in color. She most frequently drew with pencil and pen in her sketchbooks before the study because it was the most accessible material to her.

***Osewald.*** Osewald was an eighteen-year-old Hispanic student in the twelfth grade who considered himself to be moderately experienced in the arts. This year was Osewald's first year taking an art class at NFCS High School. Like Sophia, Osewald had prior experience in the arts that allowed him to skip Introduction to Art and enroll in Art

2. He took Art 2 from 12:48 pm – 1:50 pm daily throughout the study. He considered himself to be a self-taught artist primarily and sometimes drew in his spare time before the study. He most enjoyed drawing animals and human anatomy. He primarily drew with pencil, sometimes in a sketchbook, but usually on whatever paper surface was most accessible to him when he decided to draw.

**Sofia.** Sofia was a seventeen-year-old Albanian student in the twelfth grade who considered herself to be moderately experienced in the arts. This year was Sofia's second year taking an art course at NFCS High School, as well as the second year she had me as her art teacher. Sofia was enrolled in Introduction to art last year, and she was enrolled in Art 2 throughout the study this year. She had Art 2 during sixth period, from 12:48 pm – 1:50 pm daily. Her prior experiences with art-making included having taken art classes in middle school and frequently painting in her spare time. She both painted and frequently drew before the study. The subjects of her paintings and drawings were usually focused on nature. She rarely drew in a sketchbook before the study and noted that she primarily uses drawing to sketch out her paintings. She did, however, frequently doodle in her notebooks and on scrap paper before the study.

**Olive.** Olive was a seventeen-year-old Asian student in the twelfth grade who considered herself to have advanced skills in the arts. This year was Olive's second year taking an art class at NFCS High School and the second year I had the opportunity to teach her. Last year she took Introduction to Art with me, and this year was enrolled in Art 2 while participating in the study. Her Art 2 course was scheduled during the sixth period of the day, from 12:48 pm – 1:50 pm each day of the study. Olive had a great deal of experience with drawing before the study. She became interested in the arts very early

in her life and frequently drew in her childhood. She drew in her free time when she was feeling bored, and her drawings primarily focused on buildings and people. She frequently drew with pencil, in a sketchbook or on whatever paper was most readily available to her, before the study. She noted that she specifically set aside time to draw once or twice per week at minimum, before engaging in the study.

**Summary of Daily Drawing Warm-up Prompts.** At the beginning of the study, students were provided with permission slips and a thorough explanation of the purpose of the study. Students were then given one week to return signed permissions. During this first-week students were introduced to the drawing materials that would be available to them throughout the study. Each day throughout the week students were asked to try a different drawing material, a different type of mark making, or combining different drawing materials. Students were able to experiment and become acclimated with materials that they had not used before, as well as discover preferences for materials. During this first week, many of the participants expressed their discovery of material preference and engaged in conversation with their peers about the materials.

Following the experimentation week, drawing warm-ups were organized by a weekly theme (*figure 6*). Students were given a different drawing prompt each day based on the theme of the week. Themes included line and shape, mandalas and zentangles®, drawing to music and sound, emotions, associations, self-reflection, strengths and skills, aspirations and desires, and self-portraits. The themes and prompts from each week of the study were prepared prior to the commencement of the study.

Week	Theme
1	Line and Shape
2	Mandalas and Zentangles®
3	Drawing Sound
4	Emotions
5	Associations
6	Self-Reflection
7	Aspirations and Desires
8	Self-Portraits

Figure 6. Weekly Theme Chart.

**Week 1: Line and Shape.** The prompts from the first week of the study were inspired by Curry and Kasser's (2005) study, which found that repetition in drawing can significantly reduce anxiety and stress in people. The prompts contained an element of choice while challenging students to create drawings that experiment with their use of some of the simplest elements of an artwork, line and shape. The prompts were open to interpretation, which resulted in a wide variety of approaches to each of the prompts. Before starting the drawings each day, students discussed how they could approach the prompt from both representational and abstract vantage points.

<b>Week 1: Line and Shape</b>		
<b>Discussion Topic:</b> How can we approach a drawing from both representation and abstract vantage points? How can there be various possible approaches to a drawing?		
<b>Why:</b> Students are provided with an opportunity to explore multiple approaches to a drawing.		
Day	Activity	Date Implemented
Day 1	Create a drawing using repeating geometric shapes.	1/29/2018
Day 2	Create a drawing using repeating organic shapes.	1/30/2018
Day 3	Create a drawing using five different types of line.	1/31/2018
Day 4	Create a drawing using only straight lines.	2/1/2018
Day 5	Create a pattern using repeating shapes or lines.	2/2/2018

Figure 7. Week 1 Drawing Activities.

**Week 2: Mandalas and Zentangles®.** Curry and Kasser's (2005) study theorized that the repetitive and meditative nature of coloring mandalas could reduce stress and anxiety symptoms. This theory, as well as their findings regarding the connection between repetition in drawing and reduction in stress levels, inspired the prompts developed for the second week of the study. The prompts of the second week expand on the idea of repeating the simple elements of line and shape in a drawing and challenged the students to use these elements more complexly through the creation of mandala and zentangle® drawings.

On the first day of the second week of the study, students were introduced to mandalas. Students were shown images of mandalas before starting their drawings. On the second day of the week, students were shown images of zentangles® and introduced to the concept of drawing intuitively. Students created a series of both mandala and zentangle® drawings throughout the week after being introduced to these styles of drawing. Due to an unanticipated day off from school, students completed four drawings during the second week instead of five.

<b>Week 2: Mandalas and Zentangles®</b>		
<b>Discussion Topic:</b> How can we draw intuitively using repetition of lines and shapes? <b>Why:</b> Students will explore drawing without having a preconceived idea.		
<b>Day</b>	<b>Activity</b>	<b>Date Implemented</b>
Day 1	Create a mandala using the drawing material of your choice. Focus on your use of line and shape.	2/5/2018
Day 2	Create a zentangle® using the drawing material of your choice.	2/6/2018
Day 3	Create a zentangle® using the drawing material of your choice, using one continuous line.	2/7/2018
Day 4	Create a mandala that incorporates elements of nature (ie: leaves, flowers, drops of water, animal patterns, parts of animals, etc.).	N/A
Day 5	Create a mandala inspired by contrasting emotions by dividing the circle of your mandala in half. Consider the shapes and colors that could be associated with the emotions you have chosen.	2/9/2018

Figure 8. Week 2 Drawing Activities.



**Week 3: Drawing Sound.** Burns (2009) suggests that fluid materials can be more expressive and kinesthetically engaging, and therefore more likely to reduce stress or anxiety levels (26). The *Drawing to Sound* prompts were inspired by Burns' (2009) idea that kinesthetically engaging prompts can reduce stress. Each prompt was meant to keep students kinesthetically engaged while allowing them to be expressive and visually interpret the theme as they saw fit. The drawings from this week were the most expressive of the study, and also showed some of the most experimentation with materials and mark making.

On the third week of the study, students were challenged to interpret sound on paper visually. Participants were shown images of artists who have drawn sound, or whose work has been inspired by music, before each warm-up during this week. Each of the warm-ups lasted ten minutes, and students were told that they could focus on drawing how the music made them feel, or that they could draw the sounds they were hearing.

<b>Week 3: Drawing Sound</b>		
<b>Discussion Topic:</b> How can you visually interpret sound through drawing?		
<b>Why:</b> Students were told they could focus on drawing how the music made them feel, or that they could draw the sounds they were hearing. Students drew for approximately ten minutes each day.		
<b>Day</b>	<b>Activity</b>	<b>Date Implemented</b>
Day 1	Approximately thirty seconds of a variety of popular culture songs were played while students drew.	2/12/2018
Day 2	Students drew to a pre-made playlist of meditative music, and listened to the entirety of each song on the playlist.	2/13/2018
Day 3	Students visually interpreted classical music, listening to the entirety of each song on the pre-made playlist.	2/14/2018
Day 4	Students listened to a pre-made playlist of various nature sounds, each of which varied in length.	2/15/2018
Day 5	Participants created drawings while listening to a pre-made playlist of sound effects. Students drew blindfolded. *Students who were uncomfortable with wearing a blindfold were given the option to draw with their eyes closed.	2/16/2018

Figure 9. Week 3 Drawing Activities.

**Week 4: Emotions.** The emotion-themed week of the study was inspired by Chambala's (2008) study in which she asked participants to draw or paint their anxiety. Rather than have students focus on one negative emotion for each of the drawing warm-ups, like in Chambala's (2008) study, each warm-up from the study asked to portray a variety of emotions of their choosing. Students were given the option to avoid drawing their anxiety or stress for the final drawing of the week and could choose to focus on something more positive instead. At the beginning of the week, students were asked to create lists of emotions in their journals, along with a list of the colors they associate with those emotions. Students completed four drawings during the second week instead of five, due to a day off from school at the beginning of the week.

**Week 4: Emotions**

**Discussion Topic:** How can you portray emotions through drawing?

**Why:** Students explore emotions, and ways to visually interpret them through an exploration of color, shape, and form.

Day	Activity	Date Implemented
Day 1	Make a list of five emotions. Think about the color and shaper associations of each of those emotions. Create a drawing using those colors or shapes with those emotions in mind.	2/20/2018
Day 2	Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.	2/21/2018
Day 3	What makes you happy/content? Think about at what point in your day you feel most happy/content. Where are you at that moment? What are you doing at that moment? Who are you with, if anyone? Illustrate that place that comes to mind.	2/22/2018
Day 4	Students could choose between one of the following prompts. Create a drawing that illustrates how you feel right now. Consider how you feel when you are stressed or anxious. Illustrate that feeling.	2/23/2018

Figure 10. Week 4 Drawing Activities.

**Week 5: Associations.** The prompts from the *Associations*, *Self-Reflection*, *Aspirations and Desires*, and *Self-Portrait* weeks were all inspired by Chambala's (2008) idea that self-reflection can reduce anxiety, as well as Curl's (2008) idea that reflection on prior experiences can reduce stress. Rather than focus on a negative emotion, as participants did in Chambala (2008) and Curl's (2008) studies, the students created drawings inspired by positive self-reflection.

During the fifth week of the study, students focused on their associations with different words, objects, and people important to them. Due to unforeseen circumstances, the researcher was absent from the research site for the majority of this week, and data was only able to be collected from one day of this week. On the day that data was collected, students were asked to reflect on their definition of the word strength in their journals. Students then created a drawing inspired by their journal entry. Students chose to create drawings inspired by both physical and emotional strength.

<b>Week 5: Associations</b>		
<b>Discussion Topic:</b> How can you illustrate your associations with different words, objects, or people of importance to you?		
<b>Why:</b> Students explore their associations with different words, objects, and people of importance to them.		
<b>Day</b>	<b>Activity</b>	<b>Date Implemented</b>
Day 1	What does the word "strength" mean to you? Illustrate your definition.	2/26/2018
Day 2	Imagine you have a key, and think about what that key would open. Illustrate your key and what it opens.	RESEARCHER ABSENT
Day 3	Think about someone or something that you care deeply for. Create a drawing using symbols that you associate with that person or thing.	RESEARCHER ABSENT
Day 4	Think about your culture. What symbols or associations do you have with that culture? Create a drawing based on an element of your culture.	RESEARCHER ABSENT
Day 5	Make a list of five animals, and the word associations you have with those animals. What are those animals a symbol of? What animal do you feel most resembles your personality? Create a drawing of the animal that you feel most relates to your personality.	RESEARCHER ABSENT

Figure 11. Week 5 Drawing Activities.

**Week 6: Self-Reflection.** During the sixth week of the study, students engaged in self-reflection in their journals and created drawings inspired by these reflections. Due to unplanned days off from school, and an additional day of absence on the part of the researcher, data was only collected from two days of this week. On the first of the two days, students were asked to reflect on what motivates or inspires them in their journals. They were then asked to create a drawing inspired by their journal response. On the second day, students were asked to think about someone or something that is most important to them. Students reflected on the person or thing that was most important to them in their journals, and then created a drawing inspired by their responses.

<b>Week 6: Self-Reflection</b>		
<b>Discussion Topic:</b> What is important to you? How can we incorporate things that are important to you into a drawing?		
<b>Why:</b> Students will reflect on their personal lives and what is most important to them.		
<b>Day</b>	<b>Activity</b>	<b>Date Implemented</b>
Day 1	Create a drawing inspired by what motivates or inspires you.	3/5/2018
Day 2	Illustrate something that you own that is really important to you.	3/6/2018
Day 3	What do you do in your free time? Create a drawing inspired by that activity.	N/A
Day 4	Finish the phrase "I wish..." five different ways. Choose one of your statements to illustrate.	RESEARCHER ABSENT
Day 5	List your top three favorite memories. What about those moments is so memorable to you? How did you feel in those moments? Choose one of your memories and create a drawing inspired by that moment, or how you felt in that moment.	N/A

Figure 12. Week 6 Drawing Activities.

**Week 7: Aspirations and Desires.** During the seventh week of the study, students were asked to further reflect on themselves, specifically focusing on their hopes for their future. On the first day of the week, students were asked to reflect in their journals on where they see themselves in ten years. Students then created a drawing inspired by their

journal response. On the second day, students wrote in their journals about places they would like to go in the future and illustrated the place they want to go for their drawing warm-up. The third prompt of the week asked students to reflect on where they would like to live in the future, as well as how their home could look. After reflecting in their journals, students were asked to create a drawing of their future home. On the fourth day of the week, students were asked to make a list of three short-term or long-term future goals in their journals. They then chose one of these goals to inspire their warm-up drawing. On the final day of the week students reflected in their journals on three things, they wished people knew about them. Participants then chose one of the things they wrote about to inspire their drawing.

<b><i>Week 7: Aspirations and Desires</i></b>		
<b><i>Discussion Topic:</i></b> What are your desires for the future? What do you aspire to do, and where would you like to go?		
<b><i>Why:</i></b> Students reflect on their desires for the future.		
<b>Day</b>	<b>Activity</b>	<b>Date Implemented</b>
Day 1	Create a drawing inspired by where you see yourself in ten years.	3/12/2018
Day 2	Think about a place you have always wanted to go. Why do you want to go there? How might you get to that place? Create a drawing that illustrates a place or type of place that you would like to visit.	3/13/2018
Day 3	If you could live anywhere, where would you live? What would your home look like? Create a drawing designing your future home.	3/14/2018
Day 4	List three goals you have for your future. These goals can be short-term or long-term. Choose one goal to inspire your drawing. As you are drawing, consider how you might achieve this goal, how you feel about this goal, or how you feel about the future.	3/15/2018
Day 5	What are three things that you wish people knew about you? Create a drawing inspired by one of those things.	3/16/2018

Figure 13. Week 7 Drawing Activities.

**Week 8: Self-Portraits.** During the eighth and final week of the study, students were asked to further reflect on themselves by creating a series of self-portraits. Due to unforeseen days off from school students only created three drawings during the final week. On the first day, students were asked to create a drawing inspired by their alter ego. They were shown images of alter egos and discussed the definition of the term alter ego, before drawing. On the second day of the week, students were asked to create a drawing of their future self. They were told that their interpretation of the word future for this prompt was open to interpretation, and could include the very near or very distant future. On the final day of the study, students were asked to reflect in their journals on their favorite things about themselves. Students then created a drawing inspired by one of their favorite things about themselves.

<b>Week 8: Self-Portraits</b>		
<b>Discussion Topic:</b> How can you best represent yourself in a drawing, without observing yourself in a mirror? What are some alternative ways to draw a self-portrait?		
<b>Why:</b> Students reflect on themselves and how they can represent themselves.		
<b>Day</b>	<b>Activity</b>	<b>Date Implemented</b>
Day 1	Create a drawing of your alter ego.	3/19/2018
Day 2	Create a drawing of your future self.	3/20/2018
Day 3	Create a self-portrait without drawing an image of yourself. Consider your likes and dislikes, things you like to do, and what is important to you as you draw.	N/A
Day 4	Finish the phrase "I am..." five different ways. Choose one of your statements to illustrate.	N/A
Day 5	What are your favorite things about yourself? Create a drawing inspired by one of your favorite things about yourself.	3/23/2018

Figure 14. Week 8 Drawing Activities.

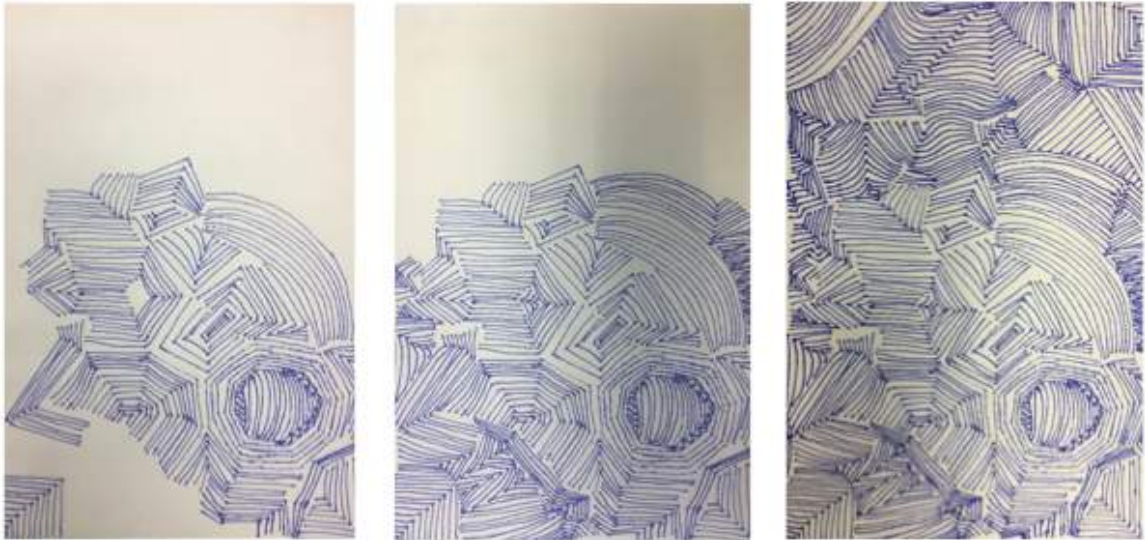
## **Presentation of Data**

**Data Collected from Daily Drawing Warm-ups.** The majority of the data collected for the study was obtained through field observation, and the work produced by students during their journaling and drawing warm-up time at the beginning of each class period. As the researcher, I filled out artwork observation charts and journal matrices at the end of each day. Pre and post drawing self-anxiety-rating-scale responses were also entered into a matrix, in order to compare the changes in stress or anxiety levels among different participants. Student pre and post-study questionnaires were collected at the beginning and end of the study, and data was then entered into the developed data matrices. The data from each of the matrices was viewed together to assess correlations between data types.

**Artwork and Observations.** When collecting data from the daily warm-up sessions, I focused on several key themes. These included the elements within each student's drawing, their overall level of engagement during the warm-up, and the level of completion of each drawing. A chart was filled in at the end of each day for each participant and was used to make observations about each of these key themes. At the end of the study, these artwork and observation charts were then used to develop further themes for the data matrices used during the data analysis process.

The artwork was documented at the end of each school day. Many students chose to work on some of their drawings for more than one warm-up period. Their drawings were marked as incomplete at the end of the period when it was not complete. The drawing was then marked as complete at the end of the warm-up period in which the student completed the drawing. The progress of the drawing was documented as the

student worked towards its completion. *Figure 15* shows the progression of Osewald's drawing over a period of three warm-up sessions.



*Figure 15.* Progression of Osewald's straight-line zentangle®.

***Pre and Post-Self-Anxiety-Rating-Scales.*** Before and after each drawing warm-up, students were given time to reflect on their emotional state. Students were given five minutes to self-assess their anxiety or stress levels using the pre-drawing chart in *figure 16*, and to write a reflection in their journals. Students then completed the post-drawing self-anxiety-rating-scale, also shown in *figure 16*, after they completed their drawing. Participants rated changes in their stress or anxiety levels caused by the drawing warm-up activity and were given journal space to reflect on any changes in their stress or anxiety levels. The data from their self-anxiety-rating-scales was regularly logged, along with their journals entries. It was later entered into a data matrix that compared each participant's changes in mood throughout the study, as well as their changes in mood to other participants.



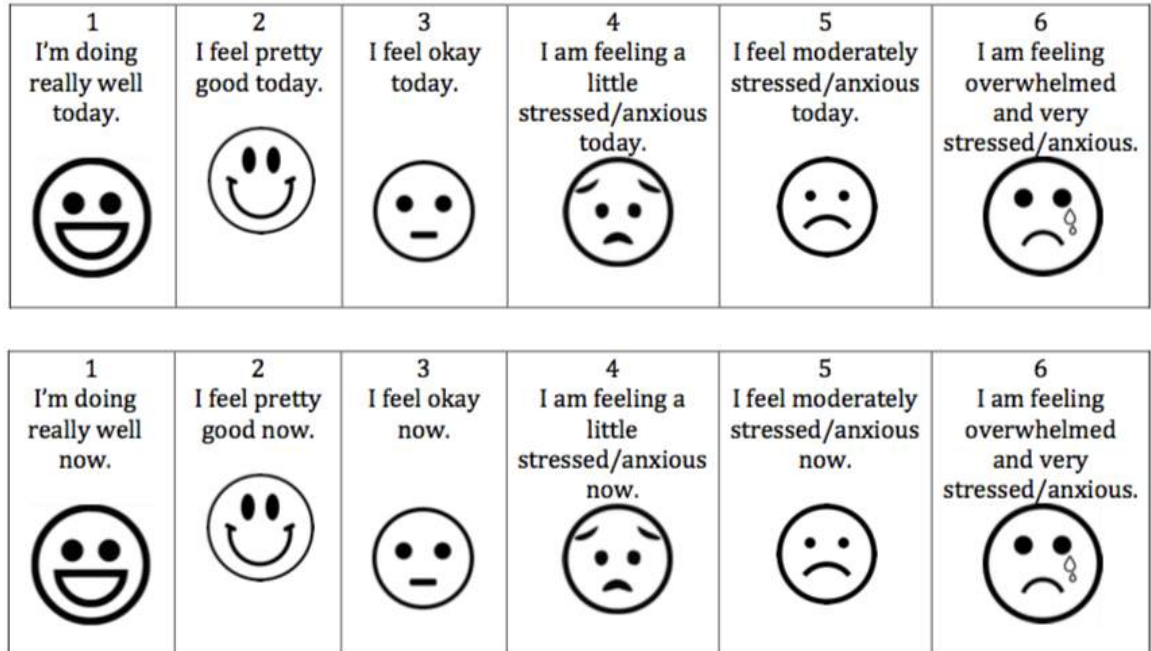


Figure 16. Student pre (top) and post-drawing (bottom) self-anxiety-rating-scales.

**Journals.** Student participants were given time at before and after their drawing warm-up to reflect in their journals. The journals were presented as a safe space for participants to express themselves. They were not required to explain their assessment of their anxiety or stress under their self-anxiety-rating-scale but were encouraged to use the space to do so. Several of the participants expressed that they enjoyed having a journal to express themselves freely, and many of these participants used the space to vent about their personal lives. Participants also provided information about how they felt about the daily drawing prompts and how they felt about the drawing materials. The journals provided essential insights for the study, many of which correlated with the data collected from artworks, observations, and interviews.

**Interviews.** Interviews were conducted three times throughout the study at the beginning, middle, and end of the study. Participants were able to choose the date and time in which they wanted to come for their interviews. Students typically chose to come at the beginning of the day, during their homeroom period. Interviews lasted between

seven to twenty-five minutes, depending on how much the student wanted to share, and were used to gain a deeper understanding of the participants' experiences before, during, and after the study. All interviews were audio recorded and later turned into transcripts. The transcripts were then coded based on the similar use of language between participant interviews, as well as key or important words used to describe their experiences with anxiety and drawing.

The first interview of the study was used to gain some insight into the participants' prior experiences with stress or anxiety, as well as their experiences with art before having my class. This interview was conducted in a one-on-one setting within my classroom. During the first interview, students were asked about how they felt about their overall performance in school, what was their favorite subject, and what was their least favorite in school. The questions gave me the opportunity to learn about some student interests, as well as to learn about their confidence in their ability to perform in school. Additional questions were asked to prompt students as needed. Questions from the first interview can be seen in *figure 17*.

**Interview 1 Questions**

1. How do you feel about your overall performance in school? Why do you feel that way?
2. What is your favorite subject in school? Why?
3. What is your least favorite subject in school? Why?
4. Do you often feel stressed or anxious at school? How do these feelings affect your performance in school?
5. What do you do when you feel stressed or anxious at school?
6. What prior experiences do you have with drawing?
7. Do you draw in your free time?
  - a. If yes:
    - i. What do you like to draw?
    - ii. Do you draw in a sketchbook? If not, where do you draw?
    - iii. What do you usually draw with?
    - iv. How often do you draw?
  - b. If no:
    - i. Why don't you draw in your free time? What don't you like about drawing?
8. How do you feel when you draw?
9. Have you ever used drawing to relax? Why or why not?
10. Are there any drawing materials that frustrate you? If so, which materials frustrate you? What about them frustrates you?

*Figure 17.* Questions from interview one.

The second interview of the study was conducted after a few weeks of implementing the drawing warm-up routine. These interviews were conducted as group interviews. Students were asked to come in small groups and were grouped by the period in which they have art together. This grouping was to ensure that the participants interviewed with other students that they knew and were comfortable. Students were also given the option to individually interview if they were more comfortable in a one-on-one setting, if they were absent the day of the group interview, or if their schedule did not align with the rest of the group. The purpose of the second interview was to speak with the participants about their experiences about halfway through the study. During the second interview, participants were asked questions in a series as shown in *figure 18*.

**Interview 2 Questions**

1. Which of the drawing prompts that we have done so far did you most enjoy?
  - a. What did you enjoy about it?
  - b. How did you feel when completing that drawing prompt?
2. Which of the drawing materials that you have experimented with so far did you enjoy working with the most?
  - a. What did you enjoy about working with that material?
3. Which of the drawing prompts that we have done so did you like the least?
  - a. What did you not like about that prompt?
  - b. How did you feel when completing that prompt?
4. Which of the drawing materials that you have experimented with so did you like the least?
  - a. What did you not like about the material?
  - b. How did you feel when using that material?
5. Are there any drawing materials that you wish you had access to for our drawing activities?
6. Have you started drawing more frequently in your free time?
  - a. If yes:
    - i. What types of things have you been drawing in your free time?
    - ii. Have you been drawing in a sketchbook? If not, where have you been drawing?
    - iii. What drawing materials have you been using?
  - b. If no:
    - i. What is keeping you from drawing in your free time?

Figure 18. Questions from interview two.

The third interview was again conducted in a one-on-one setting within my classroom. Students chose the day and time of their interviews. The third interview focused on the students' overall experience with the study. Questions focused on the effects of drawing on the participants' anxiety or stress levels, the effects of the prompts and materials on their stress or anxiety levels, and the effects of the student on their confidence levels and motivation to draw. This interview was used to gain further information about student responses to the post-study questionnaire, as well as to assess any changes in how the students were feeling about the study. Questions from the third interview can be seen in *figure 19*.

**Interview 3 Questions**

1. How does drawing make you feel?
  - a. Does drawing reduce your stress or anxiety?
  - b. Does drawing increase your anxiety at all?
2. Do you feel that the drawing activities we did in class reduced your stress?
  - a. Which drawing materials were your favorite to work with? Why were they your favorite?
  - b. Which of the drawing prompts was your favorite?
  - c. Why was it your favorite?
  - d. Were there any drawing activities that increased your stress levels? What about the prompt(s) was/were stressful for you?
  - e. Were there any drawing materials that you feel increased your stress levels?
    - i. What about the material was stressful for you?
3. Do you feel this study has increased your confidence in your drawing abilities?
  - a. What about the study has made you feel more confident in your artistic skill?
4. Will you continue to draw, in your free time, as a result of this study?
  - a. Do you feel this study has given you tools to help you manage your anxiety?
  - b. Do you feel more motivated to draw, as a result of this study?
  - c. Will you continue to use any of these drawing activities or materials outside of the study?
    - i. Which materials do you think you are most likely to continue to use?
    - ii. Which drawing prompts do you think you are most likely to continue to use?

*Figure 19.* Questions from interview three.

**Pre and Post-Study Questionnaires.** Student participants were provided with two questionnaires, one of which was given to them at the beginning of the study and the other was given to them upon the conclusion of the study. The pre-study questionnaire (figure 20) focused on the students' prior experiences with stress and anxiety, and how it affects their performance in school. The questions in the questionnaire were prepared prior to the beginning of the study and were based on common symptoms of anxiety or stress. The questionnaire responses correlated with the first interview and participant responses during the first interview of the study.

Two questionnaires (figure 21) were given to student participants upon the completion of the study, a demographic questionnaire and a post-study questionnaire. Students were able to opt out of answering questions on the demographic questionnaire if



they did not wish to share certain information with me. All participants answered the full demographic questionnaire. The post-study questionnaire questions, as well as student responses, correlated with the final interview of the study. This questionnaire, along with the final interview and student journal responses, was used to assess the overall effectiveness of the study.

Date: <i>January 29, 2018</i>			
Directions: Below are a series of statements that describe the way a person may feel. Read each statement and decide if it is "Not True or Hardly Ever True", "Somewhat True or Sometimes True", or "Very True or Often True". Check the box that corresponds with the response you feel describes you <i>for the last three months</i> .			
	0 Not True or Hardly Ever True	1 Somewhat True or Sometimes True	2 Very True of Often True
I worry a lot.			<input checked="" type="checkbox"/>
I get stomachaches when I am at school.		<input checked="" type="checkbox"/>	
I feel sick when I take tests.		<input checked="" type="checkbox"/>	
I get nervous around strangers.		<input checked="" type="checkbox"/>	
I don't like being around people I don't know.		<input checked="" type="checkbox"/>	
I get shaky when I am nervous.		<input checked="" type="checkbox"/>	
I get headaches at school.		<input checked="" type="checkbox"/>	
It is hard for me to talk to people I don't know.		<input checked="" type="checkbox"/>	
I get nauseous when I am nervous or frightened.			<input checked="" type="checkbox"/>
I am shy.	<input checked="" type="checkbox"/>		
I get nervous about going to school.	<input checked="" type="checkbox"/>		
I have difficulty concentrating in school because I feel nervous about something.		<input checked="" type="checkbox"/>	
I feel nervous completing work or when I have to do something in front of my teachers or other students (read aloud, present a project, play games, etc).		<input checked="" type="checkbox"/>	
I worry about what other people are thinking about me.			<input checked="" type="checkbox"/>
I get dizzy when I am nervous or stressed.		<input checked="" type="checkbox"/>	
It can be hard to breath when I feel anxious.		<input checked="" type="checkbox"/>	
I am confident in my artistic abilities.	<input checked="" type="checkbox"/>		
I like to try new things.		<input checked="" type="checkbox"/>	
I am willing to ask for help when I feel stuck.		<input checked="" type="checkbox"/>	

Figure 20. Amare's Pre-Study Questionnaire responses.

**Demographic Questionnaire**

The following questionnaire is meant to collect demographic information from participants.

**You may choose not to answer any of the questions below, if you prefer not to answer.**

Please write "N/A" next to any question that asks for information that you would prefer not to share.

<b>Name:</b>	[REDACTED]
<b>Questions:</b>	<b>Your Response:</b>
For the purpose of protecting your privacy, you will be given a fake name for the study. What would you like your fake name to be? (If you cannot think of one, one will be assigned to you.)	Amare or Erin
What is your current age?	18
What is your current grade level?	12
How do you racially or ethnically identify?	White
Do you have a preference of gender identity? If so, what is your preference?	female
Do you consider yourself to be a <i>beginner</i> , <i>moderately experienced</i> , or <i>very experienced</i> in the visual arts?	Beginner

	YES	NO	SOMETIMES
Do you consider yourself to be frequently anxious?			✓
Do you consider yourself to struggle with stress levels?			✓
If you do have anxiety or frequent stress, do you feel it negatively impacts your performance in school?			✓

Figure 21. Amare's Demographic Questionnaire.

Name: [REDACTED]	Date:		
Questions:	YES	SOMETIMES	NO
Do you feel that the drawing prompts in the study reduced your anxiety/stress levels?	✓	✓	
Do you feel that drawing increases your anxiety?			✓
Will you continue to draw in your free time using the drawing prompts we used throughout the study?	✓		
Do you feel more confident in your drawing skills as a result of the study?	✓		
Do you feel you will use drawing as a stress-management tool in the future?	✓		

Figure 22. Amare's Post-Study Questionnaire.

## Data Analysis





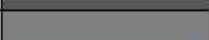


**Data Organization.** The data analysis process began with open coding, during which time I began to look for initial themes within data produced by participants, to develop the central themes of the data. Data themes from the journal responses included the level of enjoyment of each prompt, material choice, and changes in anxiety or stress as reported by the student. The central themes for the student artwork and observation charts were developed prior to the beginning of the study, and included the level of student engagement during the warm-up periods, level of completion of the drawings, use of line, shape, and color or value in student drawings, theme of the daily prompt, and use of recognizable imagery in student drawings. The self-anxiety-rating-scale matrix



themes were also pre-determined and were used to analyze changes in daily stress levels as reported by the student participants.

After the open coding process, and after the conclusion of the study, I began axial coding when creating the matrices for each type of data. This process involved analyzing the data produced by students for emerging themes. These themes emerged when comparing participants' data to one another, and resulted in the subthemes created for the artwork and observations, journal, and interview matrices. Data was then entered into the matrices, and participants' data were compared to that of other participants, as well as to other types of data produced by each participant.

The organization of data conclusively revealed commonalities and differences between participants, as well as variations in data produced by each of the participants, by comparing the data they produced on each day of the study. Each of the charts was color-coded by participant or by weekly theme. The same colors for each participant were used for all of the charts that contain all participants' data. Color-codes were also developed to indicate planned days off from school, researcher absences, student absences, snow-days, days in which the student chose not to complete a warm-up drawing, and planned days in which warm-up drawings were not completed. These color-codes were used for the artwork and observation data matrix, as well as the journal data matrix. A key for the aforementioned color-codes can be seen in *figure 23*.

<b>Planned Day Off From School</b>	
<b>Snow-Day</b>	
<b>Unplanned Day Off From School</b>	
<b>Researcher Absence</b>	
<b>Participant Absence</b>	
<b>Participant Skipped Warm-Up Drawing</b>	
<b>Researcher Planned Warm-Up Skip</b>	

*Figure 23.* Color-codes used for absences, days off, and skipped warm-ups.

**Artwork and Observations.** After completing the study, subthemes for the artwork and observation charts were developed and integrated into a matrix that was used for each participant. The matrix (*figure 24*) was organized by the theme of each week, as seen on the left portion of the matrix. Within each weekly theme, the matrix specifies each data of a warm-up activity. The matrix is also organized by both the overall themes used in the artwork and observation chart and the subthemes that were created during the axial coding process. Each participant's matrix included a space for the participant's pseudonym and level of artistic experience. The color codes seen in *figure 23* were used for the artwork and observation data matrices.

The sub-themes developed for the matrices were based on recurring themes observed in student participants' daily drawings and behaviors. Use of shape was broken down into participant use of geometric or organic shapes, and the variation in the size and overlapping of shapes within the drawing. Use of line was broken down into the participant's use of visible line, or outlines, the variation in the weight of the lines, and the use of hatching. Many participants used hatching as an element of texture in their artworks, while others used it to color in or add shading to their drawings.

The use of color was broken up into the types of colors used in the drawing. These sub-themes included the participant's use of cool, warm, neutral, or natural colors, as well as any variation in value or shading. This section of the matrix was left blank when participants chose to create a contour drawing using a colorless material, such as charcoal, pencil, or pen. The variation in value portion of the matrix was used when students used colored materials, as well as colorless materials in their drawings.

		PARTICIPANT: Emanon										LEVEL OF ARTISTIC EXPERIENCE: Advanced										
THEME OF THE WEEK	DATE																					
	GEOMETRIC																					
DRAWING TO MUSIC	1/29																					
	1/30	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	1/31																					
	2/1	x		x	x	x	x															
	2/2					x	x		x	x	x											
MANDALAS AND ZENTANGES	2/5					x	x		x	x	x											
	2/6	x	x	x	x	x	x	x														
	2/7																					
	2/8																					
EMOTIONS	2/9	x	x	x	x	x	x															
	2/12	x	x	x	x	x	x	x	x	x												
	2/13		x	x	x	x	x	x	x													
	2/14	x	x	x	x	x	x	x	x	x												
	2/15		x	x	x	x	x	x	x	x												
	2/16		x	x	x	x	x	x														
DRAWING TO MUSIC	2/19																					
	2/20		x	x	x	x	x	x	x													
	2/21	x	x	x	x	x	x															
	2/22																					
EMOTIONS	2/23		x	x	x	x	x															
	2/23		x	x	x	x	x															
THEME OF THE WEEK	DATE																					
	GEOMETRIC																					
THEME OF THE WEEK	DATE																					
	ORGANIC																					
THEME OF THE WEEK	DATE																					
	SIZE VARIES																					
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	OVERLAPPING																					
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	OUTLINES																					
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	WEIGHT VARIES																					
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	HATCHING																					
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	COOL																					
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	WARM																					
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	ABSTRACT																					
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	FOLLOWS THEME																					
THEME OF THE WEEK	DATE																					
	CONTINUING PREVIOUS DRAWING																					
THEME OF THE WEEK	DATE																					
	DEVELOPED OWN THEME																					
THEME OF THE WEEK	DATE																					
	SKIPPED WARM UP																					
THEME OF THE WEEK	DATE																					
	DRAWING FULL TIME																					
THEME OF THE WEEK	DATE																					
	DRAWING PART OF TIME																					
THEME OF THE WEEK	DATE																					
	DRAWING MINIMALLY																					
THEME OF THE WEEK	DATE																					
	TALKING																					
THEME OF THE WEEK	DATE																					
	WORKING QUIETLY																					
THEME OF THE WEEK	DATE																					
	INCOMPLETE																					
THEME OF THE WEEK	DATE																					
	COMPLETE																					

		SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION													
		PARTICIPANT: Emanon										LEVEL OF ARTISTIC EXPERIENCE: Advanced									
THEME OF THE WEEK	DATE																				
	GEOMETRIC																				
ASPIRATIONS AND DESIRES	2/26		x	x	x																
	2/27																				
	2/28																				
	3/1																				
	3/2																				
SELF-REFLECTION	3/5																				
	3/6		x																		
	3/7																				
	3/8																				
ASPIRATIONS AND DESIRES	3/9																				
	3/12	x																			
	3/13		x	x	x	x	x														
	3/14	x	x	x	x	x	x														
	3/15	x	x	x	x																
	3/16		x	x	x																
"SELF PORTRAITS"	3/19	x	x	x																	
	3/20																				
	3/21																				
	3/22																				
THEME OF THE WEEK	DATE																				
	GEOMETRIC																				
THEME OF THE WEEK	DATE																				
	ORGANIC																				
THEME OF THE WEEK	DATE																				
	SIZE VARIES																				
THEME OF THE WEEK	DATE																				
	OVERLAPPING																				
THEME OF THE WEEK	DATE																				
	OUTLINES																				
THEME OF THE WEEK	DATE																				
	WEIGHT VARIES																				
THEME OF THE WEEK	DATE																				
	HATCHING																				
THEME OF THE WEEK	DATE																				
	COOL																				
THEME OF THE WEEK	DATE																				
	WARM																				
THEME OF THE WEEK	DATE																				
	NEUTRAL																				
THEME OF THE WEEK	DATE																				
	NATURAL																				
THEME OF THE WEEK	DATE																				
	VALUE VARIES																				
THEME OF THE WEEK	DATE																				
	RECOGNIZABLE IMAGERY																				
THEME OF THE WEEK	DATE																				
	ABSTRACT																				
THEME OF THE WEEK	DATE																				
	ATTEMPT AT REALISM																				
THEME OF THE WEEK	DATE																				
	FOLLOWS THEME																				
THEME OF THE WEEK	DATE																				
	CONTINUING PREVIOUS DRAWING																				
THEME OF THE WEEK	DATE																				
	DEVELOPED OWN THEME																				
THEME OF THE WEEK	DATE																				
	SKIPPED WARM UP																				
THEME OF THE WEEK	DATE																				
	DRAWING FULL TIME																				
THEME OF THE WEEK	DATE																				
	DRAWING PART OF TIME																				
THEME OF THE WEEK	DATE																				
	DRAWING MINIMALLY																				
THEME OF THE WEEK	DATE																				
	TALKING																				
THEME OF THE WEEK	DATE																				
	WORKING QUIETLY																				
THEME OF THE WEEK	DATE																				
	INCOMPLETE																				
THEME OF THE WEEK	DATE																				
	COMPLETE																				

Figure 24. Emanon's Artwork and Observation Data Matrices.

The use of imagery theme was broken up into the sub-themes of recognizable imagery, abstract imagery, and attempt at realism. Student work was considered to contain abstract imagery when the artwork contained images that were not recognizable. Work that showed evidence of an attempt at realism contained imagery that did not contain symbolic shapes to represent an image. On some occasions, students combined all three of these types of imagery into their work. An example of this combination can be seen in the artwork in *figure 25*, in which Sofia created a drawing while listening to nature sounds during the *Drawing to Sound* week of the study. Her work shows evidence of an attempt at realism within the tree while using more symbolic, but recognizable, imagery throughout her composition. There is some abstract and unrecognizable imagery on the left side of the paper, which was a response to one of the sounds she heard while drawing.



*Figure 25.* Sofia's Drawing to Nature Sounds piece.

Throughout the study, students were given the opportunity to continue working on a drawing from a previous prompt or to develop their theme when a daily warm-up prompt did not interest them. Allowing students to work on a prompt for multiple days, rather than starting a new prompt each day, led to the development of the theme “use of prompt” within the artwork and observation data matrix. This theme was broken up into three additional themes, including whether or not they used the prompt, developed their theme, or continued a drawing from a previous day. Participants who considered themselves to have moderate to advanced artistic experience were more likely to spend two or more warm-up periods on a prompt throughout the study. They were also more likely to work on a prompt for multiple days when the prompts were based on the use of recognizable imagery. For example, Jenny, a student who considers herself to be advanced in the arts, spent a total of three warm-up periods on the drawing in *figure 26*.



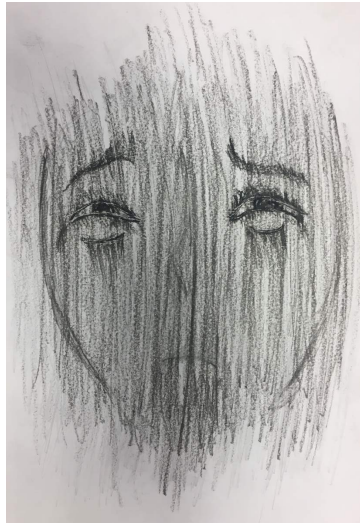
*Figure 26.* Jenny's Future Home drawing.



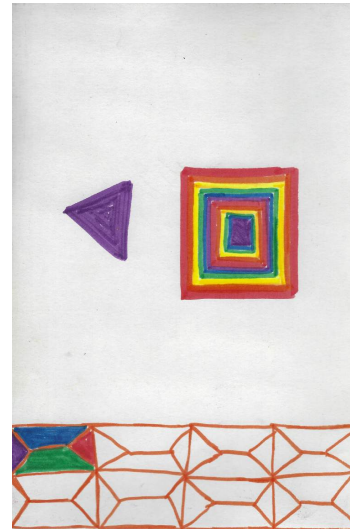
The level of participant-engagement portion of the artwork and observation data matrix was broken up into additional themes. These themes included how long the student spent on their drawing, either the full or part of the warm-up period, whether or not they were talking to their peers while working on their drawing, and whether or not they worked on a warm-up drawing during the warm-up period. Most participants engaged in some conversation while remaining engaged during the warm-up periods. Others worked quietly, focusing primarily on their drawing. The data collected from journals often correlated with the level of student engagement. A few of the students who chose to work quietly chose to do so because they were focused. Some students, however, expressed higher levels of stress or anxiety on days in which they worked quietly. These same students typically conversed with their peers on days in which their stress or anxiety levels were lower. Students who skipped a warm-up drawing expressed struggling with creating an idea, lack of interest in the prompt, or feeling too overwhelmed to focus on the warm-up. Students who only worked part of the warm-up period usually finished their drawing early. In some cases, students worked part of the warm-up period because they struggled to come up with an idea, or did not feel invested in their drawing.

The last theme of the artwork and observation data matrix, level of completion, was based on whether or not a student's drawing was complete at the end of a warm-up period. Work that was considered to be incomplete contained significant amounts of unintentional negative space. Work was considered complete when all of the space within the drawing appeared considered. Completed work could contain negative space, but the use of negative space had to be clearly intentional. For example, the student's

drawing in *figure 28* was considered to be incomplete because of the amount of space that was left unaddressed. The drawing in *figure 27* was considered complete because the use of negative space is a part of the composition.



*Figure 27.* Daniel's drawing of emotion.



*Figure 28.* Olga's straight-line drawing.

**Pre and Post-Drawing Self-Anxiety-Rating-Scales.** Data from all of the participants' self-anxiety-rating-scales was inputted into a matrix (*figure 29*) after the completion of the study. The self-anxiety-rating-scale matrix allowed me to compare student stress or anxiety levels on each day of the study. Data from every participant was put into the matrix, which allowed me to compare the data of different participants throughout the study. Having all participants included in the matrix allowed me to make connections between changes in stress levels and the prompt of the day, or the material used by the participant. It also allowed me to assess commonalities between participants' changes in mood and helped me to analyze the effect of the prompts or materials on the group as a whole.

The pre and post-self-anxiety-rating-scale matrix was organized by the date of the warm-up prompt and by the participant and was color-coded based on each participant's assigned color for matrices. The matrix includes two columns for each participant, one

for their self-assessed anxiety or stress rating before the drawing warm up, and one for their self-assessed post-drawing stress or anxiety rating. The numbers entered into the matrix are based on the scale seen in *figure 16*. Color codes were developed and applied to the matrices to indicate changes in anxiety or stress levels. A key for these color codes can be seen in *figure 29*.

**Journals.** Like the artwork and observations, journal entries were logged on a daily basis. The matrix in *figure 30* was created for each participant to log their daily journal activity. Participants' self-assessment of their anxiety or stress levels before drawing and a summary and keywords they included in their pre-drawing journal relating to their pre-drawing anxiety or stress rating were included in the matrix. Their self-assessment of their anxiety or stress levels after drawing, the material they used for their warm-up, and a summary and keywords that they included in their post-drawing journal were included in the matrix as well. The words or phrases included in the keywords sections of the matrix were chosen to summarize the students' response to the warm-up or the material used to draw, as well as reasons for why they chose their anxiety-scale-rating.



	Sava	Angelid	Amare	Helga	Olga	Emanon	Daniel	Jenny	Sophia	Osewal	Sofia	Olive												
1/29	3	2	3	2	6	5	6	4	5	5			3	3	2	2	2	2	3	3	4	2.5	4	2
1/30	4	4	4	2	6	6	3	2	4	4	4	N/A	2	2	3	3	4	3	2	2	5	4	3	4
1/31	4	3	2	2	4	3	2	2	A	A	A	A	4	3	2	2	3	2	2	2	2	2	3	1
2/1	3	3	3	3	3	2	2	2	5	4	6	3	4	2	2	2	A	A	2	2	2	1.5	1	1
2/2	2	2	2	2	2	2	2	3	3	3	3	3	A	A	2	2	A	A	1	1	1	1	2	1
2/5	1	1	1	1	2	2	3	3	A	A	1	1	1	1	2	2	1	1	A	A	3	3	A	A
2/6	4	3	4	3	6	6	4	3	3	3	4	3	2	4	2	2	3	3	2	2	2	2	4	1
2/7	2	2	2	2	4	4	2	2	A	A	A	A	4	3	2	2	2	2	2	2	2	2	1	1
2/8																								
2/9	2	2	2	2	3	2	2	2	A	A	2	2	3	3	3	3	3	2	3	2	3	3	2	4
2/12	2	2	4	3	2	2	2	2	5	4	2	1	A	A	2	2	4	3	2	2	4	3	2	5
2/13	2	2	3	2	3	2	2	2	3	3	3	2	A	A	2	2	5	3	3	3	6	2	A	A
2/14	2	2	4	N/A	2	1	1	1	3	N/A	2	4	A	A	2	2	2	1	3	3	A	A	1	1
2/15	2	2	3	3	5	4	2	2	2	2	2	1	A	A	2	2	2	1	2	2	2	2	1	1
2/16											5	3	3	2	2	2	2	1	2	2	1	1.5	1	2
2/19																								
2/20	3	3	3	2	2	2	2	2	3	N/A	6	4	2	3	2	2	2	1	A	A	2	2	3	1
2/21	2	2	3	3	4	2	2	2	3	2	3	4	2	2	2	2	2	1	3	3	1	N/A	5	1
2/22	2	3/4	3	3	3	2	3	3	3	2	A	A	3	2	2	2	2	1	2	2	3	2	3	2
2/23	4	3	2	2	4	4	2	2	3	2	2	2	3	5	2	2	1	1	2	2	3	2	3	1
DATE	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER

2/26	3	N/A	4	4	3	2	3	3	4	3	3	N/A	3	3	2	2	1	N/A	3	3	3	3	4	3
2/27																								
2/28																								
3/1																								
3/2																								
3/5	3	2	3	3	3	N/A	2	2	3	2	A	A	3	2	2	2	1	1	3	3	3	3	3	2
3/6	2	N/A	3	3	3	3	3	3	3	3	3	2	N/A	3	2	2	2	1	2	2	2	2	3	2
3/7																								
3/8																								
3/9																								
3/12	1	1	3	3	2	2	3	3	2	2	3	3	3	3	2	2	2	1	3	3	A	A	3	3
3/13	1	1	3	3	3	2	3	3	3	2	4	3	3	4	2	2	3	2	2	2	3	3	3	4
3/14	1	1	3	3	2	2	2	2	2	2	1	1	3	2	2	2	2	2	1	2	1	1	3	2
3/15	1	1	3	3	2	2	2	2	4	4	2	2	3	4	2	2	2	2	2	2	2	2	3	3
3/16											1	1	3	3	2	2	3	2	2	2	2	2	3	2
3/19	2	2	3	3	2	2	3	3	3	N/A	2	2	3	3	2	2	1	1	3	3	2	2	2	2
3/20	2	N/A	3	3	A	A	3	3	A	A	A	A	A	A	A	A	A	A	2	2	A	A	A	A
3/21																								
3/22																								
3/23	2	2	2	2	2	2	A	A	3	N/A	3	3	3	3	2	2	3	2	A	A	1	1	3	2
DATE	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER

Increase in Stress/Anxiety	Red
No Change in Stress/Anxiety	Green
Decrease in Stress/Anxiety	Yellow
Student Absent	Grey
No Data Provided	Brown

Increase in Stress/Anxiety	Red
No Change in Stress/Anxiety	Green
Decrease in Stress/Anxiety	Yellow
Student Absent	Grey
No Data Provided	Brown

Figure 29. Pre and Post Self-Anxiety-Rating-Scale Data Matrix.

STUDENT NAME: Daniel					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	3	N/A	3	Colored pencil	Relaxed – liked prompt Simple shapes – pattern Doesn't require thought Easy – material familiar and comfortable Easy to use
1/30	2	Snowing!	2	Chalk pastels	Liked prompt – abstract Incorporated pattern – fun Pastels feel nostalgic <u>messy</u>
1/31	4	Hot Heat hindering thought	3	Pencil	Exhausting – enjoyed prompt – lines easy to draw – can make anything – material easy to use – open to interpretation – would do again
2/1	4	Exhausted	2	Marker	Relaxed – easy to draw – marker good for prompt – doesn't like marker as much as the other materials
2/2 ABSENT	N/A	N/A	N/A	N/A	N/A

Figure 30. Week 1 of Daniel's Journal and Anxiety-Rating-Scale Matrix.

Participant journal matrix pages each consist of one week of their journal entries.

The color code seen in *figure 23* was used for the journal matrices, to indicate when a student was absent, the researcher was absent, or all students had off from school.

Students' pseudonyms were used on each journal matrix page and were color-coded based on the student's assigned color. After the conclusion of the study, the matrices were further coded based on commonalities between participants' journal entries. Words or phrases that were used to describe drawing prompts, materials, or mood changes were highlighted to indicate that other participants shared the views of another participant.

**Interviews.** After the conclusion of the study, each interview was transcribed and coded. The participant's assigned color codes and pseudonyms were used for each interview transcript. When coding the interviews, I began with highlighting words or phrases that summarized the participant's response to each question. A separate matrix was then developed for each interview to organize the responses of the participants, and

to compare participants' responses to each other. Participant matrices were organized by the period in which the students had art class together. The six student participants who were in my last period Art 2 class were separated into two different matrices for each interview matrix. The left side of each matrix contains the questions posed to participants, while the right contains keywords and phrases that summarize student responses.

	Helga	Olga	Amare
How do you feel about your overall performance in school? Why do you feel that way?	Good Puts in best effort	Feels good Grades are good	Feels good - Could do better Gets tired and overwhelmed by work sometimes
What is your favorite subject in school? Why?	Art Break from stress	Math and Engineering Wants a career in engineering	History, English, and Art Likes to learn, likes color, likes music
What is your least favorite subject in school? Why?	Pre-calculus. Because it's hard.	Writing and English Not good at it	Math because it has been hard this year - Sometimes science - Depends on the teacher
Do you often feel stressed or anxious at school? How do these feelings affect your performance in school?	Yes Tests cause stress Gets overwhelmed by school work - Anxiety and stress causes a struggle to focus	All the time - anxious Gets scared to do things Negative impacts Has trouble focusing	Sometimes Depends on amount of school work and sleep Can negatively impact test grades by lowering confidence
What do you do when you feel stressed or anxious at school?	Tries to think positive	Cry Shuts down Sits and does nothing Takes breaks to try to get self together	Listens to music Tries not to stress before a test Reads and talks to friends Sketches Drinks tea
What prior experiences do you have with drawing?	Drawing frequently in childhood	Went to art camp in childhood - Used to make art in childhood but stopped	Little prior experience Had classes in middle school
Do you draw in your free time? What do you like to draw? Do you draw in a sketchbook? If not, where do you draw? What do you usually draw with? How often do you draw?	Doesn't draw in free time Too busy to draw Only draws a few times per month	Sometimes - not often Draws cartoons Draws in sketchbooks Draws with pencil - most familiar with and accessible Occasionally as a way to relax	Yes - Doodles - occasionally tries anatomy Uses sketchbook or notebook paper/computer paper - uses whatever is available Uses pencil - accessible Doesn't like pen - can't erase Doodles frequently in school and at home
How do you feel when you draw?	Calm and Content Puts thoughts on paper	Calm Relaxing	Usually happy - Annoyed when drawing doesn't turn out Doodling helps improve mood
Have you ever used drawing to relax? Why or why not?	Yes - likes to draw nature Relaxed by drawing	Occasionally Takes mind off of things	Yes - makes her happy - loves to draw but struggles to come up with ideas
Are there any drawing materials that frustrate you? If so, which materials frustrate you? What about them frustrates you?	Charcoal Messy Has trouble controlling	No Has fun with all materials	Pencil - sometimes it is too thin Likes thicker materials and materials that smudge Oil pastels - can't smudge to blend - Likes to blend by smudging

Figure 31. Interview one matrix for Helga, Olga, and Amare.

**Pre and Post-Study Questionnaires.** A data matrix for the pre-study questionnaire was created at the end of the study. The pre-study questionnaire matrix (figure 32) includes all participants' responses to the self-rating-scale portion. Including all of the participants in the matrix allowed me to compare participants' responses to those of other participants. Correlations between student responses on the pre-study

questionnaire and the first interview of the study were found, although responses during the interview were more detailed.

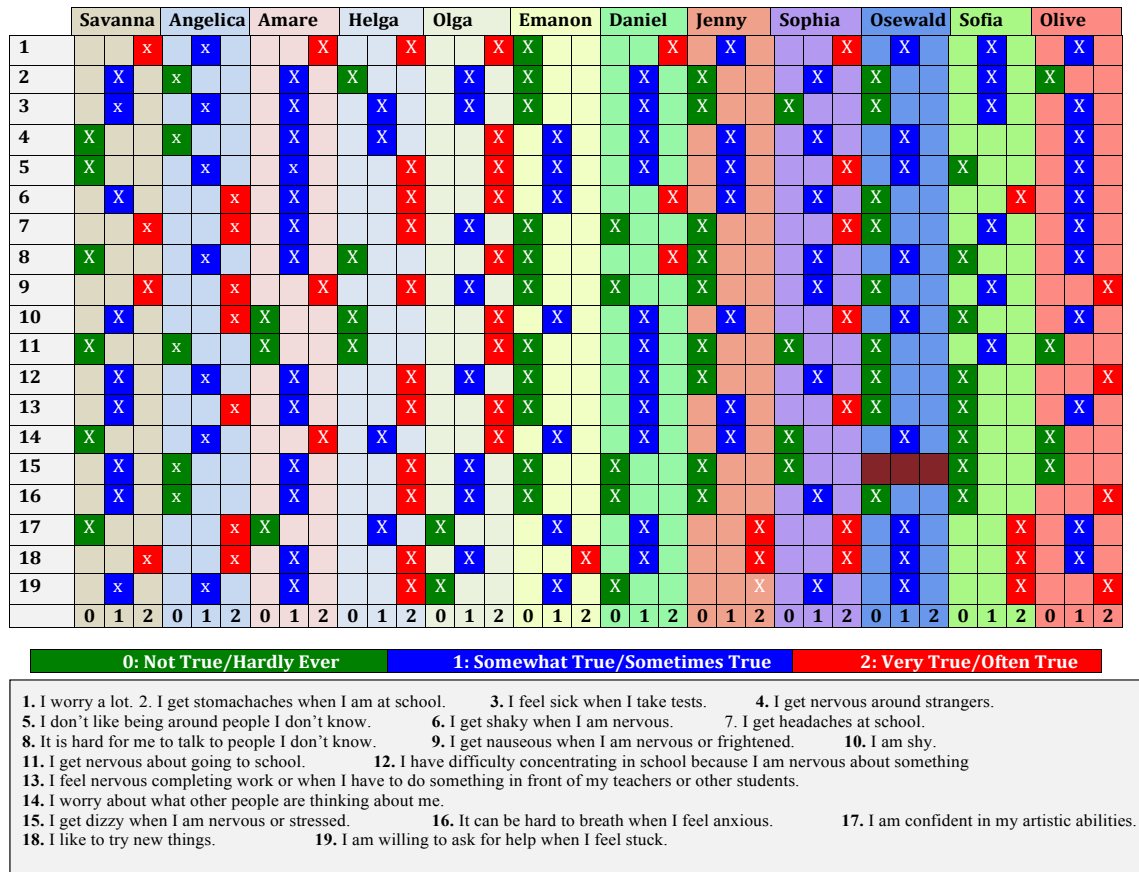


Figure 32. Pre-Study Questionnaire Data Matrix.

The pre-study questionnaire matrix was color-coded based on each participant’s assigned color. The participants’ pseudonyms were listed at the top of the matrix, which consists of three columns per student. At the bottom of each participant’s columns are the numbers they used to rate their experience with each posed question. A key at the bottom of the matrix indicates that “0” was used when students had never or hardly ever had experience with the question posed. “1” was used when students had some experience, and “2” was used when they had considerable experience with the question posed. Each of these numbers was also assigned a color, and the matrix was coded based on these colors. Each row is also numbered on the left side of the matrix based on the

questions asked in the pre-study questionnaire. A key is listed at the bottom of the matrix to indicate which pre-study questionnaire question correlates with each number in the matrix.

The data from the demographic (*figure 33*) and post-study (*figure 34*) questionnaires was inputted into two matrices, one for each questionnaire. Both questionnaires allowed me to compare student responses to those of other participants and further helped me to assess the effectiveness of the study. Both questionnaires were color-coded based on each participant's assigned color. The desired pseudonym chosen by participants along with their provided demographic information was listed on the demographic matrix. The pseudonyms chosen by each participant were then used on all other matrices for the study. The post-study matrix lists each participant on the left side, the questions posed at the bottom of the matrix, and three columns for each question, which indicate their responses.

Requested Pseudo Name	Age	Grade	Race/Ethnicity	Gender	Artistic Experience	Art Class	Class Period	Time
Savanna	16	10	Asian American	Female	Beginner	Introduction to Art	3	9:18am-10:15am
Angelica	16	10	Hispanic	Female	Advanced	Introduction to Art	3	9:18am-10:15am
Amare or Erin	18	12	White	Female	Beginner	Introduction to Art	4	10:18am-11:15am
Helga	18	12	White Albanian	Female	Moderate	Introduction to Art	4	10:18am-11:15am
Olga	18	12	White	Female	Moderate	Introduction to Art	4	10:18am-11:15am
Emanon	18	12	N/A	Male	Advanced	2D Art and Design	5	11:18am-11:45am 12:18pm-12:45pm
Sofia	17	12	White/Albanian	Female	Advanced	Art 2	6	12:48pm-1:50pm
Olive	17	12	Asian	Female	Advanced	Art 2	6	12:48pm-1:50pm
Osewald	18	12	Hispanic	Male	Moderate	Art 2	6	12:48pm-1:50pm
Jenny	18	12	White	Female	Advanced	Art 2	6	12:48pm-1:50pm
Sophia	18	12	White	Female	Moderate	Art 2	6	12:48pm-1:50pm
Daniel	17	12	Asian Chinese/Cambodian	Male	Advanced	Art 2	6	12:48pm-1:50pm

Figure 33. Demographic Questionnaire Matrix.

Participant	Yes	No	Sometimes	Yes	No	Sometimes	Yes	No	Sometimes	Yes	No	Sometimes	Yes	No	Sometimes	Yes	No	Sometimes	Yes	No	Sometimes			
	Savanna			x	x					x	x				x		x					x	x	
Angelica			x		x				x			x	x			x	x				x	x		
Amare			x			x			x			x	x			x					x	x		
Helga			x	x			x					x	x			x	x				x	x		
Olga	x			x			x					x			x			x					x	
Emanon		x				x			x			x	x			x					x	x		
Sofia			x		x				x	x			x			x					x	x		
Olive			x	x			x					x	x			x					x	x		
Osewald		x				x		x				x	x					x			x		x	
Jenny		x				x		x				x		x							x	x		
Sophia	x			x					x	x			x			x					x	x		
Daniel	x					x			x			x				x					x	x		
	Do you consider yourself to be frequently anxious?			Do you consider yourself to struggle with stress?			Do you feel your stress/anxiety negatively impacts your school performance?			Did the drawing warm ups reduce your stress/anxiety?			Did the drawing warm ups ever increase your stress/anxiety?			Will you draw in your free time using any of the warm ups?			Do you feel more confident in your drawing skills?			Will you use drawing as a stress management tool in the future?		

Figure 34. Post-Study Questionnaire Matrix.

**Correlations in Data.** Each type of data can be analyzed both alone and alongside other types of data. Most of the data matrices include data from all participants, which consequently enables me to compare participants to themselves throughout the study, as well as to other participants. The journal and artwork and observation data matrices, however, only include data from each participant. These types of data each indicate participant levels of interest in each prompt, as well as in various materials. The journal responses helped to inform data obtained through artwork and observations because they detailed the participant’s thoughts on the prompts and materials. The data obtained from the self-anxiety-rating-scales can then be used along with the journals and artwork and analysis data matrices to assess correlations between each student’s emotional state and the artwork and journal entry produced. Each type of data connects because each type of data was meant to help gain insight into reasons behind why changes in emotional state may have been occurring.

### **Summary of Findings**

Prior to commencing the study, I anticipated that the varying levels of artistic experience would affect the effectiveness of the daily drawing prompts in reducing the stress levels of the participants. Throughout the study, however, I did not see a correlation between the levels of artistic experience and changes in anxiety or stress levels. Students of all artistic backgrounds experienced either no change or a decrease in stress levels after working on their daily warm-up drawings throughout the majority of the study. Students with more artistic experience experienced an increase in stress levels more frequently than those with less artistic experience. By reading their journals, I found that students who experienced an increase in stress levels most commonly were unhappy with their drawing at the end of their prompt, and were disappointed in themselves. These students may have had higher expectations of themselves as a result of having more artistic experience.

Many students who experienced no change in their emotional state after drawing expressed in their journals that they felt distracted from their stress during the activity. Some students expressed that the warm-ups were a break from their feelings. Some of the students, who were equally anxious or stressed after a warm-up, wrote in their journals that the drawing neither helped nor negatively affected their emotional state. Students who experienced a decrease in anxiety levels also expressed that the drawings were a break from their feelings, and some even stated that the warm-ups heightened their mood. Students who experienced no change, or a decrease in anxiety or stress levels did not always express feeling stressed or anxious before drawing. Some

participants were already experiencing positive emotions before the warm-up and remained on the positive side of the rating-scales after drawing.

In some cases, students felt more stressed or anxious after a drawing warm-up, which occurred significantly less often for most participants. Students expressed some reasons behind why they felt more stressed in their journals. In some cases, students explained that their lack of interest in the prompt caused them to feel frustrated, which increased their stress levels. Some students became frustrated by the material they chose for their drawing but were not stressed as a result of the prompt assigned. Both of these instances were uncommon throughout the study. Students who experienced an increase in stress or anxiety levels were more frequently participants who consider themselves to be moderately experienced or advanced. Many of the advanced students expressed feeling more stressed or anxious after completing a drawing when they felt unhappy with the product of their work. These students were not bothered by their material used or by the prompt assigned, and even expressed wanting to try the prompt again.

Throughout the study, students were shown a variety of images of artworks at the beginning of each week during most weeks. Students appeared to show an increase in their willingness to experiment with materials and imagery as a result of seeing these images. For many students, the images helped to spark some ideas in their mind and helped them to develop an idea of their own for their drawing more easily. Showing images was most helpful during the weeks in which students were creating more abstract drawings. Showing images was especially useful during the weeks in which students focused on drawing music and emotions. There was a noticeable difference in students'



exploration of material and mark making after seeing examples of how other artists have explored similar concepts in their art.

Participants were given opportunities to look at each other's work or to show and speak about their work frequently throughout the study. Students most enjoyed circulating the room to look at what their peers had created during the warm-up. They were also more engaged by having the opportunity to then pick out a few drawings that stood out to them. Many students also enjoyed having the opportunity to speak about their drawings. The majority of the participants became increasingly willing to speak about their work after having the opportunity to see the work of their peers. Some participants became more willing to show their work but were not as willing to speak about their work in front of their peers. The majority of participants showed some increase in confidence as a result of conversing with their peers about their work.

After viewing and analyzing student artwork, I found that students most commonly used recognizable imagery during the Associations, Aspirations and Desires, *Self-Reflection*, and *Self-Portrait* weeks. Students most commonly used abstract and unrecognizable imagery during the *Line and Shape*, Zentangles® and Mandalas, *Drawing to Sound*, and *Emotions* weeks. While a few students integrated abstract imagery into prompts that were not based in abstraction, most focused on recognizable imagery. Some students integrated recognizable imagery into the prompts that were based in abstraction, but most focused on abstract imagery. Interestingly, the prompts that were based in recognizable imagery were most frequently the warm-ups drawings that lacked cohesion, or that students were unable to finish. Students seemed to more easily be able to create a cohesive and complete artwork when a prompt was based in abstraction, and also

appeared to more easily create an idea. Students overall appeared to struggle more often with creating an idea for prompts based in recognizable imagery and often drew multiple images that were separate from one another on their paper.

When conducting the second and third interviews, which focused on the students' experiences with the study, I was able to gain more insight regarding which drawing prompts students felt most strongly. The participants had similar favorite and least favorite drawing prompts, and interestingly some of the participants' favorite warm-ups were the least favorite of other participants. Some students most enjoyed the prompts that focused on the use of line and shape, as well as the Zentangle® prompts, because they enjoyed prompts that were open to interpretation. Other students preferred the prompts that provided more guidance, especially the prompts that asked the students to reflect on themselves or their futures. The students who preferred the more open-ended prompts did not like the prompts that were about self-reflection. These students expressed distaste for thinking about the uncertainty of their futures or reflecting on themselves. All but a few students agreed that one of their favorite weeks was the Drawing to Sound week. These students agreed that they liked the idea of interpreting sounds visually on paper. The few students, who did not enjoy these prompts, expressed struggling with this visual interpretation of sound.

The second and third interviews also gave me more insight as to which drawing materials students felt most strongly about. The results varied, but there were commonalities between participants' favorite and least favorite drawing materials. Participants' responses to questions regarding drawing materials, as well as their journal reflections about materials, correlated with the drawings they produced. Participants

overwhelmingly agreed that they enjoyed chalk pastels the most, because of the fluid nature of the material. The students described the materials as “easy to blend” and “easy to use.” Students also agreed that vine charcoal was their least favorite material, and found it to be frustrating to use. They did not like how the material smudged, or the excess material that can be produced through its use and found the material difficult to control.

Students who preferred materials that are more easily controlled favored fine point markers. They enjoyed the consistency of the colors as well as the marks produced by the materials. A few students expressed frustration with the permanence of markers, but still enjoyed the material. Some of the students expressed distaste for oil pastels, while others enjoyed the fluidity of the materials. Some of the students found the material to be frustrating because they struggled to control the material in their drawings. Others who felt more comfortable with the material enjoyed the colors available, as well as the way the material can blend. Students rarely chose to use colored pencils in their drawings but expressed that the material was familiar and comfortable to use. Students primarily used a pencil to draft a drawing and then covered it with another material. They also described pencils as a material that was familiar, easy to use, and easy to control. Students often chose to use a pencil to begin a drawing because of its lack of permanence.

Through the use of the post-study questionnaire, as well as through the third interview, I found that the majority of students felt more confident in their drawing abilities as a result of the study. Some of the participants expressed only feeling a slight increase in confidence, while others expressed feeling significantly more confident. All of the students who said they felt more confident, regardless of the amount of increase in

confidence, explained that the study opened them up to new possibilities. They felt the drawing prompts introduced them to new ways of thinking, as well as new ideas for drawing.

The study also introduced the student participants to new materials that they had not considered using prior and planned to continue using in the future. The majority of participants also said that they felt more motivated to draw as a result of the study and had even found themselves to be more frequently drawing. The participants who had been drawing more frequently as a result of the study were drawing both in sketchbooks and on whatever paper was available to them. Some students stated that they had more frequently been drawing in the margins of their notebooks at school when they felt stressed. The students who were not drawing more frequently expressed having difficulty finding the time to do so outside of school. The majority of the participants stated that they planned to continue using some of the warm-ups prompts in the future, including the zentangles®, mandala, and emotions based prompts.

## Chapter V: Discussion and Implications for the Field

### Introduction to Findings

The goal of the study was to discover how high school art teachers could best incorporate anxiety reducing drawing activities into their curricula and how these activities could be best promoted as a support for adolescents with anxiety and stress. The data presented in *Chapter IV* can be discussed in the context of four emerging themes. These themes include the impact of the warm-up activities on students' anxiety or stress, the connections between levels of student engagement and mood, the connections between the aesthetic of student artwork and stress or anxiety levels, and changes in student confidence levels.

**Participant Anxiety and Stress Levels.** The pre-study questionnaires (*figure 32*) that student participants filled out prior to the commencement of the study, their responses from the first interview (Appendix F), and their post-study questionnaires (*figure 34*) indicated that all of the participants have some experience with stress or anxiety. There were three questions from the post-study questionnaire that most clearly revealed this information. When asked whether or not they consider themselves to be frequently anxious (*figure 34*), three participants responded "yes," six participants responded "sometimes," and three responded "no." When asked if they struggle with stress (*figure 34*), five participants responded "yes," five responded "sometimes," and two responded "no." Three students responded "yes," seven responded "sometimes," and two responded "no" when asked whether or not their stress or anxiety levels negatively impact their performance in school (*figure 34*).

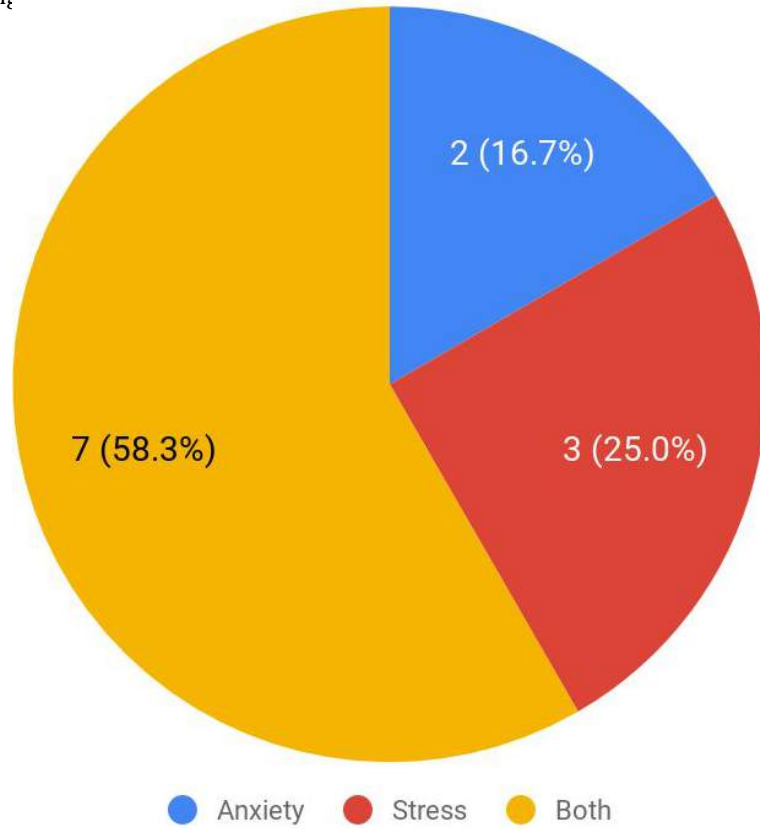


Figure 35. Participant anxiety and stress levels.

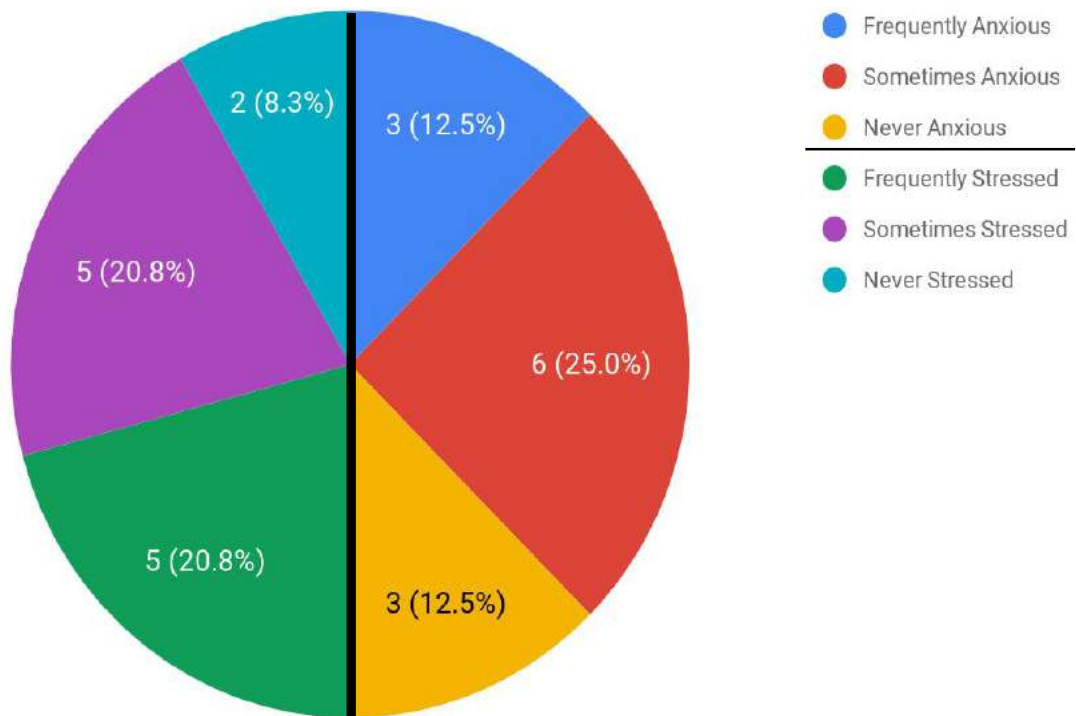


Figure 36. Break-down of student stress and anxiety levels.

The three participants who did not consider themselves to be frequently anxious indicated that they sometimes struggle with stress. Two of the participants who considered themselves to be frequently anxious indicated that they do not struggle with stress. Nine participants expressed having experience with anxiety, and ten of the participants considered themselves to have experience with stress. Seven of the twelve participants indicated that they struggle with both anxiety and stress. Two of the participants, who sometimes struggle with stress but not anxiety, indicated that they did not feel their stress negatively impacts their performance in school. Ten of the participants indicated that their stress or anxiety did or could sometimes negatively impact their performance in school.

*Figures 35-37* show student participants' responses to the anxiety and stress-based questions from the post-study questionnaire (*figure 34*). The left portion of *figure 36* shows how many participants stated that they frequently, sometimes, and never experience anxiety, and the right side shows the number of students who frequently, sometimes, or never experience stress. *Figure 38* shows which participants stated that they struggle with stress, anxiety, or both, and which students feel that their stress or anxiety can negatively impact their performance in school. Participants were listed if they responded "yes" or "sometimes" on their post-study questionnaire.

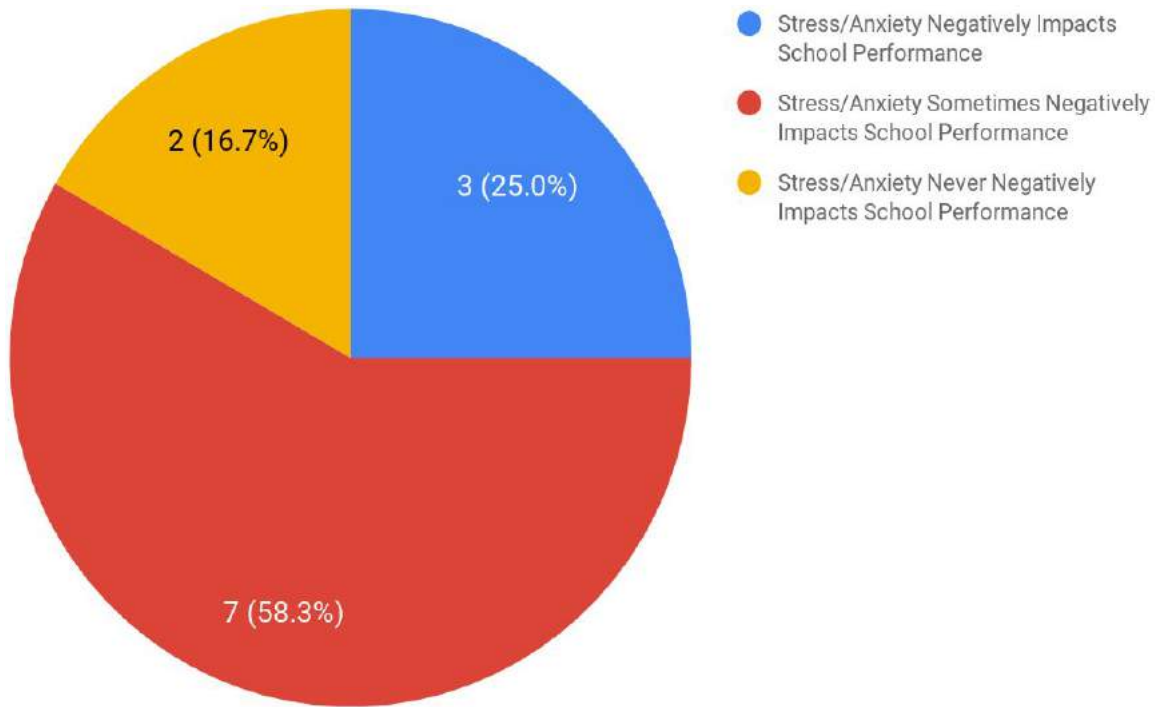


Figure 37. Impact of stress or anxiety on participants' school performance.

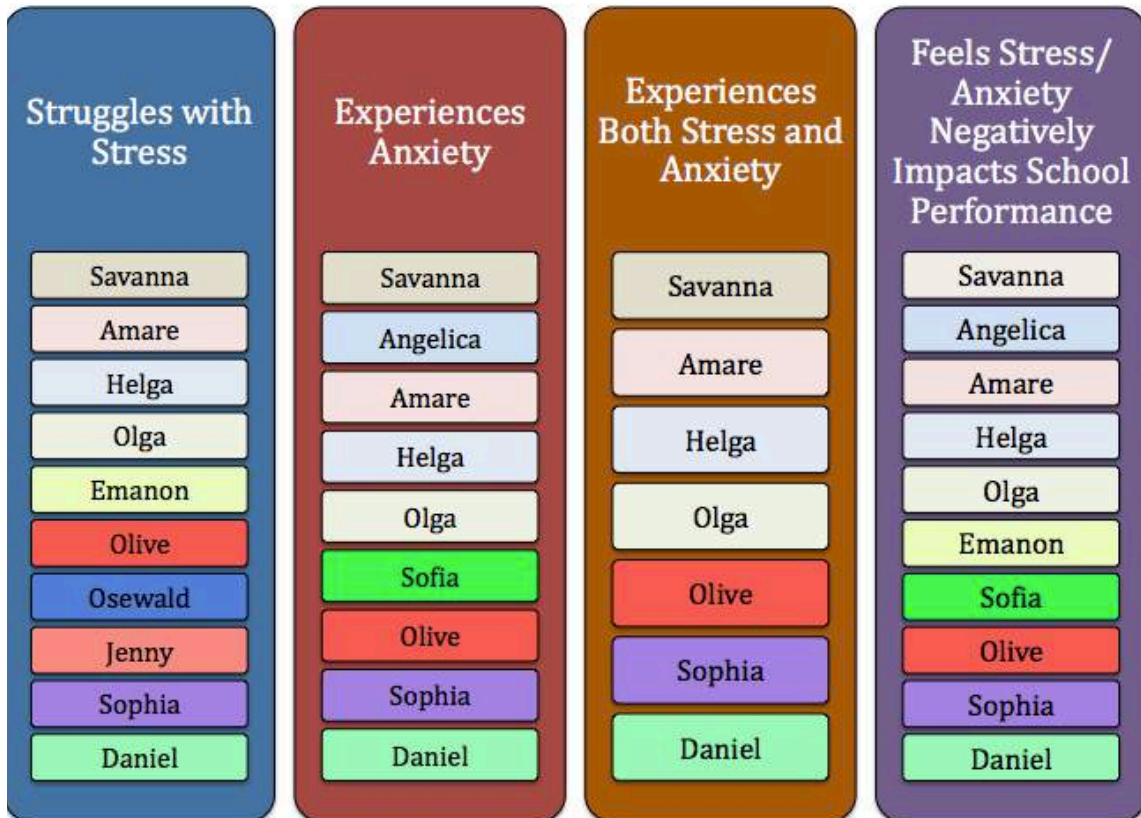


Figure 38. Participants with stress, anxiety, and negative school performance impact.



***Pre-study Questionnaires.*** The focus of the pre-study questionnaire (*figure 32*) was on students' prior experiences with anxiety, rather than stress. The interviews and post-study questionnaire were used to gather information regarding students' prior experiences with stress and anxiety. The questions on the pre-study questionnaire were based on a variety of anxiety symptoms described by the National Alliance on Mental Illness (2017). The student participants who stated that they struggle with anxiety frequently on their post-study questionnaire, more frequently selected "Very True/Often True" or "Somewhat True/Sometimes True" on the questions related to anxiety symptoms. The participants who struggle more with stress than anxiety, more frequently selected "Not True/Hardly Ever" for the questions related to anxiety on their pre-study questionnaires.

***Interviews.*** Two of the questions from the first round of interviews (Appendix G) focused on students' prior experiences with stress and anxiety. Students were first asked whether or not they are often stressed or anxious at school, and how those experiences impact their overall performance in school. They were then asked what strategies they use, if any, to deal with their stress or anxiety symptoms.

***Savannah.*** Savannah expressed that she sometimes had issues with both stress and anxiety. She stated that she tried not to let her stress and anxiety negatively impacted her performance in school, but expressed that it had sometimes negatively impacted her. She stated that she did not do anything about her stress and anxiety while at school, and did not appear to have an existing stress-management tool (Personal communication, March 14, 2018).

*Angelica.* Angelica stated that she sometimes had issues with anxiety at school, but did not have issues with stress. She specified in her interview that she primarily had test anxiety. She explained that her anxiety caused her to have difficulty focusing in school, and caused her to think negatively. Her experiences with her anxiety negatively impacted her performance in school. Angelica tried focusing on something else to distract her from her anxiety, or tried ignoring it (Personal communication, February 20, 2018).

*Helga.* Helga explained in her first interview that she primarily had experience with stress, but sometimes experienced anxiety as well. Tests caused her a great deal of stress, and she often became overwhelmed by having to balance school and work responsibilities. Her stress and anxiety caused her to have difficulty focusing on her schoolwork, as well as her classes. When experiencing stress and anxiety, she explained that she tried to focus on positive thoughts to distract her from her stress. She also stated that she tried to remind herself that she is capable of being successful, in order to combat the negative thoughts that came with her anxiety (Personal communication, February 14, 2018).

*Olga.* Olga described during her interview that she had anxiety and stress frequently. She specifically said “all the time,” when asked if she ever feels stressed or anxious at school. When she felt anxious at school, she explained that she became “scared to do things.” She had significant difficulty focusing during her classes as a result of her anxiety, which had a negative impact on her overall performance in school. She explained that she frequently cried or shut down while in school, and often sat and did nothing while experiencing significant anxiety symptoms. When experiencing

anxiety, she stated that she took breaks, often leaving her classrooms for a few minutes, to collect herself and manage her anxiety (Personal communication, April 3, 2018).

*Amare.* Amare stated in her interview that she sometimes experienced stress and anxiety while at school, but not frequently. Her anxiety and stress levels depended on the amount of schoolwork she had, as well as how much sleep she had gotten. When she felt overwhelmed by schoolwork, it lowered her self-confidence, and therefore negatively impacted her grades. Amare expressed several stress-management tools that she used when feeling stressed or anxious, including listening to music, sketching or doodling, reading, talking to friends, and drinking tea (Personal communication, February 14, 2018).

*Emanon.* Emanon expressed that he sometimes experienced stress, but not anxiety, while at school. He became particularly stressed when overwhelmed by the amount of schoolwork he had and explained that he often struggled with time management. Emanon also explained that he finds stress to be both positive and negative. It often motivated him to do his work but caused him to shut down when he became overwhelmed. When feeling stressed, he tried to separate himself from whatever was causing his stress, in order to develop a plan to make the situation easier for him. He also tried deep breathing exercises, distracting himself from his stress, and keeping his mind focused (Personal communication, February 13, 2018).

*Daniel.* Daniel described having both anxiety and stress. During his first interview he said that he only sometimes felt anxious at school, and more commonly felt stressed than anxious. He explained that his stress and anxiety often hindered his school performance, but also sometimes motivated him to get more of his schoolwork done. He

did not seem to have any stress-management tools that he used and explained that he tried to “just deal with it” (Personal communication, April 2, 2018).

*Jenny.* Jenny stated that she sometimes experienced test anxiety, and at times felt stressed by the amount of schoolwork she had, but did not frequently feel stressed or anxious overall. She stated that she rarely felt anxious or stressed at school. She explained that her stress could both motivate her, and distract her, from getting her schoolwork done. She described taking deep breaths, engaging in breathing exercises, and organizing herself when feeling stressed by schoolwork (Personal communication, February 21, 2018).

*Sophia.* Sophia described having sometimes experienced both stress and anxiety while at school. Her stress and anxiety at times caused her to have difficulty focusing, difficulty paying attention in class, and distracted her from her work. She frequently drew in her sketchbook or doodled on scrap paper, as a means to relieve her stress and anxiety. Drawing acted as a stress-management tool for Sophia, and often reduced her anxiety (Personal communication, February 26, 2018).

*Osewald.* Osewald explained that he did not have experience with anxiety at school, and only sometimes felt stressed while at school. He did not feel that his stress has a significant impact on her overall performance in school. Drawing is a stress-management tool for him, and he often doodles as a means to relax (Personal communication, April 18, 2018).

*Sofia.* Sofia stated in her first interview that she sometimes felt anxious and stressed while at school. Like many of her peers, Sofia felt anxious when she was overwhelmed by the amount of schoolwork she had to complete. Her stress and anxiety

caused her to have difficulty concentrating in school, which could at times negatively impact her overall performance. She described trying to focus on her work, in order to distract herself from her stress and anxiety, and often tried to avoid her feelings (Personal communication, April 13, 2018).

*Olive.* Olive described frequently having experienced both stress and anxiety while at school. Her stress and anxiety made it difficult for her to focus and often caused her to feel discouraged. She stated that she often felt like a failure when feeling anxious, and frequently feared to have to repeat a class. She often became overwhelmed and felt she was struggling in school. She explained that when she felt anxious and stressed at school, she kept to herself and did not speak to anyone. She described internalizing her anxiety and did not appear to have a stress-management tool to ease her stress and anxiety (Personal communication, April 20, 2018).

***Correlations in Data.*** The data relating to participants' experiences with stress and anxiety from the post-study questionnaire (*figure 34*) correlated with the data collected from both the first round of interviews (Appendix F) and from the pre-study questionnaire (*figure 32*). The students who stated that they experience stress, anxiety, or both on their post-study questionnaire, also spoke about these experiences during the school day in their first interviews. The participants who stated that they frequently or sometimes experience anxiety symptoms also responded "Very True/Often True" or "Somewhat True/Sometimes True" to the majority of the questions from the pre-study questionnaire. It is likely that those who responded "Not True/Hardly Ever" to questions on the pre-study questionnaire have had experience with some of the questions they provided this response for, but have rarely had those experiences. The data from the

three aforementioned matrices indicates that some participants struggled more with stress and anxiety than others. However, the data also indicated that all twelve participants have some experience with stress or anxiety.

### **The Impact of the Warm-ups on Student Anxiety and Stress Levels.**

Throughout the study, student participants displayed a wide range of reactions to each of the drawing activities completed during their daily warm-up time. Reasons for their reactions to the warm-ups varied depending on student interest and mood upon entering the class. The data collected from observations, student journals, and interviews were used to determine which drawing materials and prompts were most effective in reducing stress and anxiety levels in the participants. Daily changes in anxiety and stress levels can be seen in *figure 29*, and summaries of student journals responses to the daily prompts can be seen in Appendix F. *Figure 39* shows a list of which students experience an increase, no change, or decrease in stress levels during the study. Students were listed if they had at least one experience, as listed in the pre-drawing self-anxiety-rating-scales and their journals.

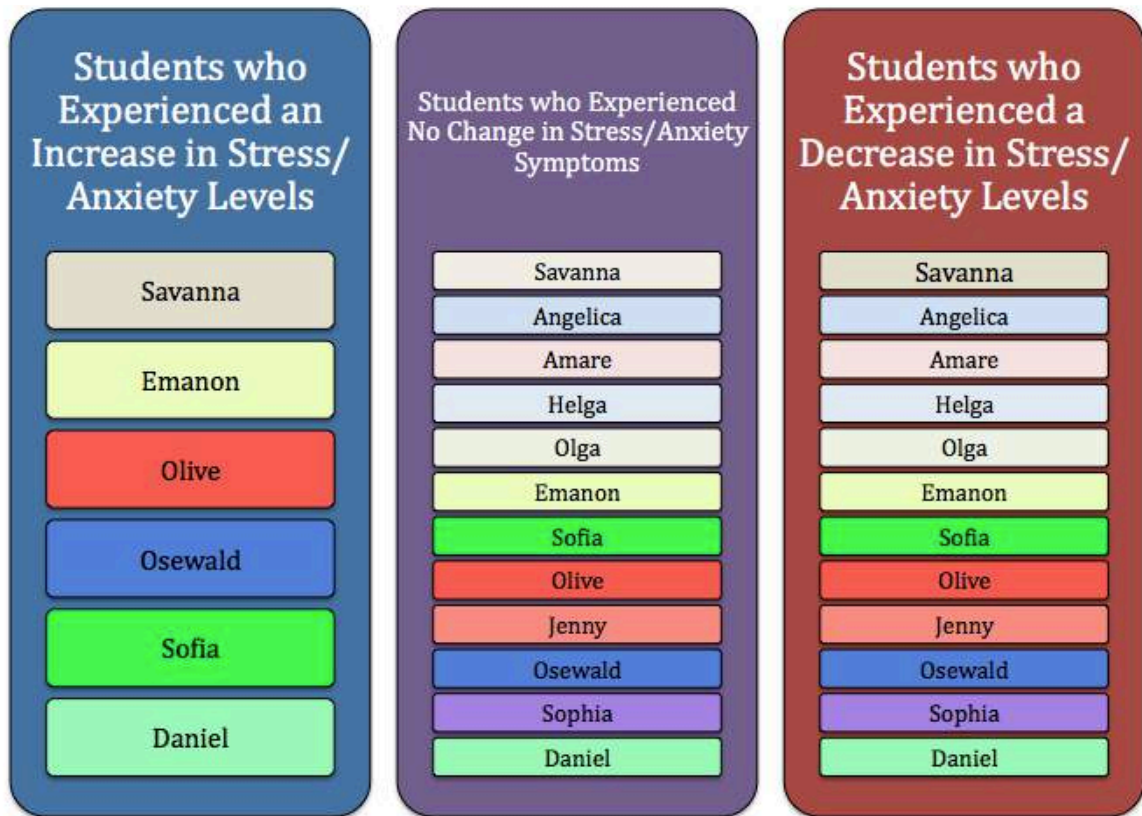


Figure 39. Students who experienced an increase, no change, or decrease in symptoms.

**Students with increased anxiety/stress symptoms.** Figure 39 shows that there were very few instances in which students experienced an increase in anxiety symptoms throughout the study. The self-anxiety-rating-scale that student participants used throughout the study can be seen in *figure 16*. There was no significant increase in the majority of instances in which students experienced an increase in stress or anxiety levels. A total of five of the twelve participants experienced an increase in stress levels on at least one occasion throughout the study. Of those five participants, three only experienced one small increase in stress levels after drawing. Two of these three students still rated themselves as feeling an overall positive emotion after the drawing prompt that caused them a slight increase in stress levels. One of the five participants experienced two instances of an increase in stress levels, and another experienced five instances of

increased stress levels after drawing. Student journals served as the primary source of information when analyzing why these students may have experienced an increase in stress levels.

*Savannah.* Savannah experienced one instance of increased anxiety symptoms throughout the study, during the fourth week of the study on February 22, 2018. The theme of the week was *Emotions* (figure 10), and the prompt was to illustrate their happy place. She rated herself at a “2” on her self-anxiety-rating-scale, which indicated that she was “feeling good” before drawing. She then rated herself at a “3 or 4,” which indicated that she was feeling “okay,” but a “little stressed,” after completing the drawing.



Figure 40. Savannah’s drawing from February 22, 2018.

When assessing Savannah’s journal response to the prompt for the day, it was discovered that her increase in stress was not directly related to the drawing prompt. She noted in her journals that she enjoyed the prompt and felt okay while using markers to complete her drawing. She even noted that she found the prompt to be “fun,” and would like to try it again. In her post-drawing journal entry, she mentioned that she had “a lot going on” (Participant journal, February 22, 2018), which indicates that there were things



on her mind that were causing her stress. This prompt was not helpful in decreasing her stress but was also not responsible for her increase in stress.

*Emanon.* Emanon experienced two instances of an increase in stress after drawing throughout the study. The first occurrence was during the third week of the study, on February 14, 2018. The theme of the week was *Drawing to Sound* (figure 9), and the prompt was to create a drawing while listening to classical music. He rated himself at a “2” on his self-anxiety-rating-scale before drawing and noted in his journal that he was not feeling stressed at all. After drawing his stress rating increased to a “4”, which indicated that he was feeling “a little stressed” as a result of the drawing warm-up.



Figure 41. Emanon’s drawing from February 14, 2018.

The second instance of increased stress occurred during the fifth week of the study, on February 21<sup>st</sup>, 2018. The theme of the week was *Emotions* (figure 10), and the prompt was to draw two contrasting emotions. He rated himself at a “3” on his self-anxiety-rating-scale before drawing, which indicated that he was feeling “okay.” He then rated

himself at a “4” after completing the drawing, which indicated that he experience a slight increase in his stress levels.



Figure 42. Emanon’s drawing from February 21, 2018.

In Emanon’s journals, he explained that on both occasions he was feeling dissatisfied with the drawing that he produced during the activity. He was also unhappy with the material he used on both days. He noted that he did not necessarily dislike the materials he chose overall, but instead felt the materials were not appropriate for the drawing one which he was working. He noted in his journal from the second occurrence that he would try the prompt again in the future, using a different material. Emanon’s journal entries indicated that it was not the material or the prompt that caused his increase in stress levels, but instead his discontent with his drawing.

*Sofia.* Sofia experienced an increase in stress on one occasion throughout the study, on February 16<sup>th</sup>, 2018. The theme of the week was *Drawing to Sound* (figure 3), and the



prompt was to draw to a playlist of sound effects while drawing either blindfolded or closed eyes. Sofia chose to try drawing blindfolded for the warm-up activity. She rated herself at a “1” on her self-anxiety-rating-scale, indicating that she was “doing really well” before the drawing activity. She then rated herself at a “1.5” after drawing, indicating a very slight increase in stress levels.

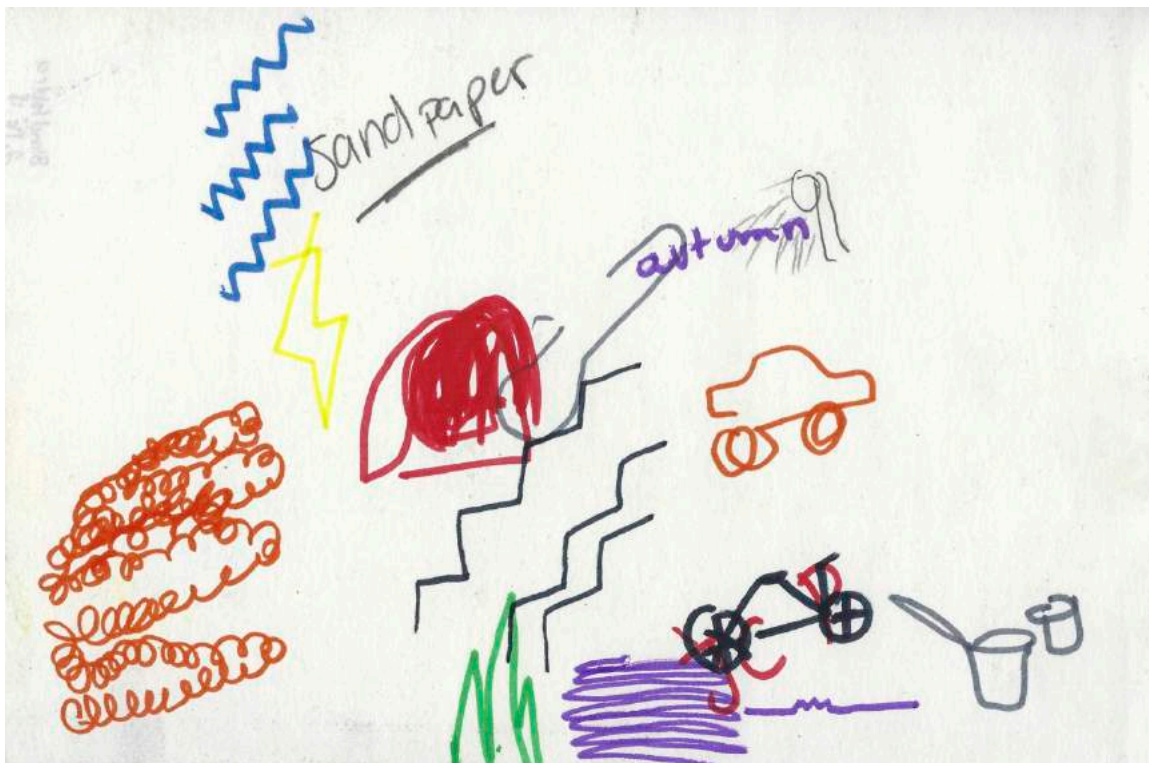


Figure 43. Sofia's drawing from February 16, 2018.

When reading Sofia's journal to try to understand why she felt more stressed after the drawing, it was discovered that the materials she chose for the prompt did not have an adverse effect on her mood. She noted in her journal that wearing the blindfold make her feel extremely uncomfortable, and not being able to see what she was drawing caused her to feel stressed. She may have experienced less stress if she had not used a blindfold, and instead closed her eyes, although not being able to see her drawing may still have caused an increase.

*Olive.* Olive experienced a total of five instances of increased anxiety and stress throughout the course of the study. The first instance was within the first week of the study, on January 30<sup>th</sup>, 2018. The theme of the week was *Line and Shape* (figure 7), and the prompt was to create a drawing using repeating organic shapes. She rated herself at a “3” on her self-anxiety-rating-scale before drawing, indicating that she was feeling “okay.” After drawing she rated herself at a “4”, indicating that she was feeling slightly stressed or anxious.



Figure 44. Olive’s drawing from January 30, 2018.

In her journal, she explained that she struggled to create a cohesive drawing, and struggled to create her drawing with the oil pastels with which she chose to work. She did not seem to dislike oil pastels overall at this point in the study but described having difficulty creating thin lines for her drawing. She also noted that she felt she did not do enough and was discontent with the drawing produced. Her discontent with her drawing,

as well as her frustration with the material she chose, contributed to her overall increase in stress.

The second instance increased anxiety and stress after drawing occurred during the second week of the study, on February 9th, 2018. The theme of the week was *Mandalas and Zentangles*® (figure 8), and the prompt was to create a mandala inspired by two contrasting emotions. Olive rated herself at a “2” on her self-anxiety-rating-scale before drawing, indicating that she was feeling “pretty good” before the activity. She then rated herself at a “4” after the activity, indicating that she was feeling a “little stressed.”



Figure 45. Olive’s drawing from February 9, 2018.

In her journal, she explained that she enjoyed the drawing prompt, as well as the colored pencils she chose for her drawing. She found the material easy to use and stated that she had many ideas for the prompt and would like to try it again. She did not have an opportunity to fully complete her drawing, which caused her to feel stressed

more stressed after drawing. Despite not being able to finish, she felt that the portion of the drawing that she had completed was successful.

Olive experienced a third instance of increased stress and anxiety during the third week of the study, on February 12<sup>th</sup>, 2018. The theme of the week was *Drawing to Sound* (figure 9), and the prompt was to create a drawing while listening to approximately thirty seconds of a series of pop culture songs for ten minutes. She rated herself at a “2” on her self-anxiety-rating-scale, indicating that she was feeling good prior to the drawing. She then rated herself at a “5” after the drawing activity, indicating that she was feeling moderately anxious. She noted that she felt unsure of how to approach the prompt, and how to express the sounds visually. She included in her journal entry that she would not do that particular prompt again and that she felt her drawing was weak.



Figure 46. Olive's drawing from February 12, 2018.



Olive's fourth experience with an increase in anxiety and stress occurred on February 16, 2018, during the third week of the study. The theme of the week was *Drawing to Sound* (figure 9), and the prompt was to create a drawing while listening to a premade playlist of sound effects for ten minutes. Students were also asked to either wear a blindfold or complete the exercise with their eyes closed. Olive chose to complete the exercise with her eyes closed, rather than while wearing a blindfold. She first rated herself at a "1" on her self-anxiety-rating-scale prior to the drawing activity, indicating that she was doing really well at the beginning of the class period. She then rated herself at a "2" after working on the warm-up activity, indicating a slight negative shift in mood as a result of the drawing activity.

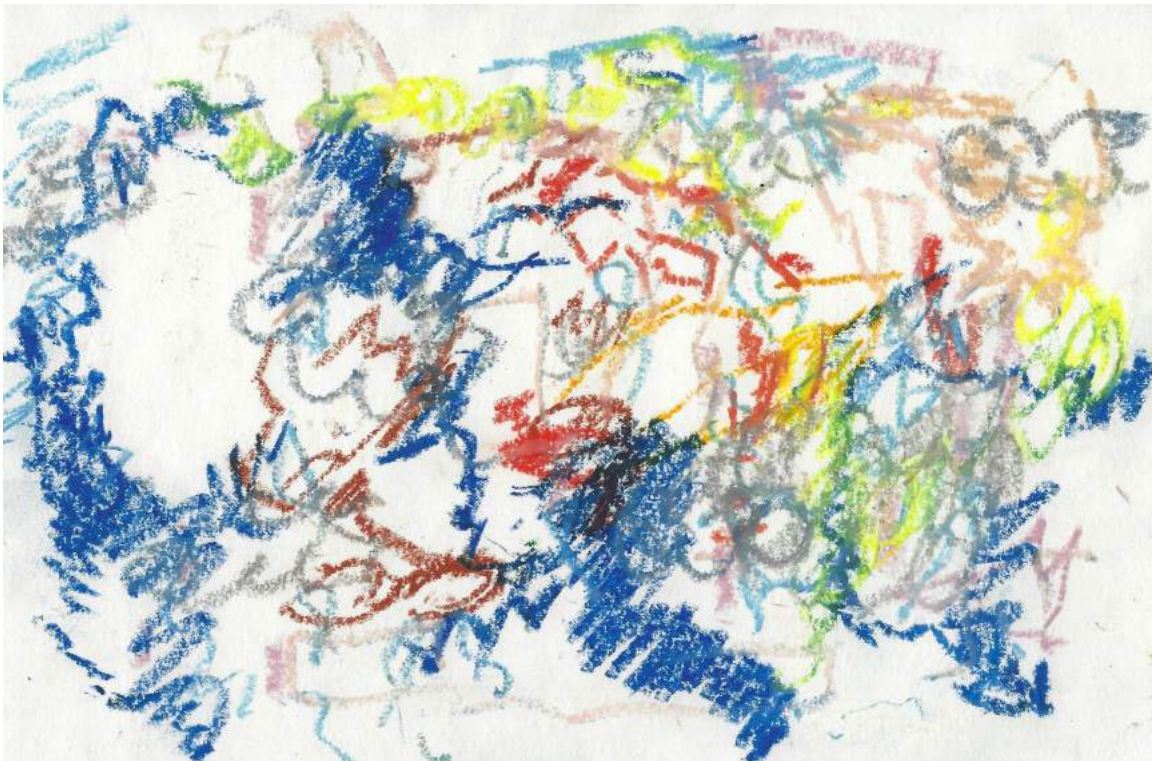


Figure 47. Olive's drawing from February 16, 2018.

Olive noted in her journal that while she felt the activity was "fun," it caused her to feel nervous. She explained that she was not sure what was going on during the activity,

but would like to try it again in the future. She also noted that she enjoyed using the oil pastels that she chose for the drawing prompt. Her indication that she enjoyed using the oil pastels for her drawing indicated that it was not being able to see the drawing while working on it that caused her to experience a slight negative shift in mood. Although her shift in mood was negative as a result of this drawing prompt, it did not cause her to feel anxious overall.

Olive's fifth experience with an increase in anxiety and stress occurred on March 13th, 2018, during the seventh week of the study. The theme of the week was *Aspirations and Desires* (figure 13), and the prompt was to create a drawing inspired by a place that they had always wanted to visit. Olive rated herself at a "3" on her self-anxiety-rating-scale prior to the activity, indicating that she was feeling "okay." She then rated herself at a "4" after the drawing, indicating that she was feeling "a little stressed" after the activity.



Figure 48. Olive's drawing from March 13, 2018.



Olive noted in her journal that the prompt made her feel a little stressed, primarily because she wished that she had access to a photo-reference while completing her drawing. She also felt frustrated by using markers to complete the prompt, and felt that the drawing she produced looked “sloppy.” Although she did not appear to enjoy the prompt, the primary cause of her increased anxiety was again her dissatisfaction with her drawing.

*Osewald.* Osewald experienced one instance of increased stress during the seventh week of the study, on March 14, 2018. The theme of the week was *Aspirations and Desires* (figure 13), and the prompt was to create a drawing of how their future home could look. He rated himself at a “1” on his self-anxiety-rating-scale prior to drawing, indicating that he was “doing really well.” He then rated himself at a “2” after the drawing activity, indicating that he was “feeling pretty good” after drawing.



Figure 49. Osewald's drawing from March 14-15, 2018.

Osewald noted in his journal that he enjoyed both the prompt and the chalk pastels with which he chose to work. He described enjoying the activity, feeling happy after drawing, and being content with the drawing that he produced. He stated that he had a desire to try the prompt again in the future, and he even continued to work on the drawing the following day. *Figure 49* shows Osewald's drawing after he had completed it on March 15, 2018. Osewald experienced a slight decrease in his mood but was not experiencing an overall negative shift in mood after completing the warm-up. The data collected from his journal indicated that his slight decrease in positive mood was not related to the prompt, or his chosen material.

*Daniel.* Daniel experienced five instances of increased stress and anxiety after the drawing activities throughout the study. The first instance occurred during the second week of the study, on February 6, 2018. The theme of the week was *Mandalas and Zentangles®* (*figure 8*), and the prompt was to create a zentangle® using any material. Daniel rated himself at a "2" on his self-anxiety-rating-scale prior to drawing, indicated that he was feeling "pretty good." He then rated himself at a "4" after drawing, indicating that the drawing caused him to feel "a little stressed."

Daniel noted that he felt frustrated while drawing. He chose to use markers for his drawing and stated that he struggled to get straight lines using the material. Although he had difficulty using the material, he noted that he enjoyed the level of control he had over them and that he would use them again in the future. He was also frustrated because he was not sure what he was doing while working on the drawing. The combination of his frustration with the material and the uncertainty of the subject of his drawing contributed to his increase in stress levels.

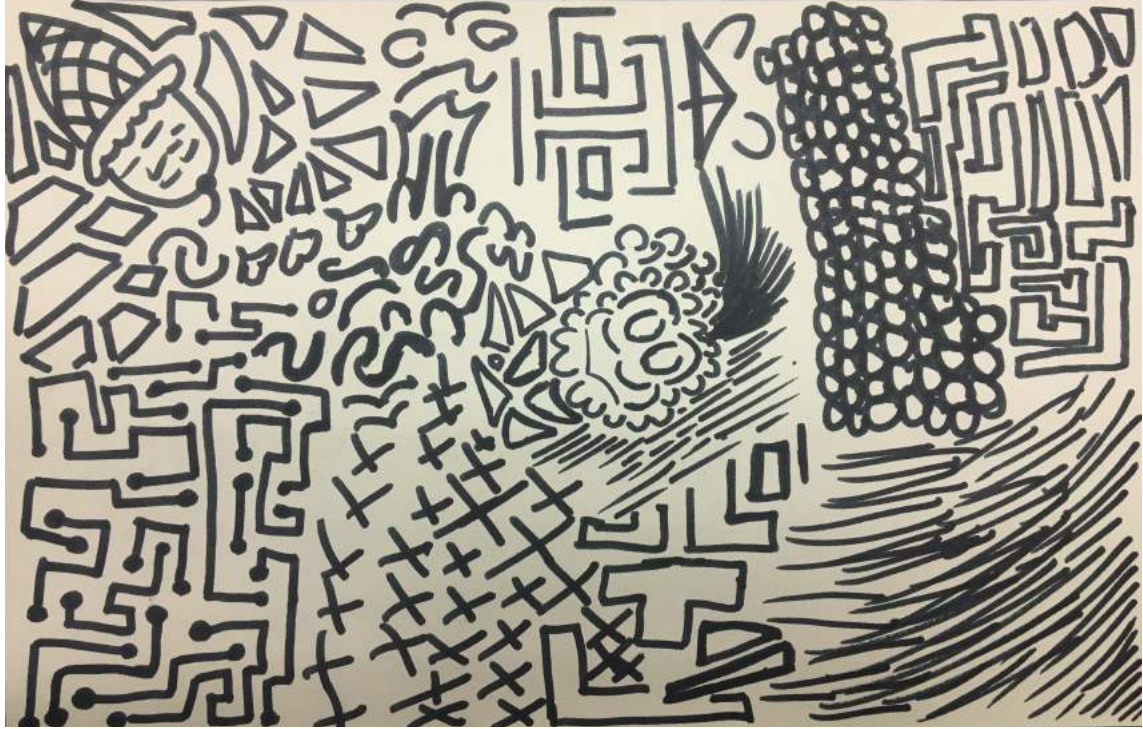
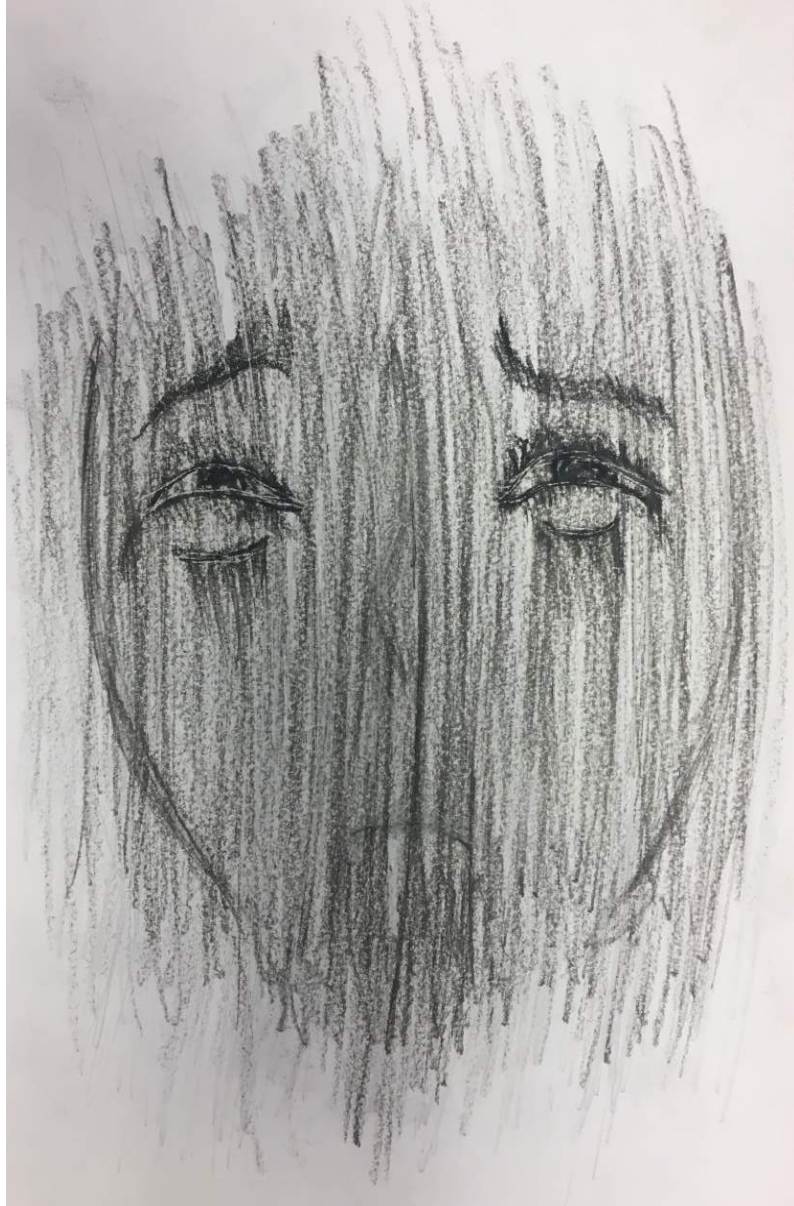


Figure 50. Daniel's drawing from February 6, 2018.

The second occurrence was during the fourth week of the study, on February 20, 2018. The theme of the week was *Emotions* (figure 10), and the prompt was to create a drawing inspired by an emotion, using the colors that the student associated with that emotion. He rated himself at a “2” on his self-anxiety-rating-scale prior to the start of the drawing activity, indicating that he was feeling “pretty good.” He then rated himself at a “3,” indicating that he was feeling “okay” after the drawing warm-up.

Daniel noted in his journal that he enjoyed the prompt, but felt “sad” after the warm-up because he chose to focus on drawing a negative emotion. He also stated that he enjoyed using charcoal pencils for his drawing. His slight increase in stress was a result of the subject he chose for his drawing, rather than the material or the prompt itself. He noted that he would try the prompt again in the future, using a different emotion. Although the prompt caused him a slight increase in stress, it did not cause him to experience an overall negative mood.



*Figure 51.* Daniel's drawing from February 20, 2018.

Daniel experienced a third occurrence of increased anxiety and stress during the fourth week of the study on February 23, 2018. The theme of the week was again *Emotions (figure 10)*. Participants were given two choices for prompts on this day. They could have either created a drawing inspired by how they were feeling on that day, or created a drawing based on what it had felt like for them when they were stressed or anxious. Daniel chose to create a drawing inspired by stress and anxiety. He rated



himself at a “3” on his self-anxiety-rating-scale before the activity, indicating that he was feeling “okay” before the warm-up. He then rated himself at a “5” after drawing, indicating that the drawing had caused him to feel “moderately stressed.”



Figure 52. Daniel’s drawing from February 23, 2018.

Daniel noted in his journal that he enjoyed the prompt, but it caused him to feel stressed. He explained that he did not think he would have felt stressed after the drawing because he enjoyed the prompt and was not sure why it caused him to feel more stressed. He enjoyed the markers he used to create the drawing and mentioned that he would like to continue to use them in the future. It is likely that Daniel’s increase in stress levels was caused by his focus on negative emotions while he was drawing, rather than the prompt.

Daniel’s third instance of increased stress and anxiety occurred during the seventh week of the study, on March 13, 2018. The theme of the week was *Aspirations and Desires* (figure 13), and the prompt was to create a drawing inspired by a place that they

had desired to visit. Daniel rated himself at a “3” on his self-anxiety-rating-scale before the drawing activity, indicating that he felt “okay” before the warm-up. He then rated himself at a “4”, indicating that he was feeling “a little stressed” after drawing.



*Figure 53.* Daniel’s drawing from March 13, 2018.

Daniel explained in his journal that he did not like the prompt or the pencil and oil pastels that he chose to use for his drawing. He struggled to develop an idea for his drawing and felt confused by the oil pastels. He also noted that he had no desire to try the prompt again in the future. He may have felt a little less stressed by the material, had

he had a better understanding of how to utilize the oil pastels. The primary cause of his increased stress appeared to be his difficulty in developing an idea for his drawing.

Daniel's last experience with increased stress and anxiety levels during the study occurred again during the seventh week of the study, on March 15, 2018. Before drawing, the participants were asked to list three future goals in their journals. The prompt was to then create a drawing inspired by one of their goals for the future. Daniel rated himself at a "3" on his self-anxiety-rating-scale prior to the warm-up, indicating that he was feeling "okay." He then rated himself at a "4," indicating that he was feeling "a little stressed" after the drawing activity.



Figure 54. Daniel's drawing from March 15, 2018.

Daniel's drawing was inspired by a fictional life goal. He was the first and only student to manipulate the paper for his drawing, to create a three-dimensional artwork. The back of his paper included directions on how to fold his paper to create a small paper building sculpture. Daniel noted in his journal that he had difficulty responding to the

journal question before the drawing warm-up started. He did not like the prompt because he struggled to develop an idea for his drawing, based on the question posed. He explained that he enjoyed using markers to create his drawing, and would continue to use markers in the future. The primary source of the increased stress levels was the prompt, and Daniel's struggle to develop an idea for his drawing.

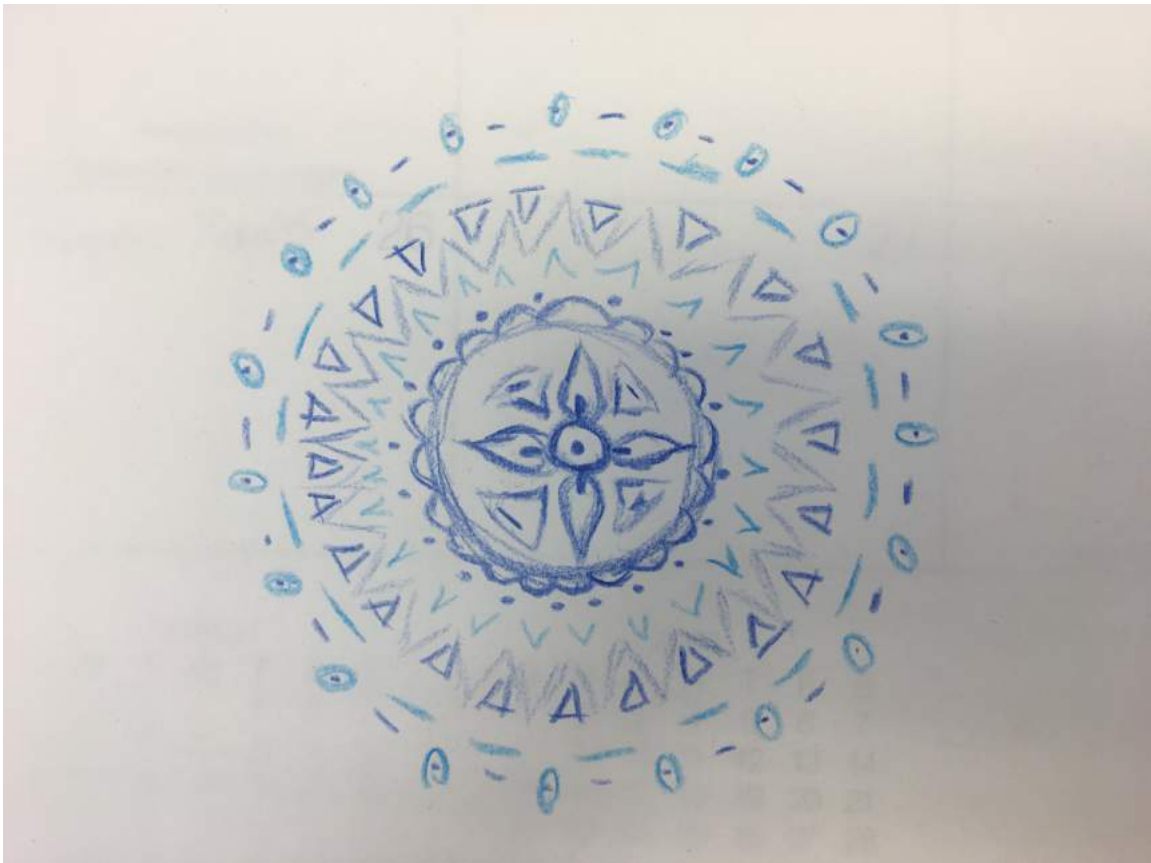
***Students with no change in mood.*** Throughout the course of the study, all of the student participants experienced no change in stress or anxiety symptoms on multiple occasions. This lack of change in stress or anxiety levels can be seen in the pre and post-self-anxiety-rating-scale data matrix in *figure 28*. Participants provided explanations for why they did not experience a change in mood in their journals. Students most frequently began the periods in which they experienced no change in mood with a positive mood, but occasionally began the class period experiencing a negative mood.

On the days in which students started the class period already feeling a positive emotion, it is likely that they did not experience a decrease in stress levels because they were not feeling stressed. On these days, students primarily enjoyed the drawing prompts but on occasion did not like the prompt. On days in which the participants disliked the prompt, they noted in their journal that it did not make them feel more stressed or anxious. Students who were feeling stressed or anxious before drawing and did not experience a decrease in their stress and anxiety as a result of the warm-up, frequently mentioned in their journals that they were not bothered by the prompt or material they chose to work with, but also were not helped by the drawing warm-up. These students often note that they felt indifferent about the prompt and material they chose. There were



also several occasions in which students felt anxious both before and after drawing, but noted in their journals that they enjoyed the prompt and their chosen material.

*Angelica.* *Figure 55* shows Angelica’s drawing on a day in which she experienced no change in mood, and enjoyed the prompt and their chosen material. The drawing was created during the second week of the study during the *Mandalas and Zentangles®* themed week. The prompt was to create a mandala using any material. She rated herself at a “1” on her self-anxiety-rating-scale before the warm-up, indicating that she was “doing very well,” and again rated herself at a “1” after the drawing. She noted in her journal that she enjoyed both the prompt and the colored pencils with which she chose to work.



*Figure 55.* Angelica’s drawing from February 5, 2018.

*Olga.* Figure 56 shows Olga's drawing on a day in which she experienced no change in mood, but disliked the warm-up prompt. The drawing was created during the *Drawing to Sound* themed week, and the prompt was to create a drawing while listening to a premade playlist of nature sounds. She rated herself at a "2" on her self-anxiety-rating-scale before the prompt, indicating that she was having a good day, and again rated herself at a "2" after the drawing activity. She noted in her journal that she found the prompt to be "boring," and did not like it. She felt indifferent about using a sharpie to complete her drawing. Interestingly, she noted that she would try the prompt again, despite stating that she did not like the prompt. Her journal and drawing indicate that disliking a drawing prompt does not always correlate with an increase in stress levels.



Figure 56. Olga's drawing from February 15, 2018.

*Amare.* Figure 57 shows Amare's prompt on a day in which she felt anxious both before and after the drawing warm-up, but did not experience an increase in stress levels as a result of the prompt. The drawing was created during the *Mandalas and*

*Zentangles*® themed week, and the prompt was to create a zentangle® using any material. She rated herself at a “6” on her self-anxiety-rating-scale before the drawing activity, indicating that she was feeling “overwhelmed and very stressed,” and again rated herself at a “6” after the conclusion of the drawing activity. She had mentioned several times in her journal that her grandmother’s health was not doing well, and that this was causing her a great deal of stress. She explained in her journal that she enjoyed the prompt, and felt it was an excellent temporary distraction from her stress. She found the chalk pastels she used for her drawing to be relaxing and noted that she enjoyed blending the material. She continued to feel extremely stressed after the drawing activity, despite feeling that the prompt was temporarily relaxing.



Figure 57. Amare’s drawing from February 6-7, 2018.

*Jenny.* Jenny consistently experienced no change in her mood throughout the course of the study. This experience with the study is likely because she had reported having low stress and anxiety levels while in school. She consistently rated herself at a

“2” or a “3” on her self-anxiety-rating-scale both before and after drawing, most frequently at a “2,” throughout the study. Despite not experiencing an overall change in her mood as a result of the drawing warm-ups, she frequently described the prompts as “fun,” “relaxing,” and “calming.” She also stated that she felt happy as a result of the drawing prompts in many of her post-drawing journals, and was often content with the drawings that she was producing. She also frequently described enjoying her chosen drawing materials and appeared to enjoy materials that she could easily blend.

*Figure 58* shows one of Jenny’s drawings from the first week of the study, during the *Lines and Shapes (figure 7)* themed week, on February 1, 2018. The prompt was to create a drawing create a drawing using only straight lines. Jenny rated herself at a “2” on her self-anxiety-rating-scale before and after the drawing activity, indicating that she was feeling “pretty good” before and after the warm-up. She enjoyed using colored pencils to create her drawing but was not content with the drawing that she produced. She enjoyed shading with the material but did not appear to enjoy the prompt as much as some of the others she worked on throughout the study. Jenny also did not describe disliking the prompt overall and wrote that she would try it again in the future. Her reaction to the prompt and her chosen material indicates that it was primarily her overall discontent with her drawing that caused her to feel “all right” after the drawing, rather than the prompt or material. Jenny’s mood was not negatively impacted, despite her discontent with her drawing.



Figure 58. Jenny's drawing from February 1, 2018.

Figure 59 shows one of Jenny's drawings from the third week of the study, during the *Drawing to Sound* (figure 9) themed week, on February 15, 2018. The prompt was to create a drawing inspired by a premade playlist of nature sounds. Jenny rated herself at a "2" on her self-anxiety-rating-scale before and after completing the drawing activity. She wrote that she was having a good day in her pre-drawing journal, and that she enjoyed the prompt in her post-drawing journal. She found the compressed charcoal that she used for her drawing to be messy but enjoyed the material despite this. She found the prompt to be "soothing," and seemed to most enjoy the *Drawing to Sound* themed week.



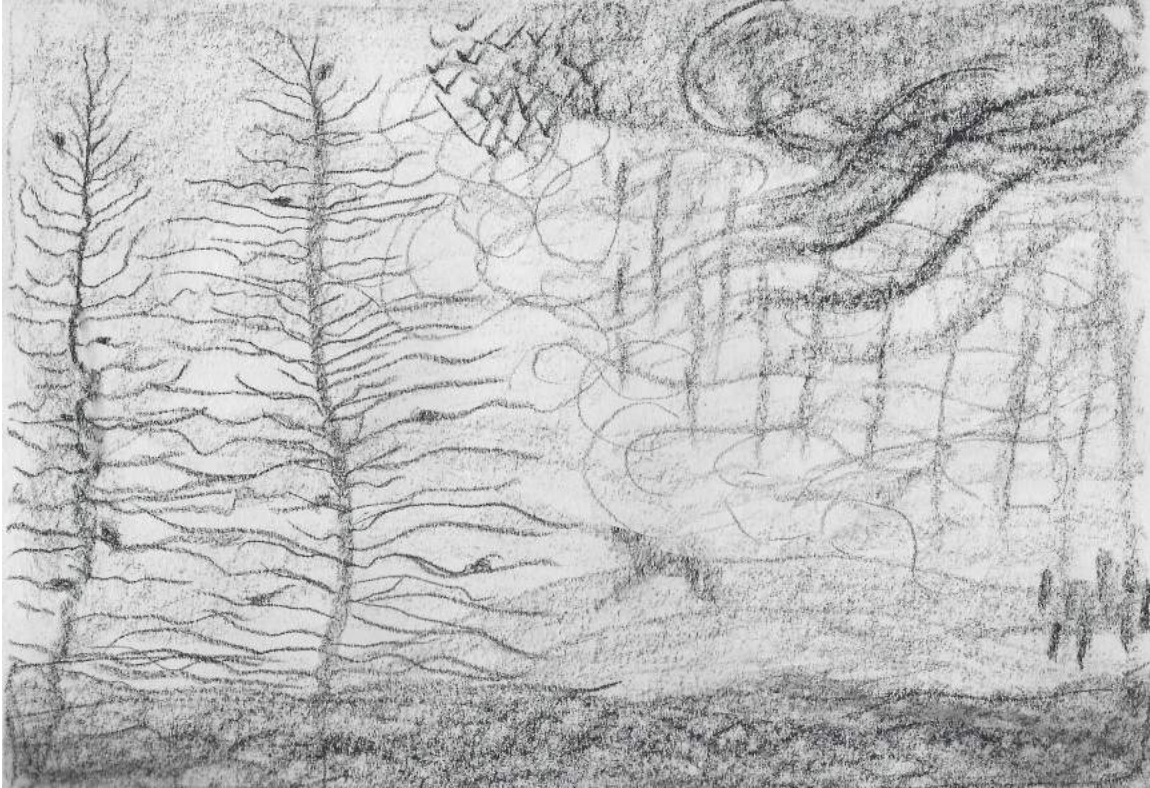


Figure 59. Jenny's drawing from February 15, 2018.

***Students with enhanced mood.*** Throughout the course of the study, eleven of the twelve student participants experienced an enhanced mood after working on a drawing warm-up activity. The only student who did not experience an enhanced mood at any point in the study, Jenny, also did not note coming into the classroom feeling stressed or anxious at any point in the study. All of the other student participants experienced a minimum of two instances of enhanced mood after drawing. Eight of the participants experienced six or more instances of enhanced mood. *Figure 60* shows the number of times each student experienced a positively enhanced mood or a decrease in stress and anxiety as a result of the drawing warm-up activities. In the majority of cases, students who began the class period feeling stressed or anxious experienced a decrease in their stress and anxiety symptoms after working on a drawing warm-up activity.

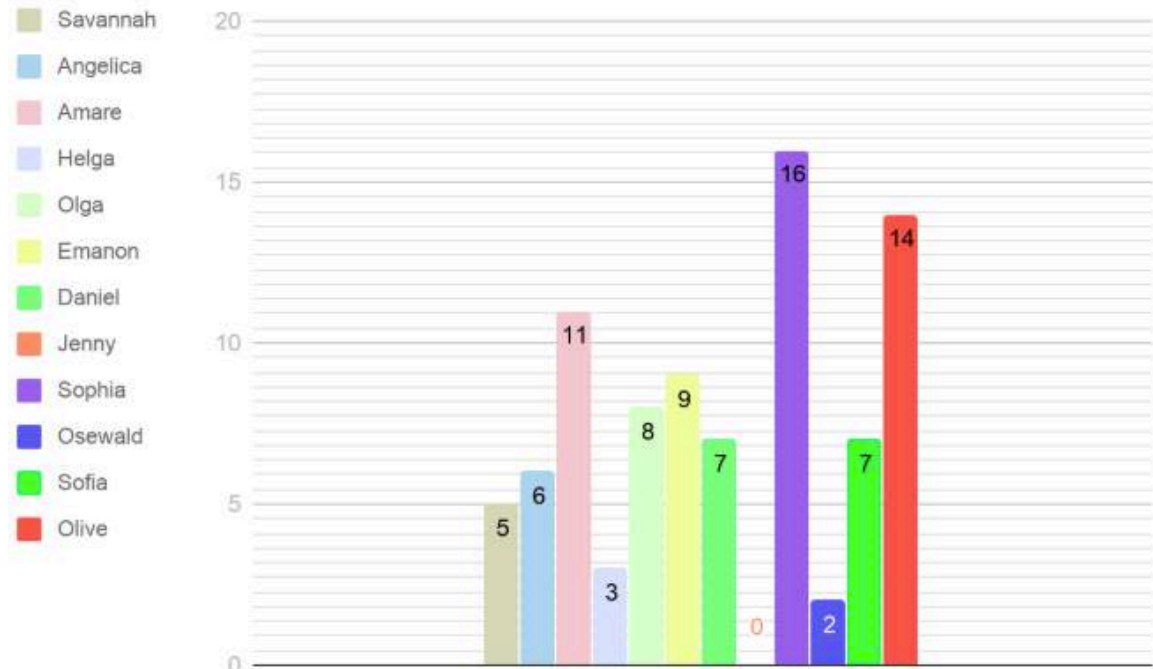


Figure 60. Number of times each participant experienced an enhanced mood.

*Savannah.* Savannah experienced an enhanced mood five times throughout the study. She began the class period feeling “a little anxious” three of the five times in which she experienced an enhanced mood. Her most significant decreases in stress occurred on January 31, February 6 and February 23, 2018. The prompt on January 31, during the *Lines and Shapes* (figure 7) themed week, was to create a drawing using five different types of lines. On February 6, during the *Mandalas and Zentangles®* (figure 8) week, the prompt was to create a zentangle® using any material. The prompt on February 23, during the *Emotions* (figure 10) week, was to create a drawing based on how the participant was feeling, or to create a drawing inspired by what it feels like to be stressed or anxious. On three of these occasions, she rated herself at a “4” on her self-anxiety-rating-scale before the drawing activity and a “3” after the drawing warm-up. She noted in her journals from these warm-ups that she enjoyed the prompts and materials and found the prompt to be “fun.” On February 6 she stated that she enjoyed the



prompt being open to interpretation. On February 23, she wrote that she enjoyed expressing emotions visually, and having some choice in the prompt.



Figure 61. Savannah's drawings from January 31 (top left), February 6 (top right), and February 23, 2018 (bottom).

*Angelica.* Angelica experienced six instances of enhanced mood throughout the course of the study. She began the class period feeling a little stressed or anxious on three of these six occasions, rating herself at a “4” on her self-anxiety-rating-scales. She then rated herself at a “3” after drawing on two of the three occasions and a “2” on one of the occasions. Her most significant decrease in anxiety occurred on January 30, 2018,



when she initially felt a little anxious before drawing, and then noted that she felt “pretty good” after the warm-up activity. The theme of the week was *Lines and Shapes* (figure 7), and the prompt was to create a drawing using repeating organic shapes. She noted in her journal that the prompt “felt good,” and she enjoyed the markers she used for her drawing. She enjoyed exploring different ways to use shapes and stated that she would be open to trying the prompt again.



Figure 62. Angelica’s drawing from January 30, 2018.

*Amare.* Amare experienced an enhanced mood after drawing, eleven times throughout the study. Her most significant instance of enhanced mood was on February 21, 2018, when she rated herself at a “4” on her self-anxiety-rating-scale before drawing, and at a “2” after her drawing. This significant decrease in stress occurred during the *Emotions* (figure 10) themed week. The prompt was to create a drawing inspired by two conflicting emotions. She explained in her journal that she was feeling stressed about her grades, and was also feeling stressed because her boyfriend was feeling stressed. She

noted in her post-drawing journal that he “loved” the prompt and that it caused her to feel happy. Blending the chalk pastels that she chose to work with also seemed to cause a reduction in her stress levels.



Figure 63. Amare’s drawing from February 21, 2018.

*Helga.* Helga experienced three instances of reduced stress throughout the study. Her most significant decrease in stress occurred on the first day of the study, on January 29, 2018, during the *Lines and Shapes* (figure 7) themed week. The prompt was to create a drawing using repeating geometric shapes. She rated herself at a “6” on her self-anxiety-rating-scale before the drawing activity, indicating that she was feeling extremely stressed and overwhelmed. She explained that her stress was due to a possible mistake with her class schedule, and that she was feeling overwhelmed by the idea of not graduating on time because of the possible mistake. After the drawing activity, she rated herself at a “4,” indicating that she was still feeling “a little stressed,” but had

experienced an overall decrease in her stress levels. She noted in her journal that she enjoyed the prompt and the texture of the charcoal pencils and chalk pastels with which she chose to work. The prompt helped to reduce her stress levels overall, but she noted that she needed the issue to be resolved before her negative mood would heighten. It is likely that she experienced the most significant decrease in stress symptoms on this day because this was the day on which she was feeling the most stressed throughout the study.

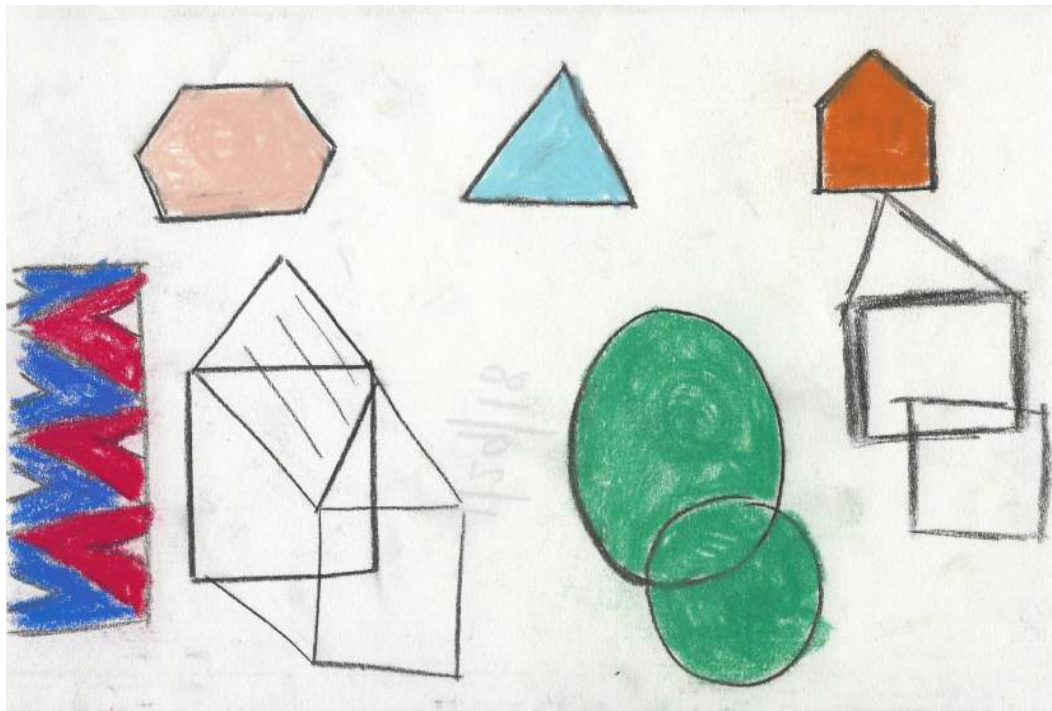


Figure 64. Helga's drawing from January 29, 2018.

*Olga.* Olga experienced an enhanced mood after drawing, eight times throughout the study. On three of these nine occasions, on February 1, 12, and 26, 2018, she began the period experiencing a negative mood. On two of these four days, she began the period feeling “moderately anxious,” and the other two days she began the period feeling “a little anxious.” On the days on which she was feeling “moderately anxious,” she rated herself at a “4” on her self-anxiety-rating-scale after the drawing activity, indicating that

she was still feeling “a little anxious,” but was feeling less anxious than she was prior to drawing. On the days on which she was feeling “a little anxious” before drawing, she rated herself at a “3” on her self-anxiety-rating-scale after drawing, indicating that she was feeling “okay” after working on the activity.

On February 1, 2018, the theme of the week was *Lines and Shapes* (figure 7), and the prompt was to create a drawing using only straight lines. Olga explained in her journal that she was feeling “shaky,” and had “a lot going on.” She noted that the drawing prompt of the day was enjoyable, and the markers she chose for her drawing were easy to use. She stated that the warm-up was a distraction from her anxiety, and that she was feeling a little better after drawing. Olga’s drawing from February 1 can be seen in figure 27.

On February 12, the theme of the week was *Drawing to Sound* (figure 9), and the prompt was to create a drawing while listening to approximately thirty seconds of a series of popular culture songs for ten minutes. She explained in her pre-drawing journal that she was feeling extremely anxious. After working on the drawing, she experienced a slight decrease in her anxiety, and noted that she found the prompt to be “fun.” She found the music being played during the warm-up to be calming. She chose to use a pencil for this drawing. Due to the familiarity of the material, it is unlikely that the pencil contributed to her stress levels.



Figure 65. Olga's drawings from February 12, 2018.

On February 26, 2018, the theme of the week was *Associations*, and the prompt was to create a drawing inspired by the participant's definition of the word strength. Before beginning the drawing activity, she rated herself at a "4" on her self-anxiety-rating-scale, indicating that she was feeling a little stressed. She mentioned feeling tired and wanted to go home in her pre-drawing journal. She rated herself at "3" after working on the drawing activity, indicating a slight decrease in her anxiety levels. Interestingly, she noted in her journal that she did not like the prompt, and would not do it again. She also stated that she did not feel creative while drawing, but did enjoy using the pencil to draw. It is not immediately evident why Olga's stress levels decreased after this drawing prompt.



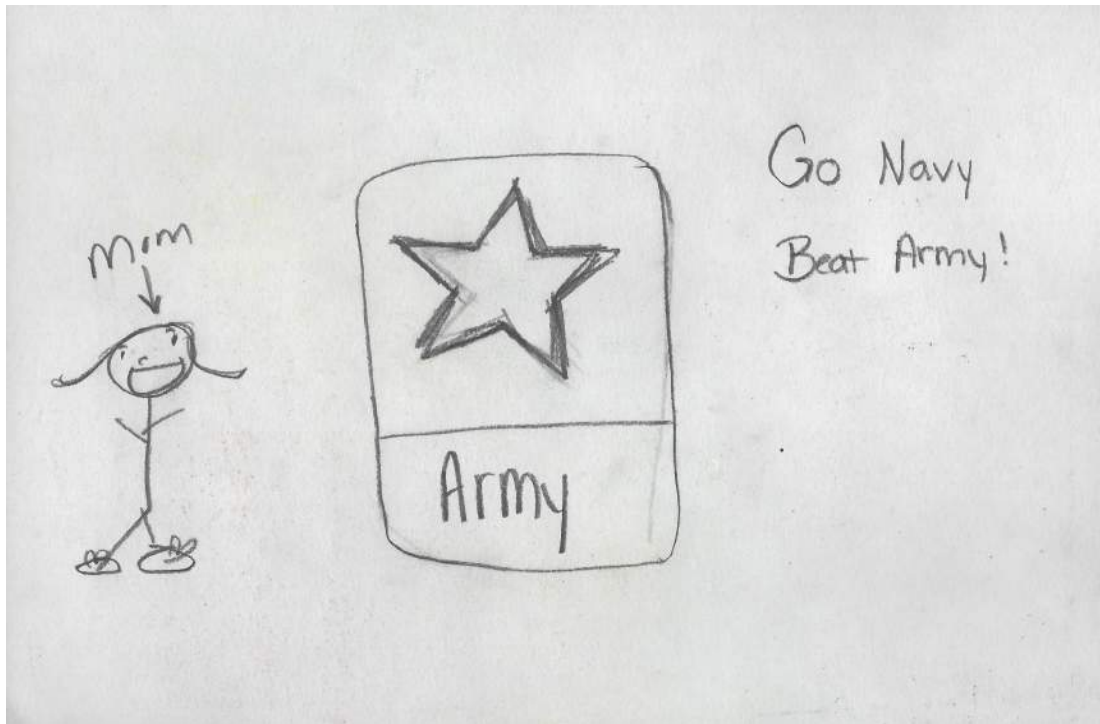


Figure 66. Olga's drawings from February 26, 2018.

*Emanon.* Emanon experienced an enhancement in his overall mood after drawing, on nine occasions throughout the study. He experienced a drastic change in mood on three of these occasions, on February 1, 16, and 20, 2018. The prompt on February 1, during the *Lines and Shapes* (figure 7) themed week, was to create a drawing using only straight lines. He rated himself at a “6” on his self-anxiety-rating-scale prior to drawing, indicating that he was feeling extremely stressed. He noted in his journal that he was feeling “conflicted” and “emotionally overwhelmed.” After working on the drawing activity, he rated himself at a “3,” indicating that he was feeling “okay” as a result of the warm-up. He stated in his journal that he found the prompt to be simple, but enjoyable. He appeared to enjoy the charcoal pencils and chalk pastels that he used for his drawing, and had the opportunity to vent to his peers while he drew. The combination of the social interaction between him and his peers, and the drawing activity, resulted in significantly decreased stress symptoms.

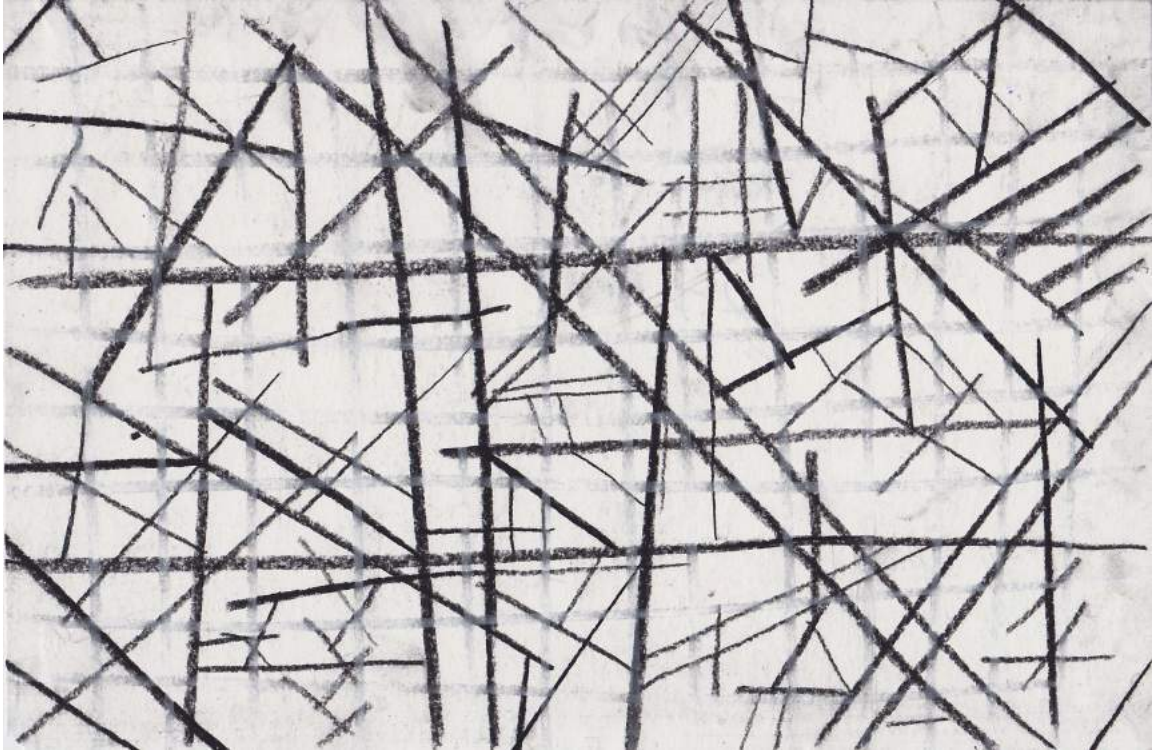


Figure 67. Emanon's drawing from February 1, 2018.

The prompt on February 16, during the *Drawing to Sound* (figure 9) week, was to create a drawing while blindfolded and listening to a premade playlist of sound effects. Emanon rated himself at a “5” on his self-anxiety-rating-scale before the drawing activity, indicating that he was feeling “moderately stressed.” He explained in his pre-drawing journal that he was feeling overwhelmed by his schoolwork, and had not slept enough. After engaging in the warm-up activity, he rated himself at a “3,” indicating that he was feeling “okay” after working on the drawing. He noted in his journal that he found the prompt to be “fun,” and specified that he was feeling less stressed. He stated that he enjoyed not being able to see what his drawing looked like, and would like to try the prompt again in the future.



Figure 68. Emanon's drawing from February 16, 2018.

The prompt on February 20, during the *Emotions (figure 10)* themed week, was to create a drawing inspired by an emotion, using the colors that the participant associated with their chosen emotion. Before the drawing activity, Emanon rated himself at a “6” on his self-anxiety-rating-scale, indicating that he was feeling overwhelmed and extremely stressed. In his journal, he stated that he had not slept, and was anxious about all of the schoolwork that he had to complete. After working on the drawing activity, he rated himself at a “4,” indicating that he was feeling “a little stressed.” In his journal, he noted that he enjoyed the prompt, as well as the opportunity to work expressively. He felt that the markers he used were perfect for what he was trying to do within his drawing, and that the prompt served as a “release” of stress for him. Although he was still feeling a little stressed after the drawing activity, his journal indicated that he experienced an overall improved mood.





Figure 69. Emanon's drawing from February 20, 2018.

*Daniel.* Daniel experienced an enhanced mood after drawing seven times throughout the course of the study. His most significant positive change in mood occurred on February 1, 2018, during the *Lines and Shapes (figure 7)* themed week. The prompt was to create a drawing using only straight lines. Daniel rated himself at a “4” before the warm-up activity, indicating that he was feeling “a little stressed” before working on the drawing. He noted in his journal that he was feeling exhausted at the beginning of the class period. He rated himself at a “2” after the drawing activity, indicating that he was feeling “pretty good.” In his post-drawing journal, he wrote about the prompt being relaxing and easy. He found the markers he used for his drawing to be effective for the drawing he was trying to create. He noted that he did not like the markers as much as the other available materials, but did enjoy them for the prompt.



Figure 70. Daniel's drawing from February 1, 2018.

*Sophia.* Sophia experienced mood enhancement after drawing sixteen times throughout the study. It should be noted that she was the most positively impacted student out of all of the participants. Her most significant decrease in stress and anxiety levels occurred on February 13, 2018, during the *Drawing to Sound* (figure 9) themed week. The prompt was to create a drawing inspired by a premade playlist of meditative music. Sophia rated herself at a “5” on her self-anxiety-rating-scale before the drawing warm-up, indicating that she was feeling “moderately anxious” prior to engaging in the warm-up. She did not provide any information in her pre-drawing journal regarding why she was feeling anxious. After the warm-up activity, she rated herself at a “3,” indicating that she was feeling “okay” as a result of drawing. In her journal, she wrote that the activity made her feel relaxed. She had a lot on her mind prior to the activity, and the drawing allowed her to clear her mind. She enjoyed using chalk pastels for her drawing

and liked blending the material. She found the meditation music calming, which contributed to her significant decrease in anxiety.

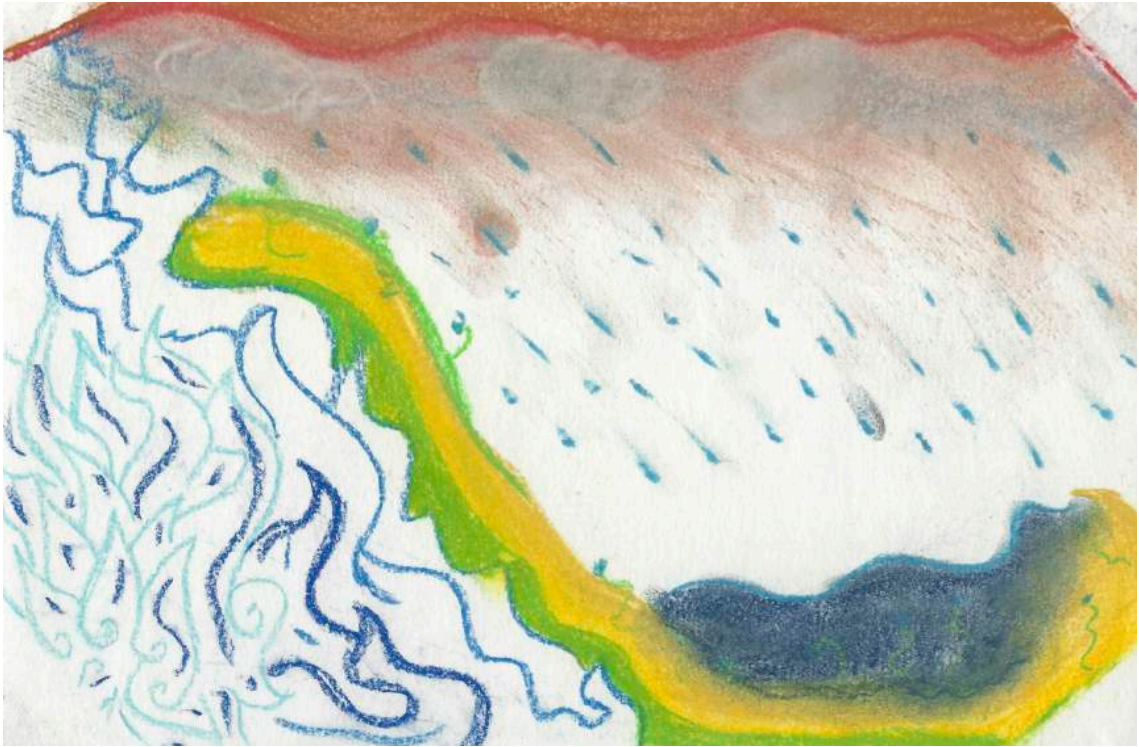


Figure 71. Sophia's drawing from February 13, 2018.

*Osewald.* Osewald's mood was enhanced after drawing on two occasions throughout the study. He primarily experienced no change in mood and did not report experiencing any stress or anxiety throughout the study. His first experience with an enhanced mood occurred on January 31, 2018, during the *Lines and Shapes* (figure 7) themed week. The prompt was to create a drawing using five different types of lines. He experienced a second instance of enhanced mood on February 9, 2018, during the *Mandalas and Zentangles®* (figure 8) themed week of the study. The prompt was to create a mandala inspired by two contrasting emotions. Osewald chose to continue working on the drawing he started on February 7, instead of beginning a new drawing. He completed the drawing during the warm-up period on February 9, 2018. The finished drawing can be seen in figure 72.





Figure 72. Osewald's drawings from January 31 (left) and February 9, 2018 (right).

On both of the occasions on which Osewald experienced an enhanced mood after drawing, he began the period by rating himself at a “3” on his self-anxiety-rating-scale, indicating that he was feeling “okay” before the drawing activities. He noted in both of his journals from these occasions that he was feeling tired, and on one of the occasions mentioned having a lot of schoolwork to do. After the drawing activities on both occasions, he rated himself at a “2,” indicating a slight enhancement in his mood. On both occasions, he expressed enjoying the prompts and feeling focused as a result of the drawings. He enjoyed the markers he used on January 31 and the sharpies he used on February 9. He likely did not experience a more significant decrease in stress symptoms because he was already feeling okay at the beginning of the class period. Although his decrease in stress levels was minimal, he did experience an overall enhanced mood as a result of the drawing activities.

*Sofia.* Sofia experienced an enhanced mood after drawing seven times throughout the study. She experienced two significance decreased in stress levels throughout the study. The first occurred during the *Lines and Shapes (figure 7)* themed week of the study, on January 29, 2018. The prompt was to create a drawing using repeating geometric shapes. She rated herself at a “4” on her self-anxiety-rating-scale before the drawing activity, indicating that she was feeling “a little stressed.” She did not provide a reason behind her stress levels but did note that she was feeling “optimistic” about the following day. She then rated herself at a “2.5” after working on the drawing warm-up. In her journal, she stated that the prompt allowed her to “get out” her feelings. She enjoyed the abstraction of the drawing prompt and stated that it forced her to think. She felt that her mind had been cleared as a result of the drawing activity. She did not like the texture of the oil pastels that she used for her drawing, but found the prompt calming despite her distaste for the materials she used. She may have experienced a little more of a decrease in her stress levels had she chosen a different material, or had she had more experience using oil pastels.

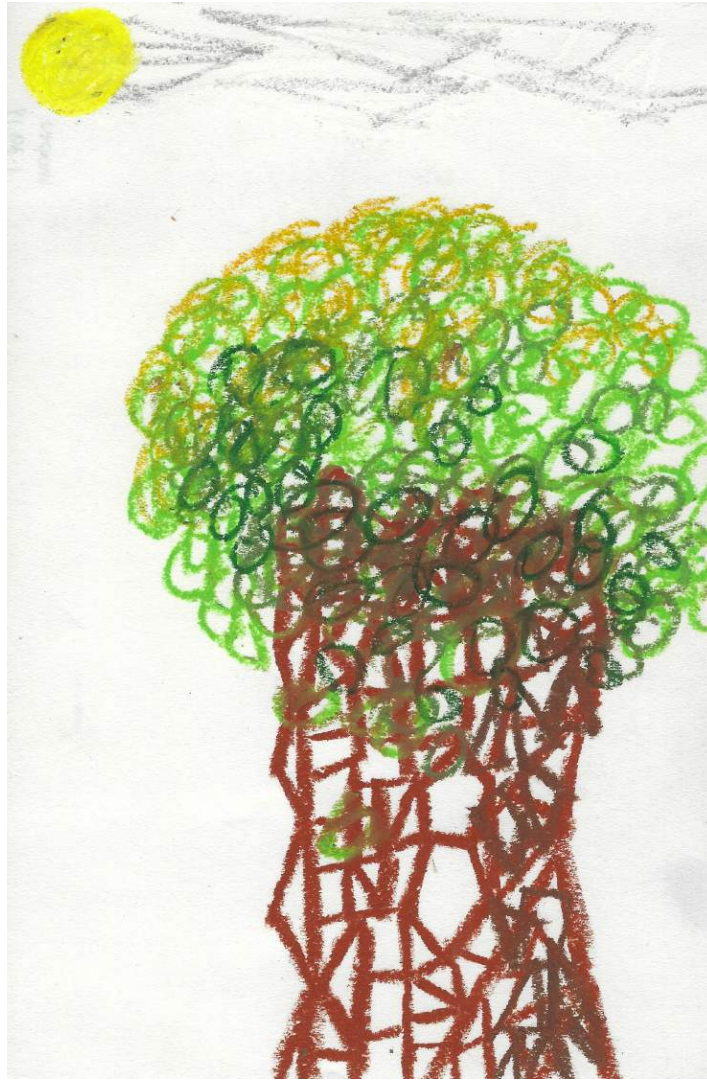


Figure 73. Sofia's drawing from January 29, 2018.

Sofia's second significant decrease in anxiety symptoms occurred on February 13, 2018, during the *Drawing to Sound* (figure 9) themed week of the study. This instance was one of the most significant decreases in stress and anxiety experienced by all of the participants throughout the study. The theme was to create a drawing inspired by a premade playlist of meditative music. She rated herself at a "6" on her self-anxiety-rating-scale prior to the drawing activity, indicating that she was feeling overwhelmed and extremely stressed. She also stated in her pre-drawing journal that she was feeling stressed. After completing the drawing warm-up, she rated herself at a "2," indicating a

significant decrease in stress levels. In her journal, she wrote about feeling calm as a result of the prompt. She enjoyed blending the chalk pastels and using them for her drawing. The meditative music likely had an impact on the reduction of stress experienced by Sofia.

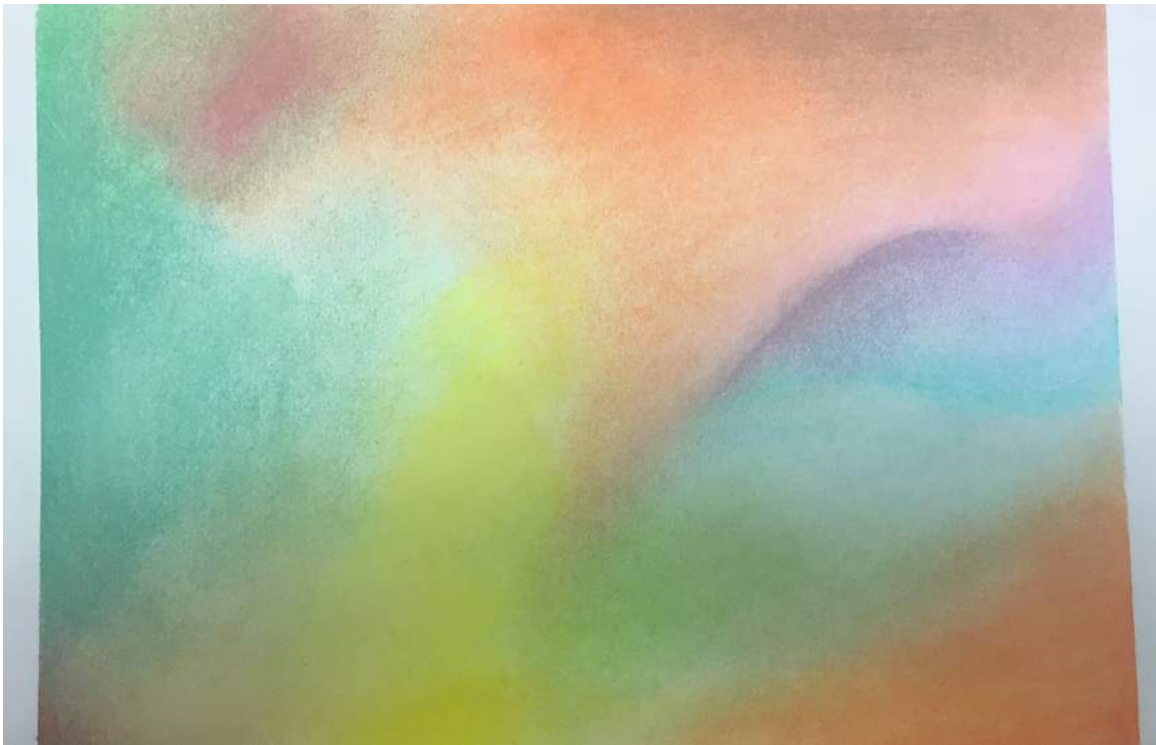


Figure 74. Sofia's drawing from February 13, 2018.

*Olive.* Olive experienced an enhanced mood after drawing on fourteen occasions throughout the study. She was the second most positively impacted student participant out of the twelve participants of the study. Olive experienced one of the most drastic changes in mood of any participant throughout the entirety of the study. Her most significant decrease in anxiety and stress occurred during the *Emotions* (figure 10) themed week, on February 21, 2018. The prompt was to create a drawing inspired by two contrasting emotions. She rated herself at a “5” on her self-anxiety-rating-scale before engaging in the drawing, indicating that she was feeling “moderately anxious.” She did not provide a reason for why she was feeling anxious and stressed at the



beginning of the class period. She then rated herself at a “1” after working on the drawing prompt, indicating that she experienced a significant decrease in stress levels. In her journal, she wrote about feeling calm as a result of the drawing activity. She enjoyed expressing emotions visually, found the activity to be “fun,” and noted that she was content with the way her drawing came out. She enjoyed using oil pastels to work on her drawing and found them to be easy to blend. She most enjoyed the fluidity of the material. Her enjoyment of the material, as well as the prompt, contributed to her significant decrease in anxiety and stress. Olive chose to continue working on this drawing the following day, instead of starting a new drawing. *Figure 75* shows the completed drawing.



*Figure 75.* Olive’s drawing from February 21, 2018.



## Presentation of Findings

**In the Context of the Research Questions.** Based on the results of the study, art educators can most effectively implement anxiety and stress-reducing drawing activities into their curricula through the implementation of daily-ungraded warm-up drawings. The integration of these activities can promote drawing as a stress-management tool for adolescents, and can result in encouraging them to draw more frequently in their free time. Implementing short activities that are not graded can encourage students to experiment more with materials and mark making, which can lead to an improvement in their overall confidence in their art-making abilities.

*Students' favorite and least favorite drawing materials and prompts.* Two of the questions from the third round of interviews focused on which prompts and materials students enjoyed the most over the course of the study. The student participants' responses varied, but many of them shared similar responses. The top chart in *figure 76* shows how many students stated that they enjoyed or disliked a material, and the bottom chart shows the students favorite and least favorite weekly prompt themes. It should be noted that many participants listed more than one material or prompt as their favorite. A weekly prompt theme was listed if a participant stated that they had at least one favorite or least favorite from that week. All participants' responses from the third interview can be seen in Appendix G.

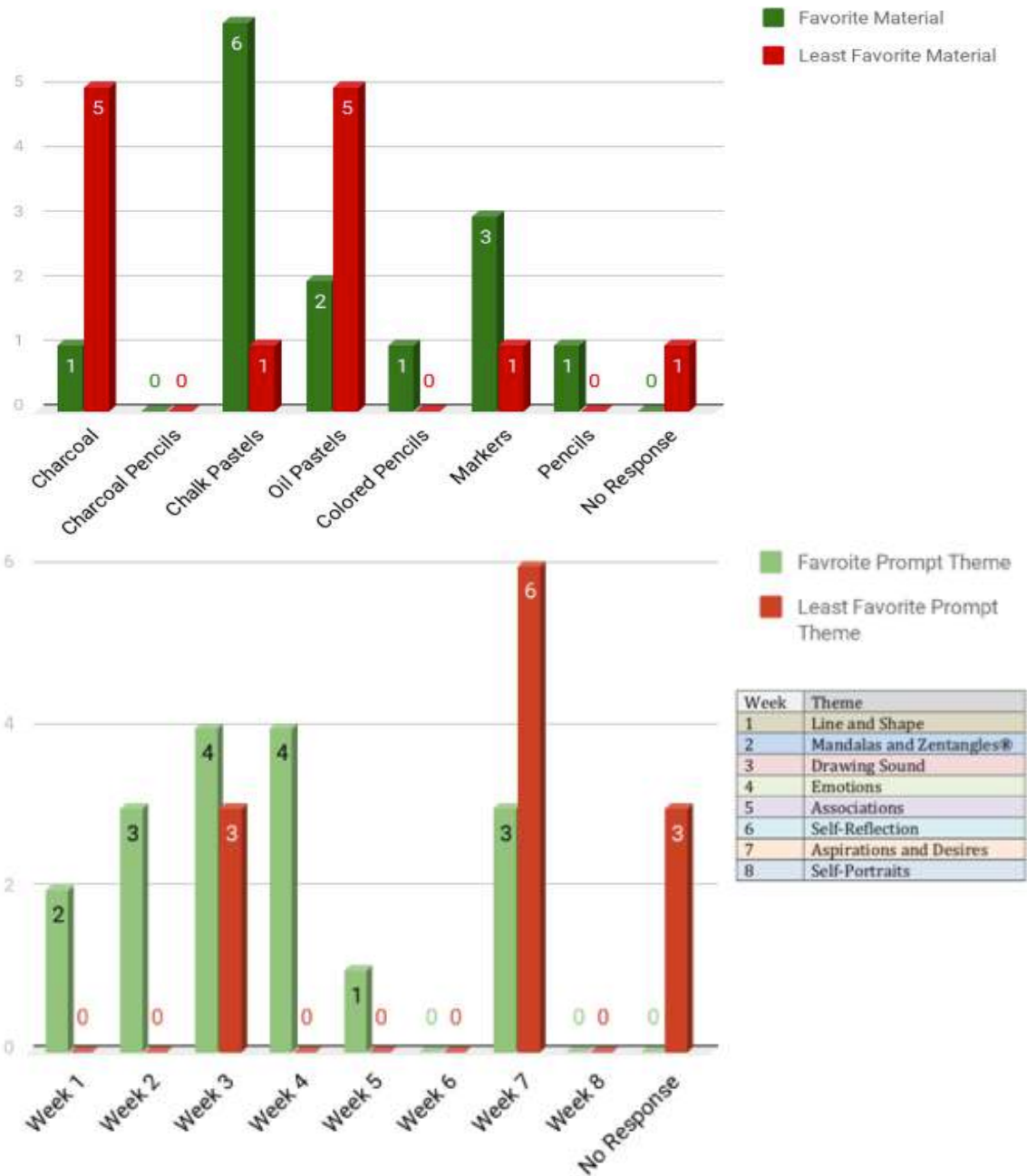


Figure 76. Students’ favorite and least favorite materials (top) and prompts (bottom).

*Favorite materials.* Students overall most enjoyed materials that could easily be blended and were fluid in nature. The most commonly listed favorite material was chalk pastels. Students who listed chalk pastels as their favorite described them as messy, but vibrant and easy to blend. Three students also listed markers as being one of their favorite materials because they found them to be familiar and easy to control. Daniel

described the markers as being “uniform and consistent” (Personal communication, April 16, 2018).

*Least favorite materials.* Students primarily showed distaste for charcoal and oil pastels. The participants who did not like charcoal described the material as “messy” and “difficult to control.” Some students also did not like how easily vine charcoal smudges. The students appeared to be more frustrated than stressed by the material. The students who disliked the oil pastels stated that they did not like the texture of the material, and found them difficult to blend or control. Olga even stated that the oil pastels were “like bad crayons” (Personal communication, May 3, 2018). Students most frequently listed the texture of the oil pastels as being their reason for finding it frustrating. Amare listed markers as her least favorite material because she found their permanence to be frustrating. She mentioned that due to her lack of drawing experience, she preferred materials that could be easily erased (Personal communication, May 4, 2018). Jenny did not list any least favorite materials because she did not find any of them to be stressful to use (Personal communication, April 26, 2018).

*Favorite prompts.* Students most enjoyed the prompts that were abstract in nature. They most likely enjoyed these prompts the most because they were open to interpretation. Students most frequently felt content with the product of their drawings during the weeks in which the prompts were abstract, and also most consistent produced completed and visually strong drawings. Students specified enjoying the *Emotions* and *Drawing to Sound* themed weeks. Students described enjoying the challenge of visually interpreting emotions. The theme of this week served as an outlet for many of the participants, allowing them to vent and express themselves through their drawings.

Students who enjoyed the *Drawing to Sound* week frequently stated that they had never tried activities of that nature before, and found it to be relaxing and enjoyable. A few students listed zentangles® as their favorite prompts and stated that the repetition was relaxing. Several students also listed the *Aspirations and Desires* themed week as one of their favorites because they enjoyed thinking about what the future may hold for them.

*Least favorite prompts.* Half of the participants listed the *Aspirations and Desires* themed week as being one of their least favorite prompt weeks. These participants specified that they did not like the prompts that asked them to think about their future. Amare, Emanon, Daniel, and Sophia stated that they disliked these prompts because thinking about the uncertainty of their future was stressful (Personal communications, April-May, 2018). Emanon stated the following during his third interview, about the prompts that asked students to reflect on their futures:

I have no idea where I'm going to be in the future. You can envision some things to maybe guide you, but things can change in an instant. I don't like thinking about having a set plan and having everything crash down because one thing happened to change it. It kind of stresses me out a little bit (Personal communication, April 20, 2018).

Daniel echoed Emanon's concerns by stating, "I honestly don't know about my future. It stresses me out a lot. I'm really indecisive" (Personal communication, April 16, 2018). Sophia mentioned that she was nervous about whether or not her future would turn out the way she had pictured (Personal communication, April 17, 2018). Jenny spoke about having difficulty developing a drawing idea based on the prompts from this week, and at times felt somewhat stressed by this difficulty (Personal

communication, April 26, 2018). Olive had one particular day from this week in which she became more stressed. She stated that she wished she had a photo-reference and was primarily stressed by not having one (Personal communication, May 16, 2018)

Three students listed different prompts from the *Drawing to Sound* week as being their least favorite. Savannah specifically did not like the prompt that asked them to create a drawing inspired by a premade playlist of nature sounds. She stated that she struggled to interpret the sounds visually, and was not sure how to approach her drawing (Personal communication, April 24, 2018). Her struggle to develop an idea did not cause her stress, or cause a negative shift in her mood. Savannah's drawing from this prompt can be seen in *figure 77*.

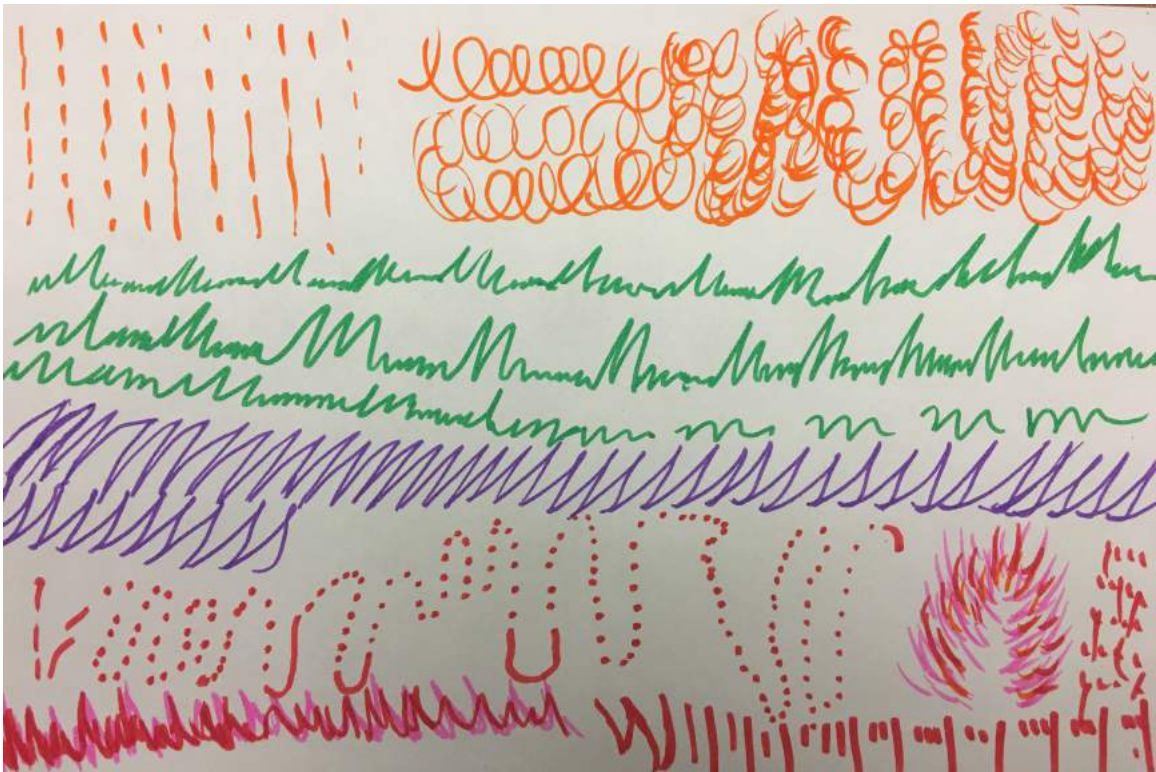


Figure 77. Savannah's drawing from February 15, 2018.

Sofia could not remember which prompt was her least favorite. When reading through her journal entries, I found that the prompt that asked them to draw to a premade

playlist of sound effects while blindfolded or with closed eyes was the prompt that made her the most uncomfortable. She wrote in her journal that this prompt made her feel physically uncomfortable because she chose to wear a blindfold (Participant journal, February 16, 2018). This prompt was among the most stressful for Sofia. Her drawing from this prompt can be seen in *figure 43*.

Olive specified that the prompt that asked the participants to create a drawing while listening to approximately thirty seconds of a series of popular culture music for ten minutes was her least favorite. She spoke about not liking the music and not being sure how to interpret the songs that were played visually. She also felt the least content with the drawing that she produced on this day. This prompt was among the most stressful for Olive. The product of her drawing can be seen in *figure 46*.

Three students stated that they there were not any prompts throughout the study that negatively impacted their mood overall. Helga specified that she became occasionally stressed when she was not content with the drawing that she produced, but did not have any least favorite prompts. She stated that she enjoyed all of the prompts overall (Personal communication, May 4, 2018). When asked if any prompts increased their stress levels during the study, Angelica and Osewald simply said, “No” (Personal communications, April-May, 2018).

***The most and least effective drawing prompts.*** Thirty-nine drawing warm-up prompts were designed for the study, and twenty-nine of those prompts were utilized throughout the implementation of the study. Student participants experienced more increases and decreases in stress levels within the first four weeks than within the last four weeks of the study. They more frequently experienced no change in mood within

the last four weeks of the study. Thirteen of the twenty-nine prompts caused at least one student to experience a negative shift in mood after drawing. Ten of these thirteen prompts were implemented within the first four weeks of the study, and three were implemented within the last four weeks. Twenty-six of the twenty-nine prompts caused at least one student to experience a positive shift in mood after drawing. Seventeen of these twenty-six prompts were implemented within the first four weeks of the study, and nine were implemented within the last four weeks. Only three of the twenty-nine prompts did not cause any of the participants to have a decrease in stress and anxiety. One of those three prompts also did not cause any participants to experience an increase in stress and anxiety.

*Figure 78* shows the number of students who experienced an increase or decrease in stress and anxiety, or no change in mood, each day of the study. Students were not included in the chart if they were absent or if they did not provide a pre or post-self-anxiety-rating-scale rating in their journal. The top chart includes data from the first four weeks of the study, and the bottom chart includes data from the last four weeks.

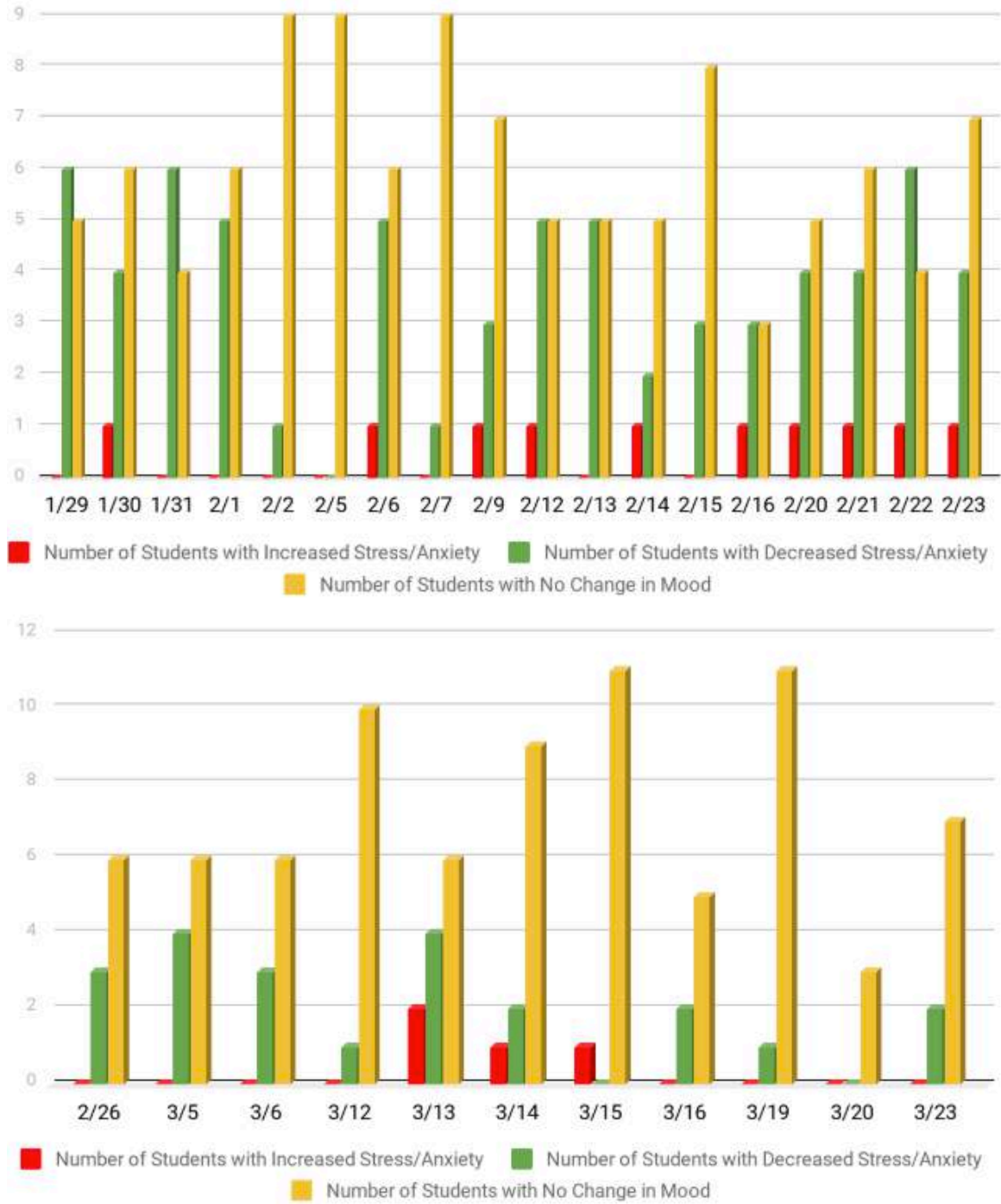


Figure 78. The effectiveness of each prompt in enhancing students' mood.

*The least effective prompts.* The prompt that caused the most cases of increased anxiety was implemented during the *Aspirations and Desires* (figure 13) themed week on March 13, 2018. The prompt was to create a drawing inspired by a place that the



participants' had wanted to visit in the future. Only two students, Daniel and Olive, experienced increased stress symptoms on this day. Daniel's drawing from this prompt can be seen in *figure 53*, and Olive's can be seen in *figure 48*. Only one participant experienced an increase in stress on each of the rest of the thirteen prompt days that caused a negative shift in mood. None of the prompts from the study caused any significant number of cases of increased stress and anxiety.

The prompt that caused the most significant negative shift in anxiety happened to Olive during the *Drawing to Sound* week, on February 12, 2018, when the participants created a drawing while listening to thirty seconds of a series of population culture songs for ten minutes. Her mood shifted from feeling "pretty good" to "moderately anxious" after working on the drawing, primarily due to her lack of confidence in the drawing that she produced that day. Olive's drawing from this prompt can be seen in *figure 46*.

The two other most significant increases in stress and anxiety happened to Emanon during the *Drawing to Sound* themed week on February 14, 2018, and to Daniel during the *Emotions* themed week on February 23, 2018. Emanon went from feeling "pretty good" to "a little stressed," and Daniel went from feeling "okay" to feeling "moderately stressed" on these days. Daniel enjoyed the prompt but felt stressed because he focused on a negative emotion, and Emanon was not content with the way he used his materials, as well as the drawing that he produced. Daniels drawing can be seen in *figure 52*, and Emanon's can be seen in *figure 41*.

For many of the participants that experienced an increase in stress and anxiety levels, the days on which they experienced a negative shift in mood correlated with the weekly theme they listed as their least favorite during their third interview. Negative

shifts in mood did not, however, always correlate with their least favorite weekly theme for all of the participants. For example, Savannah listed one of the prompts from the *Drawing to Sound* week as her least favorite prompt from the study, but experienced no change in mood on the day in which the participants worked on this prompt. The day on which she experienced a negative shift in mood instead occurred during the *Emotions* themed week.

Emanon stated in his third interview that the *Aspirations and Desires* themed prompts were his least favorite, but experienced no negative shift in mood during that week of the study. He did experience a negative shift in mood during the *Drawing to Sound* and *Emotions* themed week. Amare also did not experience a negative shift in mood during the week that she listed as her least favorite, the *Aspirations and Desires* themed week. It should be noted, however, that she did not experience any instances of a negative shift in mood throughout the study. Olive experienced increased stress and anxiety symptoms on multiple days that were not listed as being her least favorite prompts. She did, however, experience increased stress symptoms during both of the weeks that she listed as being her least favorite, the *Drawing to Sound* and the *Aspirations and Desires* themed weeks.

*The most effective prompts.* The number of students who experienced a positively enhanced mood after each daily drawing warm-up can be seen in *figure 78*, and the self-anxiety and stress ratings from before and after the drawing activities can be seen in *figure 28*. The most significant positive shifts in mood occurred within the first four weeks of the study. There were a total of twenty-two instances of decreased stress and anxiety in the first week, nine within the second, eighteen within the third, and eighteen

within the fourth. There were three instances of decreased anxiety and stress symptoms during the fifth week of the study. It should be noted that only one of the planned prompts was completed during the fifth week, due to the unexpected absence of the researcher from the classroom. During the sixth week of the study, there were seven instances of decreased stress and anxiety levels. Only two of the planned prompts were completed during this week, due to some unexpected days off from school. The seventh week of the study contained nine instances, and the eighth week contained three instances of decreased stress and anxiety symptoms. Two of the planned prompts from the last week of the study were not completed, as a result of unanticipated snow days.

The highest number of students to experience an enhanced mood after drawing on a single day was six. Six participants experienced an enhanced mood on the same day three times throughout the study, on January 29 and 31, and February 22, 2018. On January 29, students were participating in the *Lines and Shapes (figure 7)* themed week, and the prompt was to create a drawing using five different repeating geometric shapes. Savannah, Angelica, Amare, Helga, Sofia, and Olive each experienced a decrease in their stress and anxiety symptoms as a result of the drawing warm-up. On January 31, the students were again participating in the *Lines and Shapes (figure 7)* themed week, and the prompt was to create a drawing using five different types of line. Savannah, Amare, Daniel, Sophia, Osewald, and Olive each experienced a decrease in stress levels as a result of the prompt. On February 22, 2018, the students were engaging in the *Emotions (figure 10)* themed week, and the prompt was to create a drawing illustrating the participants' happy place. Amare, Olga, Daniel, Sophia, Sofia, and Olive each experienced a positively enhanced mood as a result of engaging in the drawing warm-up.

The participants who experienced positively enhanced moods on each of these three days described the drawing activities as relaxing or calming, fun, easy, and enjoyable. Many of the participants also described feeling happy while drawing, as well as after the drawing activity concluded.

Based on the data collected, the first, third, and fourth weeks of the study were the most effective in decreasing the stress and anxiety symptoms of participants. This finding indicated that the prompts that were based in abstraction and expression, specifically the *Lines and Shapes*, *Drawing to Sound*, and *Emotions* themed weeks, had the most positive effects on students' moods. This data was correlated with the data collected from the third interview, during which the majority of participants spoke about most enjoying the prompts during these three weeks. Interestingly, only two participants listed the theme of the first week, *Lines and Shapes*, to be their favorite week, despite this week having the highest number of decreased anxiety and stress symptoms.

***Anxiety and Stress and Student Engagement.*** Student participants' engagement in the drawing warm-ups during the study was not always directly connected to the stress and anxiety levels they were experiencing before the drawing warm-up activities. The majority of the participants engaged in the warm-up activities for the full time allotted, on a daily basis, throughout the study. Interestingly, students who experienced an increase in stress levels as a result of the drawing warm-up activity were working the full, allotted time, on their drawings on all of the days in which they experienced a negative shift in mood. On days in which students were entirely focused on their drawings and experienced decreases in stress and anxiety levels, or positive enhancements in mood, their drawings were frequently more thoughtfully completed. Students more often treated

these drawings as an opportunity to complete a small artwork, rather than a practice drawing session, when they were fully engaged.

Only one participant was observed drawing minimally, or not engaging in a drawing warm-up at all during the study. Olga drew minimally during drawing warm-up activities six times throughout the study. She also chose to skip drawing prompts all together on three occasions. During her third interview, she spoke about not knowing what to draw or feeling too anxious to focus on all of these occasions. In her first interview, she explained that her high anxiety levels in school often kept her from being able to focus entirely. There was not one particular week during the study during which students were drawing minimally more frequently than others.

The drawings that were created by student participants on days in which they were fully engaged were not only more complete but also more aesthetically engaging. Students were more likely to experiment with their use of shape, color, and line on these days. Students also experimented more with their use of value, mark making, and layering materials when they enjoyed the drawing prompt. Students were given the option to choose drawings from their warm-up activities to display in the annual art show held at the school. Many participants chose many of their warm-up drawings to display in the art show.

***Artistic Experience and Mood.*** Student participants' previous artistic experience did not vary significantly. Only two of the participants were beginners, four were moderately experienced, and six were advanced in their artistic skill. The students who were beginners or moderately experienced were the least likely to create an aesthetically engaging and complete drawing. They were also less likely to experience an increase in

their stress levels as a result of a drawing warm-up activity. Savannah, a beginner, only experienced one negative shift in mood throughout the study. This shift in mood was not significant, and she was not made to feel significantly anxious or stressed as a result of the drawing warm-up. Amare, Helga, Olga, Osewald, and Sophia, each beginners or moderately experience participants, did not experience any negative shifts in mood throughout the study. Jenny and Angelica were the only advanced students who did not experience a negative shift in mood throughout the study.

The student participants with advanced skills in the arts were more likely to experience a negative shift in mood as a result of the drawing warm-up activities. Emanon, Sofia, Olive, and Daniel, all participants with advanced artistic skills, each experienced negative shifts in mood during the study. Emanon, Daniel, and Olive each described feeling dissatisfied with the product of their drawing on multiple of the occasions in which they experienced an increase in stress levels. Emanon and Olive only appeared to feel more stressed on days in which they were not happy with the drawing that they produced.

Each of the students with more advanced artistic skill appeared to have higher expectations of themselves, which contributed to them being more likely to experience a negative shift in mood. Olive was the student with the most advanced artistic skill and appeared to have the highest expectations of herself. She experienced the most instances of increased stress or anxiety levels throughout the study, and only had these experiences when she was not pleased with her drawing or was unable to complete her drawing. Despite experiencing negative shifts in mood more frequently than the beginner or

moderately experienced students, the advanced students were more likely to create aesthetically engaging and complete drawings throughout the study.

***Student Confidence Levels.*** During the third and final interview of the study (Appendix G), participants were asked about the impact of the study on their overall confidence in their drawing abilities. When asked whether or not they felt more confident in their artistic skill as a result of the study, all of the twelve participants responded “yes.” Helga stated that she felt self-conscious about her drawing abilities at the beginning of the school year, and felt more confident as a result of the study. Olga explained that the study helped her to feel more comfortable with drawing in front of other people, as well as more confident in her skill. She stated that the support she received from her peers was the most effective in helping her to feel more confident. All of the participants stated that the study helped them to feel more confident because it gave them the opportunity to freely experiment with materials and new ways of drawing, without the stress of being graded. They also stated that the study exposed them to new ways of drawing through the warm-up activities, which has increased the motivation to draw for most of them. All of the participants also stated that they felt the study exposed them to the idea of using drawing as a way to manage their stress or anxiety.

When asked whether or not they would continue to draw in their free time as a result of the study, all but one participant said that they would. Many of the participants stated that they had already started to draw more frequently as a result of the study. Olive and Helga explained that they had been doodling more frequently. Olga, the only participant to say she would not continue to draw in her free time, expressed a desire to draw more, but felt she did not have time to set aside to do so.

Students were more likely to experience an increase in stress and anxiety levels during the first four weeks of the study. For many of the participants, they were likely experiencing less negative shifts in mood during the last four weeks of the study because they were beginning to feel more confident in their drawing skills. It was observed that students became more focused and deliberate in their drawings over the course of the study. It should be noted, however, that students produced fewer drawings during the last four weeks of the study, as a result of the unexpected absence of the researcher, as well as other unexpected days off from school.

**In the Context of the Literature.** Each of the drawing activity themes, as well as the daily drawing warm-ups for the study, were designed with the literature discussed in the literature review in mind. Prompts based in repetition were inspired by Curry and Kasser's (2005) study, and the prompts based in kinesthetic engagement were inspired by Burns (2009). The prompts based on abstraction and emotional expression were inspired by Chambala (2008), as were the prompts based in self-reflection.

**Repetition.** Curry and Kasser (2005) found that repetition in drawing can lead to reduced anxiety symptoms. The *Line and Shape* and *Mandalas and Zentangles®* themed weeks were designed based on this theory. The prompts from both weeks were designed to have an element of choice and to be relatively open-ended. While the majority of students did not list either of these weekly themes as their favorite, the *Line and Shape* themed week resulted in the highest number of reduced stress and anxiety symptoms, or instances of positively enhanced mood. Many of the participants stated that they enjoyed how open-ended the prompts were, and stated in their journals that there were many possibilities for each prompt.



Students seemed to enjoy zentangles® more than mandalas, although many participants stated that they enjoy creating mandalas. The students who preferred zentangles® over mandalas felt restricted by the circular nature of mandalas. Students who were beginners or moderately experienced in the arts were more likely to struggle with developing an idea for these prompts, as well as less likely to create a completed and aesthetically engaging drawing. This struggle did not, however, always contribute to changes in these participants' overall mood. Participants found the prompts based in repetition to be relaxing and calming overall.

**Abstraction.** Burns (2009) theorized that art-making activities that are kinesthetically engaging would reduce stress or anxiety levels. Chambala (2008) theorized that focusing on experiences while making art can have a direct impact on anxiety and stress levels. Burns' (2009) theory inspired the prompts from the *Drawing to Sound* themed week, and Chambala's (2008) theory inspired the prompts from the *Emotions* themed week. The themes from both of these weeks were designed to encourage students to express themselves using abstract imagery. The prompts from both of these weeks were among the students' favorite from the study. They found the prompts from these weeks to be the most relaxing and calming, as well as the most enjoyable. Many of the participants even requested completing more prompts based on emotions or drawing to music in the future. The prompts from both of these weeks resulted in the second highest number of decreased stress and anxiety symptoms throughout the study.

Like the prompts based in repetition, students with less artistic experience were more likely to have difficulty figuring out how to approach a prompt that was based in

abstraction. However, the students with less artistic experience also overall had the least difficulty developing a completed drawing during the *Drawing to Sound* and *Emotions* themed weeks. They likely were more frequently able to complete a drawing during these weeks because of the open-ended nature of the prompts, as well as because the students did not have to be as concerned about drawing something representational. Many of the participants listed prompts from these weeks when asked which prompts from the study that they would be most likely to try using outside of the study in the future.

***Self-reflection.*** Chambala (2008) theorized that self-reflection could reduce anxiety, and Curl (2008) theorized that focusing on one's previous experiences while making art could reduce anxiety. The prompts for the *Associations*, *Self-Reflection*, *Aspirations and Desires*, and *Self-Portrait* themed weeks were based on each of these theories. The prompts that were based on students' personal preferences did reduce anxiety and stress in some participants. The prompts that were focused on self-reflection, especially those that asked students to consider their futures, were more likely to cause stress in the participants. Not all of the participants experienced an overall negative shift in mood after engaging in these prompts, but they did state that they did not enjoy them in their journals. The prompts from the self-reflection based weeks were among the least favorite of the students from the study. The students often felt uncomfortable when asked to reflect on themselves, and frequently felt anxious when asked to consider their future.

***Open-ended Prompts.*** Student participants overall appeared to enjoy prompts that were open-ended, over the prompts that provided visual guidance. The most open-ended

prompts were those designed from the *Line and Shape*, *Drawing to Sound*, and *Emotions* themed weeks. Many of the prompts from the *Mandalas and Zentangles*® themed week were also open-ended. The prompts that provided more visual guidance, by giving students something specific to focus on for their drawing, felt more restrictive to the majority of participants. The student with more advanced artistic skill felt the most restricted by these prompts. The students with less artistic experience were more likely to enjoy the prompts that provided some visual guidance and struggled less to develop a drawing during these weeks. However, all students were more likely to produce a completed and aesthetically engaging drawing during the weeks in which the prompts were more open-ended and open to interpretation.

***Conversing with Students.*** Dunn-Snow and D'Amelio (2000) suggested a variety of ways to support students in their art-making using methods commonly used by art therapists, without taking on the role of an art therapist. Throughout the study, I supported student participants' creative processes by casually conversing with them about their artwork, without interpreting the content of their work. These conversations included asking them to tell me about the content of their work, their reaction to the materials they chose to use, and their reaction to the prompt. These conversations at times lead to students thinking of new ideas, which allowed them to expand on their existing idea. It also encouraged students to experiment more with their materials and mark making, when suggestions on the use of materials were offered. Student participants became more open to speaking to me about their artwork and their creative process throughout the study.

Throughout the study, I facilitated conversations among participants, as a way to further engage students in their work, as well as to help students to feel more confident about conversing about their artwork. Conversations among participants were facilitated in two ways, through casual conversations with the participants and students sitting at their table in the art room, and through class or table discussions at the end of the warm-up periods. Casual conversations with the participants and their peers during the drawing activities were used to help participants who were struggling to develop an idea, as well as to help participants get feedback on their drawings while they worked. One student began to engage in conversation with each other about their work, while they worked on their drawings, I moved on to the next group of participants. Over time, throughout the study, many of the participants began to naturally engage in these conversations with their peers, without me facilitating it.

At the end of many of the warm-up periods, students were given the opportunity to share their work with either their table group or with the class. Over the course of the study, some of the participants became more likely to present their work to their class. The students who still felt uncomfortable sharing with their entire class were more likely to feel comfortable sharing in small groups. Students were also given the opportunity to choose a drawing of one of their peers that they felt was interesting or successful after some of the warm-ups. Students shared why they felt a drawing was interesting or successful during these opportunities. During class discussions about student work, I would also contribute positive comments regarding the successfulness of their artwork. These two interactions between the participants and their peers contributed to their growth in artistic confidence.

**In the Context of the Research Environment.** The participation in the study was extremely limited based on the location of the research site, as well as the demographics of the student body within the research site. This limited demographic of the research site resulted in a limited demographic of research participants. The majority of the participants were Caucasian and female, and the majority of participants were eighteen and in the twelfth grade. This limitation in demographic limited my ability to study the effect of race or ethnicity, gender, or age on the impact of the drawing activities on students' stress and anxiety levels. This study is therefore only reflective of the demographics of the students in my classroom during the 2018 school year.

Since I was limited in the contact I had with students in the classroom environment, it was not possible for me to study the changes in student participants' anxiety and stress levels throughout the day. Had I been able to study their stress and anxiety levels throughout the day, I may have been able to get a better understanding of the impact of the drawing activities on their overall stress and anxiety levels. I was instead limited to studying their stress and anxiety levels during the specific class time they were scheduled to have an art class by the school.

**In the Context of the Researcher as Self and Practitioner.** The study overall significantly increased my rapport with my students. Conversing with students while they drew about their drawings, as well as about their journal prompts, allowed me to gain a better insight into the minds of my students. I learned a great deal about the participants through reading their journals and through informal conversations with them during the warm-up periods. Conversing with students made students more comfortable with me as their teacher, as well as made them more likely to share personal details about

themselves with me, which ultimately contributed to their increase in confidence throughout the study.

### **Implications for the Field**

**Significance of the Findings.** The data collected for the purpose of the study shows that high school students can significantly benefit from being provided with an outlet to express themselves during the school day. Having opportunities to express themselves was particularly beneficial to the student participants of the study, each of which struggled with varying levels of stress or anxiety, and some of which struggled with both stress and anxiety. The students were given two opportunities to express themselves through the daily drawing warm-up activities. At the beginning of each class period, students were each handed their journals and were given five minutes to write about their emotional state in their journals. Participants often chose not to provide data in the pre-drawing journals on days on which they were not feeling stressed or anxious. On the days on which students were struggling with stress and anxiety, they were able to use their journals to vent about the source of their stress. Students expressed enjoying having the opportunity to journal, and enjoyed being able to use their journals as a free space to express themselves through written means.

Students were then given a second opportunity to express themselves through their drawings. The drawing warm-up activities resulted in student participants experiencing a positive shift in their mood on the majority of the days on which they were struggling with their stress and anxiety. They expressed in their interviews and journals, as well as in conversation with their peers and myself, throughout the study, that they enjoyed being

able to express themselves through drawing. Students stated in the interviews, and also wrote in the journals, that many of the warm-up activities provided an effective distraction from their stress and anxiety. Some participants even explained in their journals that some of the warm-up activities allowed them to process their emotions and clear their minds.

**Implications of the Findings.** The findings of the study show that art educators can promote drawing as a stress-management tool for adolescents who struggle with issues such as stress and anxiety. Providing students with ungraded opportunities to explore drawing methods and materials can increase their desire to explore art-making. Ungraded art-making opportunities can help students to become more confident in their artistic skills because they can explore freely without fear of a failing grade. Providing students with these opportunities to explore materials, and exposing them to new ways of drawing, can increase students' motivation to engage in art-making, both in and outside of the classroom.

### **Implications for Further Research: Next Questions**

Due to the limitations in demographics and opportunities to observe participants, several questions have emerged as a result of the study. To begin, future researchers may want to investigate the impact of different races, ethnicities, genders, and sexual orientations on adolescent experiences with stress and anxiety. The impact on race, ethnicity, gender, and sexual orientation on the effectiveness of drawing on adolescent stress and anxiety symptoms should also be further investigated. Due to the inability of the researcher of this study to investigate the stress and anxiety levels of participants

throughout the school day, the impact of the time of day in which participants engage in art-making should also be investigated in the future. Lastly, this study focused on the impact of drawing warm-up activities on the stress and anxiety levels of high school students. Future research could investigate how the integration of drawing warm-ups affects the artwork produced for graded project assignments.

### **Conclusion**

The study yielded positive results regarding the reduction of anxiety and stress levels among the high school student participants through drawing warm-up activities. Furthermore, the study was overall beneficial among the participants and the researcher alike. The study strengthened my rapport with my students, which increased their overall comfort level in my classroom, resulting in a willingness to experiment and explore. As suggested by Dunn-Snow (2000), I conversed with students as they drew throughout the study, inquiring about their drawings and experiences with the prompts and materials. These conversations, as well as reading participant journals, helped me to learn more about my students. As a result of the implementation of the drawing warm-up activities, students experienced an overall increase in their artistic confidence and became more motivated to engage in drawing.



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National Art Education Association.

**APPENDIX A**

**Letter of Consent & Permissions**

**MA Thesis Consent Form**

**Research Site Support**

Charles Baltimore  
New Foundations Charter High School  
4850 Rhawn Street  
Philadelphia, PA 19136

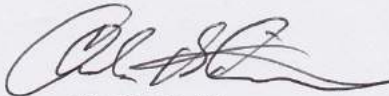
January 11, 2018

To Whom It May Concern:

I, Charles Baltimore, give permission to Alexandra Montgomery to conduct an action research study at New Foundations Charter High School during the spring 2018 semester in order to fulfill the requirements of his/her Master's thesis at Moore College of Art and Design. I understand that this project is intended to research the implementation of anxiety reducing drawing activities by promoting creative expression and self-reflection in secondary art education.

I understand that Alexandra Montgomery will be a teacher researcher who will be teaching art while gathering data during her regularly scheduled art classes. I understand she will be collecting data using various methods including observation and observational field notes, interviews, anxiety rating questionnaires, student artwork and journal responses, surveys/questionnaires, and conversations with selected teachers.

Sincerely,



Charles Baltimore  
High School Principal

MOORE COLLEGE OF  
ART & DESIGN  
IRB APPROVED DATE

*h* 12/15/17

### **INFORMED CONSENT FOR TEACHERS**

**DESCRIPTION OF THE RESEARCH:** You are invited to participate in a research study that investigates the implementation of anxiety reducing drawing activities by promoting creative expression and self-reflection. It is hoped valuable information on how to best structure art education for high students will be revealed throughout the course of this research study. For this study, I will ask you to participate in a pre-study and post-study questionnaire, in which you will be asked questions about your students who are participating in the study. I will not be asking to view any personal information on students such as IEPs, student records, or behavior programs. During all research sessions, you will be audio recorded. These audio recordings will provide information that I will use in writing my dissertation, and the audio recordings will be destroyed upon the completion of my study. This study will take place at New Foundations Charter High School in a classroom designated for the study and I, Alexandra Montgomery, will conduct the research study.

**RISKS AND BENEFITS:** Participation in the study is completely voluntary. There will be no effects or risks to you should you decide not to participate in this study. The questionnaires will be the same for teachers involved in the study. Therefore, you will not be singled out if you choose not to participate in the study. If you become uncomfortable at any time during the interview, you may address your concerns verbally or in writing. If this occurs at any point in this study, special arrangements can be made, and/or you can remove yourself from the study without penalty or repercussions. The benefits from the study include positively affecting students' participation in art in school, both in terms of enhancing their creative expression through conversation about art and their artistic practice skills through making art. It is also hoped that I will learn through the study more about how to provide a supportive arts learning environment that will influence my art instruction.

**PAYMENTS:** There will be no payments for you to participation in this study.

**DATA STORAGE TO PROTECT CONFIDENTIALITY:** Subject's confidentiality will be preserved. I am the sole researcher of this study. For the collation, analysis and reporting of all data, all of the participants will be assigned a pseudonym to prevent individuals from being identified. The school name will also be changed. Any charts used in my thesis or presentations, will be coded. All the data that I collect for this research project will be kept in a locked file cabinet in my home. The audio recordings will be destroyed upon the completion of my thesis. I will reserve the right to use the data and photographs of student artwork in the future, but the students' identity will continue to remain confidential.

**TIME INVOLVEMENT:** Your participation in the study will take approximately 20 minutes for each questionnaire.

**HOW WILL RESULTS BE USED:** The study will be reported in the form of a thesis, which serves to fulfill my requirements for a Master's degree in Art Education (with an emphasis in special populations).

I authorize the teacher-researcher, Ms. Alexandra Montgomery, to use the information as outlined above and that any reproduction/publication of this information will be strictly for educational and/or research purposes.



**TEACHER CONSENT**

January 8, 2018

Dear Participant:

I am a Graduate Student in Art Education at Moore College of Art & Design. I will be conducting research for my MA thesis from 1/29/18 - 3/23/18.

The purpose of this study is to investigate the implementation of anxiety reducing drawing activities by promoting creative expression and self-reflection in a high school art classroom, furthermore promoting art-making as a support strategy for high school students when addressing adolescent challenges such as anxiety.

Participating in this study is voluntary, and you can refuse to participate. Throughout the course of the study you will meet with me, and complete two questionnaires, when times are convenient with you. You will not receive payment for participating in this study.

This study poses very little risk to you. Though I will disguise your identity in the final thesis, there is a possibility that details of your story will make you identifiable. This possibility could result in the public disclosure of various aspects of your life. In order to minimize this risk, I will change your name and any other obvious identifying information in the final thesis. Throughout the study, I will also discuss with you what details you feel comfortable having included in any final products. Additionally, you are permitted to withdraw from the study at any time. If you withdraw, all existing interview recordings and transcripts will be destroyed immediately.

If you have any questions or concerns about the study, or if you are dissatisfied at any time, you can contact me at (215) 805-7554 or amontgomery@moore.edu or the Graduate Program Director in Art Education Lauren Stichter, at (215) 667-6811 or lstichter@moore.edu. You are encouraged to ask questions at any time about the study and its procedures, or your rights as a participant.

Sincerely,  
Alexandra Montgomery

\*\*\*\*\*

**Statement of Consent:** I have read the above information and have received answers to my questions. I give my consent to participate in this study.

Printed name of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_

**PARTICIPANT'S RIGHTS FOR TEACHERS**

Principal Investigator: Alexandra Montgomery

- ✓ I have read and discussed the Research Description with the researcher. I have had the opportunity to ask questions about the purposes and procedures regarding this study.
- ✓ My participation in research is voluntary. I may refuse to participate or withdraw from participation at any time without jeopardy to future employment or other entitlements.
- ✓ The researcher may withdraw me from the research at her professional discretion.
- ✓ If, during the course of the study, significant new information that has been developed becomes available which may relate to my willingness to continue to participate, the investigator will provide this information to me.
- ✓ Any information derived from the research project that personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- ✓ If at any time I have any questions regarding the research or my participation, I can contact the investigator, who will answer my questions. The investigator's phone number is (215) 805-7554.
- ✓ If at any time I have comments, or concerns regarding the conduct of the research or questions about my rights as a research subject, I should contact:

Lauren Stichter  
Moore College of Art & Design  
20<sup>th</sup> and the Parkway, Phila., PA 19103  
(215) 965-6811  
lstichter@moore.edu

- ✓ I should receive a copy of the Research Description, Consent Form and this Participant's Rights document.
- ✓ If audio recording is part of this research, (check one)
  - I consent to be audio recorded.
  - I do NOT consent to being audio recorded.
- ✓ The written and audio taped materials will be viewed only by the principal investigator and members of the program faculty.

Written and audio taped materials, (check one)

- May be viewed in an educational setting outside the research.
- May NOT be viewed in an educational setting outside the research.

My signature means that I agree to participate in this study.

Participant's signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Participant's Name: \_\_\_\_\_

**RECRUITMENT LETTER**

January 8, 2017

Dear Parent / Guardian,

I am contacting you to request permission for your child,

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to participate in a research study at New Foundations Charter High School. My name is Alexandra Montgomery, and I am a Masters candidate in Art Education (with an emphasis in special populations) at Moore College of Art & Design. I am conducting my thesis research at NFCS where I will be examining the impact of anxiety-reducing drawing activities on the development of student confidence in creative expression through self-reflection. You are invited to reach out to me to ask questions following the review of the attached materials.

This research will be conducted at NFCS during the school day, and will not impact time devoted to other academic subjects or therapies. Your child's identity will be kept confidential, as will the school name, as pseudonyms will be used on all data collected. I am not requesting any access to personal student records such as IEPs or behavior programs. The research study will take place over two months, with students participating in daily art-making sessions for 15-30 minutes per session. Sessions may be audio recorded to assure quality throughout the course of the study. All students will have the opportunity to engage in drawing activities that will ask them to reflect on their prior experiences, or to freely express themselves as they choose, through the use of a variety of drawing materials. Again, students will be audio-recorded only; no photographs or video of your child will be taken. Student artwork will be photographed. All audio and digital data will be destroyed upon conclusion of the thesis.

Attached you will find CONSENT, PERMISSION SLIP, RESEARCH DESCRIPTION, and PARTICIPANT'S RIGHTS forms which further detail the research study. Should you have any questions at all, please do not hesitate to contact me at [amontgomery@moore.edu](mailto:amontgomery@moore.edu) at any time. If you have no further questions, you may sign and return these forms now. You will have additional time to consider your child's participation with a deadline of January 12, 2017. Thank you for your time and consideration in this matter.

**PERMISSION SLIP**

January 8, 2017

Dear Parent/Guardian,

We are contacting you to request permission for your child, \_\_\_\_\_, to participate in a special project at NFCS. Alexandra Montgomery, a Masters student at Moore College of Art and Design, is conducting a research project examining the benefits of art education and its impact student anxiety levels. Ms. Montgomery is currently the art teacher at NFCS. This project will be conducted in-class, during the school day, and will not impact time devoted to other academic subjects or therapies. The results of the study will not in any way affect your child’s grades or academic activities. Your child’s identity will be kept anonymous, as will the school name and location. In addition, IEP records will be not be shared with Ms. Montgomery.

The project will involve daily 15-30 minute drawing sessions over the next two months. Participating students will have to opportunity to create a series of drawings that allow them to reflect on their personal experiences and freely express themselves as they choose. Students will be exposed to new drawing techniques and subjects throughout the course of the study. Sessions will be audio-recorded only, for the purpose of ensuring accuracy in field notes. No photographs or video of your child will be taken at any time. Their artwork may be photographed throughout the course of the study.

Should you have any questions, please do not hesitate to contact Lauren Stichter at (215) 965-6811 or lstichter@moore.edu. **Should you wish your child to participate, please sign and return this form to the classroom teacher no later than January 12, 2017.** Thank you for your time and consideration in this matter.

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**PLEASE DETACH AND RETURN TO THE CLASSROOM TEACHER NO LATER THAN JANUARY 12, 2017**

I, \_\_\_\_\_ (Guardian Name) do hereby give permission for my child, \_\_\_\_\_ to participate in a special project at NFCS.

\_\_\_\_\_  
Parent / Guardian Signature

\_\_\_\_\_  
Date

**PARENTAL CONSENT FORM FOR PARTICIPATION IN RESEARCH**

I give consent for my child \_\_\_\_\_ to participate in the research study entitled, “Anxiety Reducing Drawing Activities for Secondary Art Education,” that is being conducted by Alexandra Montgomery, a Graduate Student in Art Education at Moore College of Art & Design. I understand that this participation is entirely voluntary; I or my child can withdraw consent at any time without penalty, and have the results of the participation, to the extent that it can be identified as my child’s, returned to me, removed from the records, or destroyed.

1. The reason for the research is to investigate the implementation of anxiety reducing drawing activities by promoting creative expression and self-reflection in secondary art education.
2. The procedures are as follows: Students will participate in daily drawing activities during their regularly scheduled art period, from January 29<sup>th</sup> through March 30<sup>th</sup>. They will complete anxiety-rating questionnaires before and after each drawing activity, and will complete journal prompts reflecting on their drawing experiences daily. Students will be informally observed and data will be collected regularly. Journals and questionnaires will be collected weekly, and students will be interviewed at the beginning, middle, and end of the study. Interviews will take place during the during a time that is most convenient to them.
3. The timeline for the research is as follows:
  - o Early January: Gain permissions
  - o Mid January: Finalize lesson plans
  - o January 29<sup>th</sup> to March 30<sup>th</sup>: Conduct study/gather data
4. No risks are foreseen. My child’s participation is voluntary. Non-participating students will not be penalized in any way. Grades will not be affected if a student chooses not to participate.
5. Participant’s identities are strictly confidential. Results will not be personally identifiable. Data collected from the research will be kept secure, locked in a file cabinet off site. Pseudonyms will be used when quotes from individual children are transcribed into data.
6. If there are further questions now or during the research, I can be reached at \_\_\_\_\_ AND [amontgomery@moore.edu](mailto:amontgomery@moore.edu)
7. If you have any further questions, you may also reach out to my professor, Amanda Newman-Godfrey at [anewmangodfrey@moore.edu](mailto:anewmangodfrey@moore.edu) or my MA Program Director, Lauren Stichter at [lstichter@moore.edu](mailto:lstichter@moore.edu)

Please sign both copies of this form. A duplicate will be provided for you.

Signature of Researcher: \_\_\_\_\_

Signature of Parent/Guardian: \_\_\_\_\_

Research at Moore College of Art & Design, that involves human participants, is overseen by the Institutional Review Board. Questions regarding your rights as a participant should be addressed to:

Lauren Stichter  
Moore College of Art & Design  
20<sup>th</sup> and the Parkway, Phila., PA 19103

215 – 965 – 6811  
[lstichter@moore.edu](mailto:lstichter@moore.edu)

### **INFORMED CONSENT FOR STUDENTS**

**DESCRIPTION OF THE RESEARCH:** Your child is invited to participate in a research study that investigates the implementation of anxiety reducing drawing activities by promoting creative expression and self-reflection. It is hoped valuable information on how to best structure art education for high school students will be revealed throughout the course of this research study. For this study, your child will participate in research sessions over the course of 2 months. These sessions are extra opportunities to engage with and possibly make art beyond his or her existing art class. Participation will in no way impact the regular school schedule, IEP programs, or vocational training. I will not be asking to view any personal information on students such as IEPs, student records, or behavior programs. During all research sessions, students will be audio recorded. These audio recordings will provide information that I will use in writing my thesis and the audio recordings will be destroyed upon the completion of my study. This study will take place at New Foundations Charter High School in a classroom designated for the study and I, Alexandra Montgomery, will conduct the research study.

**RISKS AND BENEFITS:** Participation in the study is completely voluntary. There will be no effect on your child's standing or grades should you or your child decide not to participate in this study. The dialogues around art works and the art-making experiences for the study will be the same for all the students in study. Therefore, your child will not be singled out or pulled out from any of the activities if you chose not to participate in the study and/or the art-making experiences. The research has the same amount of risk students will encounter during a usual art or classroom activity. However, your child may be shy engaging with a new person or a new type of activity. If this occurs or if your child feels uncomfortable at any point in this study, special arrangements can be made, and/or you can pull your child out of the study without penalty or repercussions. The benefits from the study include positively affecting students' participation in art in school, both in terms of enhancing their creative expression through conversation about art and their artistic practice skills through making art. It is also hoped that I will learn through the study more about how to provide a supportive arts learning environment that will influence my art instruction.

**PAYMENTS:** There will be no payments for you for your child's participation in this study.

**DATA STORAGE TO PROTECT CONFIDENTIALITY:** Subject's confidentiality will be preserved. I am the sole researcher of this study. For the collation, analysis and reporting of all data, all of the participants will be assigned a pseudonym to prevent individuals from being identified. The school name will also be changed. Any charts used in my thesis or presentations will be coded. All the data that I collect for this research project will be kept in a locked file cabinet in my home. The audio recordings will be destroyed upon the completion of my dissertation. I will reserve the right to use the data and photographs of student artwork but the students' identify will continue to remain confidential.

**TIME INVOLVEMENT:** Your child's participation in the study will take approximately 2 months.

**HOW WILL RESULTS BE USED:** The study will be reported in the form of a thesis, which serves to fulfill my requirements for a Master's degree in Art Education (with an emphasis in special populations).

I authorize the teacher-researcher, Ms. Alexandra Montgomery, to use the information as outlined above and that any reproduction/publication of this information will be strictly for educational and/or research purposes.

**PARTICIPANT'S RIGHTS FOR STUDENTS**

Principal Investigator: Alexandra Montgomery

- ✓ I have read Research Description and I have had the opportunity to contact the researcher with questions about the purposes and procedures regarding this study.
- ✓ My child's participation in research is voluntary. I may refuse to have him/her participate or withdraw from participation at any time without effect on your child's standing or grades.
- ✓ The researcher may withdraw my child from the research at her professional discretion.
- ✓ If, during the course of the study, significant new information that has been developed becomes available which may relate to my willingness to allow my child to continue to participate, the investigator will provide this information to me.
- ✓ Any information derived from the research project that personally identifies my child will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- ✓ If at any time I have any questions regarding the research or my child's participation, I can contact the investigator, who will answer my questions. The investigator's phone number is [REDACTED].
- ✓ If at any time I have comments, or concerns regarding the conduct of the research or questions about my child's rights as a research subject, I should contact:

Lauren Stichter  
Moore College of Art & Design  
20<sup>th</sup> and the Parkway, Phila., PA 19103  
(215) 965-6811  
lstichter@moore.edu

- ✓ I should receive a copy of the Research Description, Consent, Permission Slip, and this Participant's Rights document.
- ✓ If audio recording is part of this research, (check one)
  - I consent to have my child audio recorded.
  - I do NOT consent to my child being audio recorded.
- ✓ The written, artwork and audio taped materials will be viewed only by the principal investigator and members of the program faculty.



Written, artwork, and audio taped materials, (check one)

- May be viewed in an educational setting outside the research.
- May NOT be viewed in an educational setting outside the research.

My signature means that I agree that my child may participate in this study.

Parent/Guardian signature: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Parent/Guardian Name: \_\_\_\_\_

Participant's Name: \_\_\_\_\_

**APPENDIX B**

**Data Collection Protocols & Questionnaires**

**Student Pre-Study Questionnaire**

Name:
Date:
Directions: Below are a series of statements that describe the way a person may feel. Read each statement and decide if it is “Not True or Hardly Ever True”, “Somewhat True or Sometimes True”, or “Very True or Often True”. Check the box that corresponds with the response you feel describes you <i>for the last three months</i> .

	0 Not True or Hardly Ever True	1 Somewhat True or Sometimes True	2 Very True of Often True
I worry a lot.			
I get stomachaches when I am at school.			
I feel sick when I take tests.			
I get nervous around strangers.			
I don't like being around people I don't know.			
I get shaky when I am nervous.			
I get headaches at school.			
It is hard for me to talk to people I don't know.			
I get nauseous when I am nervous or frightened.			
I am shy.			
I get nervous about going to school.			
I have difficulty concentrating in school because I feel nervous about something.			
I feel nervous completing work or when I have to do something in front of my teachers or other students (read aloud, present a project, play games, etc).			
I worry about what other people are thinking about me.			
I get dizzy when I am nervous or stressed.			
It can be hard to breath when I feel anxious.			
I am confident in my artistic abilities.			
I like to try new things.			
I am willing to ask for help when I feel stuck.			

**Directions: Answer the following questions to the best of your ability.**

1. What do you do when you feel stressed or anxious?

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2. Do you feel that drawing can reduce your stress? Why or why not?

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3. Which drawing materials do you most enjoy using? Why?

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4. Which drawing materials frustrate you the most? Why?

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**Demographic Questionnaire**

The following questionnaire is meant to collect demographic information from participants.

**You may choose not to answer any of the questions below, if you prefer not to answer.**

Please write “N/A” next to any question that asks for information that you would prefer not to share.

<b>Name:</b>	
<b>Questions:</b>	<b>Your Response:</b>
For the purpose of protecting your privacy, you will be given a fake name for the study. What would you like your fake name to be? (If you cannot think of one, one will be assigned to you.)	
What is your current age?	
What is your current grade level?	
How do you racially or ethnically identify?	
Do you have a preference of gender identity? If so, what is your preference?	
Do you consider yourself to be a <i>beginner</i> , <i>moderately experienced</i> , or <i>very experienced</i> in the visual arts?	

	<b>YES</b>	<b>NO</b>	<b>SOMETIMES</b>
Do you consider yourself to be frequently anxious?			
Do you consider yourself to struggle with stress levels?			
If you do have anxiety or frequent stress, do you feel it negatively impacts your performance in school?			

**Post-Study Questionnaire**

<b>Name:</b>	<b>Date:</b>		
<b>Questions:</b>	<b>YES</b>	<b>SOMETIMES</b>	<b>NO</b>
Do you feel that the drawing prompts in the study reduced your anxiety/stress levels?			
Do you feel that drawing increases your anxiety?			
Will you continue to draw in your free time using the drawing prompts we used throughout the study?			
Do you feel more confident in your drawing skills as a result of the study?			
Do you feel you will use drawing as a stress-management tool in the future?			

<b>Additional Comments</b>

**Observation Protocol**

Date:	Time:	Length of Observation:
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<b>Demographic Notes:</b>	<b>Classroom Setup:</b>
Student Name: _____	<div style="border: 1px solid black; height: 200px; width: 100%;"></div>
Class Period: _____	
Course Name: _____	
Number of Students: _____	
Number of Student Participants: _____	
Number of Teachers: _____	
Number of Aides: _____	

<b>Lesson Plan:</b>	
Warm Up Prompt	
Material Options	
Motivation/Visualization	
Closure/Transition	
Adaptations/Modifications	

**Student Artwork Observation Protocol**

Date:	Time:	Length or Observation:
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<b>Artwork Components</b>	<b>Description</b>	<b>Notes</b>
<b>Shapes</b>		
<b>Lines</b>		
<b>Use of Color</b>		
<b>Recognizable Imagery</b>		
<b>Theme</b>		
<b>Engagement</b>		
<b>Level of Completion</b>		





## Interview Protocol

Students will be individually asked identical questions at the beginning, middle, and end of the study. Questions from the first interview will explore students' prior experiences with stress and anxiety in school, as well as their previous experiences with drawing and materials. The middle interview will focus on each student's experiences with the study up until that point, including their experiences with the drawing prompts and material choices. The last interview will focus on each student's experience with the overall study.

Interview steps will include the following:

1. Interview conditions:
  - a. Interviews will take place in the empty art room for fifteen minutes during each student's homeroom period, or during a time of day that is convenient to the student.
  - b. Students will be interviewed individually in a one-to-one ratio.
  - c. Students will be given a choice in seating for the interview, and may choose to sit where is most comfortable for them.
  - d. The researcher will sit opposite of the student throughout the interview.
  - e. Guidance counselors or special education teachers may be present, but will be asked to remain silent if present.
  - f. Audio will be recorded during each interview in order to ensure experimental control and accuracy in transcripts.
  - g. Transcripts of each interview will be created using a word processor.
  - h. All transcripts will be labeled with the student's pseudonym and date.
2. Students will be greeted and will be asked the scripted topic question listed below.
3. Students will be asked questions about their experiences, as listed below.
4. Questions will be repeated after ten seconds, if no verbal response is given. The next question will be asked if the student has still not responded after an additional ten seconds.
5. Each student will be asked identical questions.

<b>Interview I</b>		
<b>Date:</b>	<b>Time:</b>	<b>Location:</b>
<b>Interviewer:</b>	<b>Interviewee:</b>	<b>Release form signed?</b>
<b>Guidance Counselor or SpED Teacher Present:</b>		

**Spark**

Question (Q): How are you doing today?

Researcher Response (RR): *Today I would like to talk to you about some of your experiences in school, with stress, and with drawing. I am really interested in how you feel during the school day, what types of things you like to draw, and what drawing materials you like the most. I am also really interested in how drawing makes you feel.*

Q: Does that sound ok?

RR: *I want you to answer each question to the best of your ability. There are no right or wrong answers. If at any time you feel uncomfortable answering a question, you may choose not to answer it. You may also choose to end the interview at any point, should you feel the need to do so.*

Q: Do you have any questions before we begin? Are you ready to begin?

**Interview Questions**

1. How do you feel about your overall performance in school? Why do you feel that way?
2. What is your favorite subject in school? Why?
3. What is your least favorite subject in school? Why?
4. Do you often feel stressed or anxious at school? How do these feelings affect your performance in school?
5. What do you do when you feel stressed or anxious at school?
6. What prior experiences do you have with drawing?
7. Do you draw in your free time?
  - a. If yes:
    - i. What do you like to draw?
    - ii. Do you draw in a sketchbook? If not, where do you draw?
    - iii. What do you usually draw with?
    - iv. How often do you draw?
  - b. If no:
    - i. Why don't you draw in your free time? What don't you like about drawing?
8. How do you feel when you draw?

9. Have you ever used drawing to relax? Why or why not?
10. Are there any drawing materials that frustrate you? If so, which materials frustrate you? What about them frustrates you?

**Closure**

RR: *Thank you so much for taking the time to talk with me. I really appreciate your willingness to share with me.*

Q: Before we finish up, is there anything else you would like to add or talk about with me? Do you have any questions about your participation in the study?

RR: *Thank you again for your time. Your responses were helpful, and I appreciate your contribution.*

<b>Interview II</b>		
<b>Date:</b>	<b>Time:</b>	<b>Location:</b>
<b>Interviewer:</b>	<b>Interviewee:</b>	<b>Release form signed?</b>
<b>Guidance Counselor or SpED Teacher Present:</b>		

**Spark**

Question (Q): How are you doing today?

Researcher Response (RR): *Today I would like to talk to you about some of your experiences with the study so far. I am really interested in which drawing prompts and which drawing materials you have enjoyed the most. I am also interested in how the activities we have done so far have made you feel.*

Q: Does that sound ok?

RR: *I want you to answer each question to the best of your ability. There are no right or wrong answers. If at any time you feel uncomfortable answering a question, you may choose not to answer it. You may also choose to end the interview at any point, should you feel the need to do so.*

Q: Do you have any questions before we begin? Are you ready to begin?

**Interview Questions**

1. Which of the drawing prompts that we have done so far did you most enjoy?
  - a. What did you enjoy about it?
  - b. How did you feel when completing that drawing prompt?
2. Which of the drawing materials that you have experimented with so far did you enjoy working with the most?
  - a. What did you enjoy about working with that material?
3. Which of the drawing prompts that we have done so did you like the least?
  - a. What did you not like about that prompt?
  - b. How did you feel when completing that prompt?
4. Which of the drawing materials that you have experimented with so did you like the least?
  - a. What did you not like about the material?
  - b. How did you feel when using that material?
5. Are there any drawing materials that you wish you had access to for our drawing activities?
6. Have you started drawing more frequently in your free time?
  - a. If yes:
    - i. What types of things have you been drawing in your free time?

- ii. Have you been drawing in a sketchbook? If not, where have you been drawing?
- iii. What drawing materials have you been using?
- b. If no:
  - i. What is keeping you from drawing in your free time?

**Closure**

RR: *Thank you so much for taking the time to talk with me. I really appreciate your willingness to share with me.*

Q: Before we finish up, is there anything else you would like to add or talk about with me? Do you have any questions about your participation in the study?

RR: *Thank you again for your time. Your responses were helpful, and I appreciate your contribution.*

**Interview III**

<b>Date:</b>	<b>Time:</b>	<b>Location:</b>
<b>Interviewer:</b>	<b>Interviewee:</b>	<b>Release form signed?</b>

**Guidance Counselor or SpED Teacher Present:****Spark**

Question (Q): How are you doing today?

Researcher Response (RR): *Today I would like to talk to you about your overall experience throughout the study. I am really interested in which drawing prompts and which drawing materials you have enjoyed the most overall. I am also interested in how the activities we have done have made you feel.*

Q: Does that sound ok?

RR: *I want you to answer each question to the best of your ability. There are no right or wrong answers. If at any time you feel uncomfortable answering a question, you may choose not to answer it. You may also choose to end the interview at any point, should you feel the need to do so.*

Q: Do you have any questions before we begin? Are you ready to begin?

**Interview Questions**

1. How does drawing make you feel?
  - a. Does drawing reduce your stress or anxiety?
  - b. Does drawing increase your anxiety at all?
2. Do you feel that the drawing activities we did in class reduced your stress?
  - a. Which drawing materials were your favorite to work with? Why were they your favorite?
  - b. Which of the drawing prompts was your favorite?
  - c. Why was it your favorite?
  - d. Were there any drawing activities that increased your stress levels? What about the prompt(s) was/were stressful for you?
  - e. Were there any drawing materials that you feel increased your stress levels?
    - i. What about the material was stressful for you?
3. Do you feel this study has increased your confidence in your drawing abilities?
  - a. What about the study has made you feel more confident in your artistic skill?
4. Will you continue to draw, in your free time, as a result of this study?

- a. Do you feel this study has given you tools to help you manage your anxiety?
- b. Do you feel more motivated to draw, as a result of this study?
- c. Will you continue to use any of these drawing activities or materials outside of the study?
  - i. Which materials do you think you are most likely to continue to use?
  - ii. Which drawing prompts do you think you are most likely to continue to use?

### **Closure**

RR: *Thank you so much for taking the time to talk with me. I really appreciate your willingness to share with me.*

Q: Before we finish up, is there anything else you would like to add or talk about with me? Do you have any questions about your participation in the study?

RR: *Thank you again for your time. Your responses were helpful, and I appreciate your contribution.*









## APPENDIX C

### Lesson Plan Protocol & Drawing Warm-up Lesson Plan

#### Lesson Plan Protocol

Students will engage in a series of drawing prompts that ask them to reflect on their identity and feelings. The drawing prompts are designed to help students reflect on their sense of self, and expose them to new ways of drawing and new drawing materials. The lessons are also designed to foster an environment in which students feel comfortable discussing their ideas and experiences. Students will develop their creative problem solving skills as they experiment with materials and composition. They may also develop their confidence in their drawing abilities through their exploration of materials. Students will be given a different drawing warm-up prompt on each day, based on a weekly theme. Students may continue to work on their drawings outside of the study if they wish, although completion is not required for their warm-up activities. The teacher researcher will engage in empathetic conversations with students that will provide encouragement, which may contribute to the development of student confidence and reduce stress. Students will be given the opportunity to share their journal responses and artwork at the end of each warm-up activity. They will also be given pre-activity and post-activity anxiety rating scales and journal prompts, in which they may reflect on their feelings and their experiences with drawing materials or prompts.

The steps for the drawing warm-up activities will include:

1. The conditions will be as follows:
  - a. Students will complete their drawing activities during their regularly scheduled art period, in an art classroom with their peers, at their school site.
  - b. Students will be given five minutes for pre-drawing journal reflections and anxiety rating scales, ten to twenty minutes for their drawing prompt, depending on its complexity, and five minutes for post-drawing journal reflections and anxiety rating scales.
  - c. Student participants will store their artwork in a designated folder that will be collected at the end of each period.
  - d. Student artwork will be digitally photographed weekly.
  - e. Drawing sessions will be audio recorded to capture participants' dialogue during each drawing session.
  - f. Art materials will include pencils, pencil, colored pencils, oil pastels, crayons, markers, charcoal, charcoal pencils, and chalk pastels.
2. Students will be greeted by the teacher researcher and begin each activity as described in the lesson plans below.
3. Students will converse about the theme and prompt each day, work on the drawing warm-up, and transition from their warm-up into working on their current in-class project.
4. Data from in-class projects will not be included in the case study.

## Drawing Warm-up Lesson Plan

**Activity:** Drawing Warm-Ups

**Grade Level:** 9-12

**Materials:** pencils, pencil, colored pencils, oil pastels, crayons, markers, charcoal, charcoal pencils, chalk pastels

### Development Rationale/Prior Learning:

Students will engage in drawing prompts that ask them to reflect on their ideas, as well as themselves. The prompts ask students to consider their likes and dislikes, who they are, what they care about, and what associations they have. Students will also be given the opportunity to experiment with materials, their use of color, and mark making, as they experiment with different drawing materials. Students will strengthen their creative problem solving skills as they develop small works of art ask them to consider their design, composition, use of material, and use of the elements and principles.

#### ***Week 1: Line and Shape***

**Discussion Topic:** How they could approach the prompt from both representational and abstract vantage points? How can there be various possible approaches to the prompt prior to beginning the drawing?

**Why:** Provide an opportunity for students to explore how there can be multiple approaches to the prompt.

Day	Activity
Day 1	Create a drawing using repeating geometric shapes.
Day 2	Create a drawing using repeating organic shapes.
Day 3	Create a drawing using five different types of line.
Day 4	Create a drawing using only straight lines.
Day 5	Create a pattern using repeating shapes or lines.

#### ***Week 2: Mandalas and Zentangles®***

**Discussion Topic:** How can we draw intuitively using repetition of lines and shapes?

**Why:** Students explore drawing without having a preconceived idea.

Day	Activity
Day 1	Create a mandala using the drawing material of your choice. Focus on your use of line and shape.
Day 2	Create a zentangle® using the drawing material of your choice.
Day 3	Create a zentangle® using the drawing material of your choice, using one continuous line.
Day 4	Create a mandala that incorporates elements of nature (ie: leaves, flowers, drops of water, animal patterns, parts of animals, etc.).
Day 5	Create a mandala inspired by contrasting emotions by dividing the circle of your mandala in half. Consider the shapes and colors that could be associated with the emotions you have chosen.

**Week 3: Drawing Sound****Discussion Topic: How can you visually interpret sound on paper?****Why: Students were told they could focus on drawing how the music made them feel, or that they could draw the sounds they were hearing. Students drew for approximately ten minutes each day.**

Day	Activity
Day 1	Approximately thirty seconds of a variety of popular culture songs were played while students drew.
Day 2	Students drew to a premade playlist of meditative music, and listened to the entirety of each song on the playlist.
Day 3	Participants visually interpreted classical music on the third day of the week, listening to the entirety of each song.
Day 4	Students listened to a premade playlist of various nature sounds, each of which varied in length.
Day 5	Participants created drawings while listening to a premade playlist of sound effects. Students drew blindfolded during the final sound drawing. *Students who were uncomfortable with wearing a blindfold were given the option to draw with their eyes closed.

**Week 4: Emotions****Discussion Topic: How can you portray emotions through drawing?****Why: Students explore emotions, and ways to visually interpret emotions.**

Day	Activity
Day 1	Make a list of five emotions. Think about the color associations of each of those emotions. Create a drawing using those colors, with those emotions in mind.
Day 2	Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.
Day 3	What makes you happy/content? Think about at what point in your day you feel most happy/content. Where are you at that moment? What are you doing at that moment? Who are you with, if anyone? Illustrate the place that comes to mind.
Day 4	Students could choose between one of the two following prompts. Create a drawing that illustrates how you feel right now, using the material of your choice. Consider how you feel when you are stressed or anxious. Illustrate that feeling.

<b>Week 5: Associations</b>	
<b>Discussion Topic: How can you illustrate your associations with different words, objects, or people of importance to you?</b>	
<b>Why: Students explore their associations with different words, objects, or people of importance to them.</b>	
Day	Activity
Day 1	What does the word “strength” mean to you? Illustrate your definition.
Day 2	Imagine you have a key, and think about what that key would open. Illustrate your key and what it opens.
Day 3	Think about someone or something that you care deeply for. Create a drawing using symbols that you associate with that person or thing.
Day 4	Think about your culture. What symbols or associations do you have with that culture? Create a drawing using the materials of your choice, based on an element of your culture.
Day 5	Make a list of five animals, and the word associations you have with those animals. What are those animals a symbol of? What animal do you feel most resembles your personality? Create a drawing of the animal you feel most relates to your personality.

<b>Week 6: Self-Reflection</b>	
<b>Discussion Topic: What is important to you? How can we incorporate the things that are important to you into a drawing?</b>	
<b>Why: Students reflect on their personal lives, and what is most important to them.</b>	
Day	Activity
Day 1	What motivated or inspires you? Create a drawing inspired by what motivates or inspires you.
Day 2	Illustrate something that you own that is really important to you.
Day 3	What do you like to do in your free time? Create a drawing inspired by that activity.
Day 4	Finish the phrase “I wish...” five different ways. Choose one of your statements to illustrate.
Day 5	List your top three favorite memories. What about those moments is so memorable to you? How did you feel in those moments? Choose one of your memories and create a drawing inspired by that moment, or how you felt in that moment.

<b>Week 7: Aspirations and Desires</b>	
<b>Discussion Topic: What are your desires for the future? What do you aspire to do, and where would you like to go?</b>	
<b>Why: Students reflect on their desires for their future.</b>	
<b>Day</b>	<b>Activity</b>
Day 1	Think about your future. Create a drawing illustrating where you see yourself in ten years.
Day 2	Think about a place you have always wanted to go. Why do you want to go there? How might you get to that place? Create a drawing that illustrates a place or type of place that you would like to visit.
Day 3	If you could live anywhere, where would you live? What would your home look like? Create a drawing designing your future home.
Day 4	List three goals you have for your future. These goals can be short-term or long-term. Choose one goal to inspire your drawing. Create drawing inspired by that goal. As you are drawing, consider how you might achieve this goal, how you feel about this goal, or how you feel about the future.
Day 5	What are three things that you wish people know about you? Create a drawing inspired by one of those things.

<b>Week 8: Self-Portraits</b>	
<b>Discussion Topic: How can you best represent yourself in a drawing, without observing yourself in a mirror? What are some alternative ways to draw a self-portrait?</b>	
<b>Why: Students reflect on themselves and how they can represent themselves.</b>	
<b>Day</b>	<b>Activity</b>
Day 1	Create a drawing of your alter ego.
Day 2	Create a drawing of your future self.
Day 3	Create a self-portrait without drawing an image of yourself. Consider your likes and dislikes, the things you like to do, and what is important to you as you draw.
Day 4	Finish the phrase "I am..." five different ways. Choose one of your statements to illustrate.
Day 5	What are your favorite things about yourself? Create a drawing inspired by one of your favorite things about yourself using the drawing material of your choice.

### **Accommodations/Modifications/Adaptations:**

Students will be able to choose the material they feel most comfortable using for each daily activity. They will be provided with precut paper, and tape will be available to students who wish to tape their paper to the table surface. Students may have extended time to complete their drawing and journal prompts if they wish, although completeness is not a requirement for warm-up activities. Students with IEPs will be given preferential

seating throughout each class period. Prompts will be given both verbally and in written format. Students will be provided with premade journals that include daily writing prompts. Students will be given additional adaptations as necessary.

**National Standards:**

**VA:Cr1.1.Ia:** Use multiple approaches to begin creative endeavors.

**VA:Cr2.1.Ia :** Engage in making a work of art or design without having a preconceived plan.

**VA:Cr3.1.Ia:** Apply relevant criteria from traditional and contemporary cultural contexts to examine, reflect on, and plan revisions for works of art and design in progress.

<http://www.nationalartsstandards.org/sites/default/files/Visual%20Arts%20at%20a%20Glance%20-%20new%20copyright%20info.pdf>

**PA Standards:**

**9.1.12.A:** Know and use the elements and principles of each art form to create works in the arts and humanities.

**9.1.12.E:** Delineate a unifying theme through the production of a work of art that reflects skills in media processes and techniques.

**9.1.12.H:** Incorporate the effective and safe use of materials, equipment and tools into the production of works in the arts at work and performance spaces.

<https://www.pdesas.org/Standard/View#>

**Clean-up:**

Students will be given three minutes to put away their drawing materials and store their artwork. Students will put their drawing materials in their appropriate container, on the materials table. Students will also put their warm-up drawing in their folder.

**Closure:**

Students will be given five minutes to complete their daily journal prompt, reflecting on their experiences with the drawing prompt, and their chosen material. Students will then be given an opportunity to share responses, if they choose.



APPENDIX D

Demographic and Pre and Post-Study Questionnaire Matrices

Demographic Matrix and Absence Color Codes

	Savanna	Angelica	Amare	Helga	Olga	Emanuel	Daniel	Jenny	Sophia	Osewald	Sofia	Olive
1	X	X	X	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X	X
9	X	X	X	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X	X	X	X
11	X	X	X	X	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X	X	X	X	X
15	X	X	X	X	X	X	X	X	X	X	X	X
16	X	X	X	X	X	X	X	X	X	X	X	X
17	X	X	X	X	X	X	X	X	X	X	X	X
18	X	X	X	X	X	X	X	X	X	X	X	X
19	X	X	X	X	X	X	X	X	X	X	X	X
0	1	2	0	1	2	0	1	2	0	1	2	0
1	2	0	1	2	0	1	2	0	1	2	0	1
2	0	1	2	0	1	2	0	1	2	0	1	2

**0: Not True/Hardly Ever**      **1: Somewhat True/Sometimes True**      **2: Very True/Often True**

1. I worry a lot. 2. I get stomachaches when I am at school. 3. I feel sick when I take tests. 4. I get nervous around strangers.  
 5. I don't like being around people I don't know. 6. I get shaky when I am nervous. 7. I get headaches at school.  
 8. It is hard for me to talk to people I don't know. 9. I get nauseous when I am nervous or frightened. 10. I am shy.  
 11. I get nervous about going to school. 12. I have difficulty concentrating in school because I am nervous about something  
 13. I feel nervous completing work or when I have to do something in front of my teachers or other students.  
 14. I worry about what other people are thinking about me. 16. It can be hard to breath when I feel anxious.  
 15. I get dizzy when I am nervous or stressed. 19. I am willing to ask for help when I feel stuck.  
 17. I am confident in my artistic abilities.

Planned Day Off From School	
Snow-Day	
Unplanned Day Off From School	
Researcher Absence	
Participant Absence	
Participant Skipped Warm-Up Drawing	
Researcher Planned Warm-Up Skip	

Pre-Study Questionnaire Matrix

	Savanna	Angelica	Amare	Helga	Olga	Emanon	Daniel	Jenny	Sophia	Osewald	Sofia	Olive
1	x	x	x	x	x	x	x	x	x	x	x	x
2	x	x	x	x	x	x	x	x	x	x	x	x
3	x	x	x	x	x	x	x	x	x	x	x	x
4	x	x	x	x	x	x	x	x	x	x	x	x
5	x	x	x	x	x	x	x	x	x	x	x	x
6	x	x	x	x	x	x	x	x	x	x	x	x
7	x	x	x	x	x	x	x	x	x	x	x	x
8	x	x	x	x	x	x	x	x	x	x	x	x
9	x	x	x	x	x	x	x	x	x	x	x	x
10	x	x	x	x	x	x	x	x	x	x	x	x
11	x	x	x	x	x	x	x	x	x	x	x	x
12	x	x	x	x	x	x	x	x	x	x	x	x
13	x	x	x	x	x	x	x	x	x	x	x	x
14	x	x	x	x	x	x	x	x	x	x	x	x
15	x	x	x	x	x	x	x	x	x	x	x	x
16	x	x	x	x	x	x	x	x	x	x	x	x
17	x	x	x	x	x	x	x	x	x	x	x	x
18	x	x	x	x	x	x	x	x	x	x	x	x
19	x	x	x	x	x	x	x	x	x	x	x	x
	0	1	2	0	1	2	0	1	2	0	1	2

0: Not True/Hardly Ever      1: Somewhat True/Sometimes True      2: Very True/Often True

1. I worry a lot.
2. I get stomachaches when I am at school.
3. I feel sick when I take tests.
4. I get nervous around strangers.
5. I don't like being around people I don't know.
6. I get shaky when I am nervous.
7. I get headaches at school.
8. It is hard for me to talk to people I don't know.
9. I get nauseous when I am nervous or frightened.
10. I am shy.
11. I feel nervous about going to school.
12. I have difficulty concentrating in school because I am nervous about something
13. I feel nervous completing work or when I have to do something in front of my teachers or other students.
14. I worry about what other people are thinking about me.
15. I get dizzy when I am nervous or stressed.
16. It can be hard to breath when I feel anxious.
17. I am confident in my artistic abilities.
18. I like to try new things.
19. I am willing to ask for help when I feel stuck.



APPENDIX E

Pre and Post-Drawing Self-Anxiety-Rating-Scale Data Matrix

	Sava	Angelid	Amare	Helga	Olga	Emanon	Daniel	Jenny	Sophia	Osewal	Sofia	Olive												
1/29	3	2	3	2	6	5	6	4	5	5			3	3	2	2	2	2	3	3	4	2.5	4	2
1/30	4	4	4	2	6	6	3	2	4	4	4	N/A	2	2	3	3	4	3	2	2	5	4	3	4
1/31	4	3	2	2	4	3	2	2	A	A	A	A	4	3	2	2	3	2	3	2	2	2	3	1
2/1	3	3	3	3	3	2	2	2	5	4	6	3	4	2	2	A	A	2	2	2	2	1.5	1	1
2/2	2	2	2	2	2	2	2	2	3	3	3	3	A	A	2	2	A	A	1	1	1	1	2	1
2/5	1	1	1	1	2	2	3	3	A	A	1	1	1	1	2	2	1	1	A	A	3	3	A	A
2/6	4	3	4	3	6	6	4	3	3	3	4	3	2	4	2	2	3	3	2	2	2	2	4	1
2/7	2	2	2	2	4	4	2	2	A	A	A	A	4	3	2	2	2	2	2	2	2	2	1	1
2/8																								
2/9	2	2	2	2	3	2	2	2	A	A	2	2	3	3	3	3	3	2	3	2	3	3	2	4
2/12	2	2	4	3	2	2	2	5	4	2	1	A	A	2	2	4	3	2	2	4	3	2	5	
2/13	2	2	3	2	3	2	2	2	3	3	3	2	A	A	2	2	5	3	3	3	6	2	A	A
2/14	2	2	4	N/A	2	1	1	1	3	N/A	2	4	A	A	2	2	2	1	3	3	A	A	1	1
2/15	2	2	3	3	5	4	2	2	2	2	2	1	A	A	2	2	2	1	2	2	2	2	1	1
2/16													5	3	3	2	2	2	2	1	2	2	1	2
2/19																								
2/20	3	3	3	2	2	2	2	3	N/A	6	4	2	3	2	2	2	1	A	A	2	2	3	1	
2/21	2	2	3	3	4	2	2	3	2	3	4	2	2	2	2	2	1	3	3	1	N/A	5	1	
2/22	2	3/4	3	3	3	2	3	3	2	A	A	3	2	2	2	2	1	2	2	3	2	3	2	
2/23	4	3	2	2	4	4	2	2	3	2	2	2	3	5	2	2	1	1	2	2	3	2	3	1
DATE	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER

Increase in Stress/Anxiety	Red
No Change in Stress/Anxiety	Green
Decrease in Stress/Anxiety	Yellow
Student Absent	Grey
No Data Provided	Brown

	Sava	Angelid	Amare	Helga	Olga	Emanon	Daniel	Jenny	Sophia	Osewal	Sofia	Olive												
2/26	3	N/A	4	4	3	2	3	3	4	3	3	4	3											
2/27																								
2/28																								
3/1																								
3/2																								
3/5	3	2	3	3	3	N/A	2	2	3	2	A	A	3	2	2	2	1	1	3	3	3	3	2	
3/6	2	N/A	3	3	3	3	3	3	3	3	2	N/A	3	2	2	2	2	1	2	2	2	2	3	2
3/7																								
3/8																								
3/9																								
3/12	1	1	3	3	2	2	3	3	2	2	3	3	3	3	2	2	2	1	3	3	A	A	3	3
3/13	1	1	3	3	3	2	3	3	3	2	4	3	3	4	2	2	3	2	2	2	3	3	3	4
3/14	1	1	3	3	2	2	2	2	2	2	1	1	3	2	2	2	2	2	1	2	1	1	3	2
3/15	1	1	3	3	2	2	2	2	4	4	2	2	3	4	2	2	2	2	2	2	2	2	3	3
3/16													1	1	3	3	2	2	3	2	2	2	3	2
3/19	2	2	3	3	2	2	3	3	3	N/A	2	2	3	3	2	2	1	1	3	3	2	2	2	2
3/20	2	N/A	3	3	A	A	3	3	A	A	A	A	A	A	A	A	A	A	2	2	A	A	A	A
3/21																								
3/22																								
3/23	2	2	2	2	2	2	A	A	3	N/A	3	3	3	3	2	2	3	2	A	A	1	1	3	2
DATE	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER	ANXIETY/STRESS BEFORE	ANXIETY/STRESS AFTER

Increase in Stress/Anxiety	Red
No Change in Stress/Anxiety	Green
Decrease in Stress/Anxiety	Yellow
Student Absent	Grey
No Data Provided	Brown

**APPENDIX F**

**Journal Matrices**

**Savannah’s Journal Matrices**

STUDENT NAME: Savannah					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	3	N/A	2	Colored Pencils	Felt ok – enjoyed prompt – Material was ok – Would do again – multiple possibilities
1/30	4	Headache – a lot going on	4	Markers	Felt ok – enjoyed he prompt – boring – abstract – material was fine – would not do again – feel the same – wasn’t fun
1/31	4	Tired – have quizzes today	3	Oil Pastels	Fun – fun to mix material – would do again
2/1	3	Chill day	3	Vine Charcoal	Liked prompt – different – material messy – didn’t like material – would not do again – material too messy – feel the same
2/2	2	N/A	2	Oil Pastels	Liked prompt – fun – Likes material a lot – Would do again – open to interpretation – feels the same

STUDENT NAME: Savannah					WEEK #: 2
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5	1	N/A	1	Colored Pencils	Felt ok – fun – liked prompt – many possibilities – like materials – would do again – good day
2/6	4	N/A	2	Markers	Enjoyed – open to interpretation – Materials were ok – would do again - fun
2/7	2	N/A	2	Charcoal Pencil	Prompt was ok – enjoyed – fun – Liked material but made annoying sound – Would do again – feel the same
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9	2	Friday - happy	2	Markers	Felt ok – expressive – liked material – would do again – colorful – feels the same

STUDENT NAME: Savannah					WEEK #: 3
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	2	Tired but good day	2	Charcoal Pencil	Prompt was hard but fun - not sure how to draw - material felt good - would do again - fun - felt the same
2/13	2	Good day so far	2	Oil Pastels	Felt calm - Enjoyed - relaxing - Liked material - Would do again - prompt was soothing - felt the same
2/14	2	N/A	2	Colored Pencil	Like the music - liked the prompt - Liked material - Would do again - fun - felt the same
2/15	2	N/A	2	Markers	Liked prompt - liked hearing different sounds - liked material - would do again - fun - feels the same
2/16	N/A	N/A	N/A	N/A	N/A

STUDENT NAME: Savannah					WEEK #: 4
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	3	Tired - under a lot of pressure	2	Oil Pastels	Calm - liked blending - material felt good - fun - would do again
2/21	2	Feels confident about test in another class	2	Oil Pastels	Felt calm - fun - Like materials - blends - would do again
2/22	2	N/A	3/4	Markers	Liked prompt - expressed happiness - material was ok - would do again - fun - has a lot going on
2/23	4	Not sure how I feel - sad and mad? - not sure how to express	3	Chalk Pastels	Liked having an option to pick - liked materials - blended - Would do again - expressed feelings - felt good to let out emotions

<b>STUDENT NAME:</b> Savannah	<b>WEEK #:</b> 5
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	3	N/A	N/A	Charcoal	Not sure what to draw - didn't feel anything - material was fun - wouldn't do again - not sure how to express
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Savannah	<b>WEEK #:</b> 6
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	3	A lot of school work	2	Markers	Liked prompt - uplifting - likes thinking about what makes her happy - would do again - stressful week
3/6	1	N/A	1	Markers	Felt good - material felt ok - would do again
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Savannah	<b>WEEK #:</b> 7
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	1	N/A	1	Oil Pastels	Felt scared thinking about the future - Felt calm using the material - would do again
3/13	1	N/A	1	Chalk Pastels	Enjoyed thinking about the future - material felt ok - would do again - liked material
3/14	1	N/A	1	Pencil	Helped think about future - material felt ok - would do again
3/15	1	N/A	1	Chalk Pastels	Felt ok - liked prompt - planning for future - material felt ok - would do again
3/16	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Savannah	<b>WEEK #:</b> 8
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	2	N/A	2	Chalk Pastels	Felt different thinking about alter ego - material felt ok - would do again
3/20	2	N/A	N/A	Pencil	Felt ok - Material felt ok - Would not do again - not sure how to portray prompt
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	2	N/A	2	Pencil	Felt different emotions - thought about personality - material felt ok - would do again



## Angelica's Journal Matrices

STUDENT NAME: Angelica					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	3	N/A	2	Colored Pencils	Felt ok – prompt was simple – material simple and easy to use – would do again – a lot of possibilities – felt better after – fun – gave break form other classes
1/30	4	N/A	2	Markers	Felt good – enjoyed materials – simple and not messy material – would do again – explored different ways to use shapes
1/31	2	N/A	2	Oil Pastels	Felt ok – prompt fun – enjoys patterns – enjoyed material – likes texture – would do again – felt good before and after drawing
2/1	3	Average day	3	Charcoal	Felt stressed – didn't like material choice – annoyed by material – wanted crisp lines but material smudged – Wouldn't do again – bored by prompt – still felt ok after prompt
2/2	2	Feel good	2	Oil Pastels	Felt normal – prompt was fun – enjoyed material – would do again – fun – felt the same
STUDENT NAME: Angelica					WEEK #: 2

DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5	1	Feel good	1	Colored Pencils	Enjoyed prompt – Loves mandalas – liked material because can control – would do again – felt the same
2/6	4	N/A	3	Pencil	Enjoyed prompt – doodling – Enjoyed material – allowed for detail – would do again – felt more relaxed after
2/7	2	Happy	2	Charcoal Pencil	Enjoyed Prompt – Challenging – felt ok using material but wouldn't use again – Would do again – felt the same
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9	2	N/A	2	Markers	Felt good – enjoyed prompt – felt normal using material – would do again – liked prompt - happy

<b>STUDENT NAME: Angelica</b>	<b>WEEK #: 3</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	4	Monday	3	Charcoal	Enjoyed prompt – never tried before – enjoyed material – would do again – interesting – felt better – enjoyed music
2/13	3	Average day	2	Pastels	Enjoyed – peaceful – calming – material smooth – would do again – music calming – made happy
2/14	4	N/A	3	Colored Pencils	Enjoyed prompt – liked music – material felt normal – would do again
2/15	3	Normal day	3	Markers	Enjoyed prompt – annoyed by markers – did not like for this prompt – would do prompt again – feels the same
2/16	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Angelica</b>	<b>WEEK #: 4</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	3	Sleepy	2	Oil Pastels	Enjoyed prompt – interesting – helped with drawing emotion – like material – colors mixed well – would do again – feel better - distraction
2/21	3	Normal day	3	Oil Pastels	Enjoyed prompt – material worked for idea – would do again – felt the same
2/22	3	N/A	3	Markers	Felt ok – enjoyed prompt – liked thinking about what makes her happy – material felt normal – would do again – felt the same
2/23	2	Happy	2	Chalk Pastels	Felt ok – enjoyed prompt – enjoyed drawing feelings – material felt good – blending – would do again – drawing reflects feelings

<b>STUDENT NAME:</b> Angelica	<b>WEEK #:</b> 5
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	4	N/A	4	Marker and Charcoal	Felt normal - enjoyed prompt - Would do again - interesting - stressed about giving a speech in English
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Angelica	<b>WEEK #:</b> 6
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	3	N/A	3	Chalk Pastels	Felt calm - enjoyed prompt - material felt great - blending - would do again - interesting - felt the same
3/6	3	N/A	3	Pencil	Felt ok - enjoyed prompt - material easy to use - would do again - feels the same
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Angelica	<b>WEEK #:</b> 7
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	3	N/A	3	Oil Pastels	Felt good - enjoyed prompt - material felt good - blending - would do again - interesting
3/13	3	N/A	3	Chalk Pastels	Felt ok - material felt normal - would do again - interesting - feels the same
3/14	3	N/A	3	Pencil	Felt good - enjoyed prompt - material felt good - would do again - motivated for future
3/15	3	N/A	3	Chalk Pastels	Felt ok - enjoyed prompt - enjoyed blending material - would do again
3/16	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Angelica	<b>WEEK #:</b> 8
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	3	N/A	3	Pencil	Felt ok - interesting - enjoyed prompt - felt free using material - would do again
3/20	3	N/A	3	Pencil	Felt ok - enjoyed prompt - material felt normal - would do again
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	2	Excited for spring break	2	Marker and Colored Pencils	Felt ok - enjoyed prompt - would do again - interesting

**Amare's Journal Matrices**

STUDENT NAME: Amare					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	6	Extremely stressed - angry - upset about school and graduation	5	Charcoal and Chalk Pastels	Felt okay - nice distraction - liked material - blending - would do again with different materials - still stressed
1/30	6	Overwhelmed - grandmother in hospital	5	Oil Pastels	Didn't feel any particular way about prompt - liked how deep colors were - wouldn't mind drawing it again - drawing wasn't enough to feel better
1/31	4	Slightly anxious - feeling cautiously optimistic about grandmother	3	Oil Pastels	Prompt was fun - liked using materials - bright - feel normal - not stressed - not happy
2/1	3	Feeling relieved - feeling sick - grandmother released from hospital	2	Charcoal and Chalk Pastels	Liked prompt - feel better - drew symbol from favorite book series - different materials would have made it easier - improved mood
2/2	2	Feel pretty good - Friday - excited to see grandmother - boyfriend	2	Oil Pastels	Feel indifferent - not happy with pattern - want to improve - still happy
STUDENT NAME: Amare					WEEK #: 2

DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5	2	Eagles won the Superbowl - family pretty happy - pretty tired but happy	2	Pencil	Feel okay - not different - material made it easy to map prompt out - hope to do better job next time - good day
2/6	6	Feeling really tired - sleep deprived - grandmother back in hospital - feeling nervous	6	Pencil and Chalk Pastels	Liked doodling - cool - liked materials - nice distraction - still worried - still exhausted
2/7	4	Still worried about grandmother - trying to be positive - things will get better	4	Pencil and Chalk Pastels	Worked on prompt from 2/6 - still feel the same
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9	3	Feeling okay - tired - happy - grandmother released from hospital	2	Pencil and Oil Pastel	Felt good - expressed feelings - thoughts expressed better with materials - feel happier

STUDENT NAME: Amare					WEEK #: 3
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	2	Good day - feeling tired - spent quality time with family - saw boyfriend	2	Pencil	Felt expressive - trying to convey what was heard - wouldn't use pencil again - too thin - too straight - still feeling happy - want to listen to more music
2/13	3	Feeling tired - slightly stressed - being positive - going to make week a good one	2	Charcoals and Oil Pastels	Felt calm - felt happy - really enjoyed it - would have preferred chalk pastels - fun - relaxing prompt
2/14	2	Feeling tired - very happy - Valentine's Day	1	Chalk Pastels	Loved prompt - more sound - less lyrics - loved smudging - loved blending - prompt was cool
2/15	5	Worried about things - people - Distraction from friends helping	4	Chalk Pastels	Felt happy - calm - enjoyed prompt - colors worked together - loved it- love nature - still feel anxious
2/16	N/A	N/A	N/A	N/A	N/A
STUDENT NAME: Amare					WEEK #: 4

DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	2	Feeling pretty good - a little tired	2	Pencil and Chalk Pastels	Happy and frustrated - didn't turn out as desired - want to improve - enjoyable - reminded me of "him"
2/21	4	Feeling very tired - stressed - stressed about grades - boyfriend stressed - empathy effecting mood	2	Chalk Pastels	Loved it - allowed more blending - more mixing - Happy from prompt
2/22	3	N/A	2	Chalk Pastels	Felt happy - felt like material fit well - Chalk Pastels are "fave" - would do prompt again
2/23	4	Unsure how to feel - hoping day gets better	4	Chalk Pastels	Felt indifferent - helped express feelings - feeling confused - don't know how to feel

<b>STUDENT NAME:</b> Amare	<b>WEEK #:</b> 5
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	3	Feeling tired - optimistic	2	Chalk Pastel and Charcoal	Felt pretty good - inspired by mother - would do again - love chalk pastels
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/3 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Amare	<b>WEEK #:</b> 6
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	3	N/A	N/A	N/A	N/A
3/6	3	N/A	3	Pencil and Chalk Pastel	Felt fine - no different - nice - not amazing - wasn't the best material for prompt - feeling okay not great
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

STUDENT NAME: Amare					WEEK #: 7
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	2	N/A	2	Pencil and Chalk Pastels	Feel pretty happy - should have used colored pencils - would do prompt again
3/13	3	N/A	2	Pencil and Chalk Pastels	Happy - should have used oil pastels - would do prompt again
3/14	2	N/A	2	N/A	N/A
3/15	2	N/A	2	Pencil	Liked prompt - like using pencil - can erase - helps get things right - want to do again to improve - feeling happy
3/16	N/A	N/A	N/A	N/A	N/A

STUDENT NAME: Amare					WEEK #: 8
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	2	Feeling tired - happy	2	Pencil	N/A
3/20 ABSENT	N/A	N/A	N/A	N/A	N/A
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	2	Feeling tired - happy - have plans for spring break	2	N/A	N/A



### Helga's Journal Matrices

STUDENT NAME: Helga					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	6	Overwhelmed – angry – school mistake with courses stressing out	4	Charcoal pencil and chalk pastel	A little less anxious/stressed – thinking about issues – feeling stressed while drawing – enjoyed texture – would do again
1/30	3	Lack of sleep – feels exhausted	2	Oil pastels	Felt calm drawing – relaxing – focused – would do again – felt more calm than before
1/31	2	Tired – having a good day	2	Chalk pastels	Music keeps me focused – felt good – relaxed – messy but enjoyed – would do again – enjoyed prompt
2/1	2	Having a good day – good mood	2	Markers	Good mood while drawing – hard using only straight lines – difficult to use (markers) – sloppy – too limited – wouldn't do again
2/2	2	Having a good day	2	Oil pastels and charcoal	Felt good – enjoyed – like contrasting materials – would do again – lets you be creative
STUDENT NAME: Helga					WEEK #: 2

DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5	3	Tired – stressed – angry – not having a good day	3	Charcoal and Pencil	Felt calm – tired – enjoyed – liked material – charcoal messy – opens up creativity – would do again
2/6	4	A lot going on – overwhelmed – a lot on mind	3	Charcoal	Felt good – calm – free-will drawing – enjoyed look of material – would do again – feel a little better – still overwhelmed
2/7	2	Good mood – tired – sleep schedule off	2	Pencil	Easy – felt good – enjoyed material – easy to use – would do again – felt good after
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9	2	Tired – looking forward to weekend	2	Chalk Pastel	Felt good – happy – best prompt – would do again – favorite prompt

<b>STUDENT NAME:</b> Helga	<b>WEEK #:</b> 3
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	2	Having a good day	2	Pencil	Felt pumped - liked prompt - liked material - would do again
2/13	2	Good day - tired	2	Oil Pastels	Relaxed - peaceful - liked material - would do again - at peace
2/14	1	Good day - V-Day	1	Charcoal and Chalk Pastel	Felt vibrant and moved - liked how materials mixed - would do again - put in a good mood
2/15	2	Feeling good	2	Chalk and Oil Pastel	Relaxed by birds - focused - messy - would do again - focused more on art
2/16	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Helga	<b>WEEK #:</b> 4
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	2	Pretty good - nergetic - drawing peace and serenity	2	Chalk Pastels	Peaceful - focused - messy - enjoyed colors - would do again
2/21	2	Feeling good	2	Chalk Pastels	Energized - happy - would do again - likes material - good mood from prompt
2/22	3	tired	3	Chalk Pastels	sleepy - drawing sleep - messy but good - would do again
2/23	2	Feel good today - energized	2	Oil Pastels	Happy - hungry - would do again

<b>STUDENT NAME:</b> Helga	<b>WEEK #:</b> 5
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	3	Sick - tired - hungry - want to nap	3	Chalk Pastels	Empowered - happy - focused - would do again - still feel okay
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Helga	<b>WEEK #:</b> 6
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	2	Feeling good - hungry	2	Oil Pastels	Felt good - "like drawing a vision board" - material felt good - would do again - motivating
3/6	3	Tired	3	Pencil	Relaxed - thinking about family - material felt good - would do again - meaningful - thought of home
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Helga	<b>WEEK #:</b> 7
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	3	Tired - desperate for sleep	3	Pencil	Made me think about my future - material felt good - would do again - felt good
3/13	3	Feel okay	3	Chalk Pastels	Thinking about vacation - material felt good - would do again
3/14	2	Feel good today	2	Pencil	Felt good - something aspiring to have - material felt good - would do again - still feel good
3/15	2	Feel good	2	Charcoal Pencil	Thinking about aspirations - material felt good - would do again - still feel good
3/16	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Helga	<b>WEEK #:</b> 8
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	3	Tired	3	Pencil	Felt good - thinking about alter ego - material felt good - would do again - still feel tired
3/20	3	Tired - hungry	3	Pencil	Good - thinking about future plans - material felt good - would do again - feel the same
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23 ABSENT	N/A	N/A	N/A	N/A	N/A

**Olga's Journal Matrices**

STUDENT NAME: Olga					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	N/A	N/A	N/A	N/A	N/A
1/30	5	Very shaky - nervous - don't want to be around people	5	Oil Pastels	Enjoyed it - easy - feel the same
1/31	4	A little shaky - better than previous day	4	Soft Pastels	Didn't know what to draw - liked pastels - wants something more specific - feel the same
2/1	5	Have a lot going on - still shaky	4	Markers	Enjoyed it - easy - felt good - used material before - felt better - distraction
2/2	3	Feel pretty fine	3	Markers	Proud - love patterns - looks as intended

STUDENT NAME: Olga					WEEK #: 2
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5 ABSENT	N/A	N/A	N/A	N/A	N/A
2/6	3	Today not bad	3	Charcoal	Good - easy prompt - like using charcoal - fun - like patterns
2/7 ABSENT	N/A	N/A	N/A	N/A	N/A
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9 ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Olga</b>	<b>WEEK #: 3</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	5	Anxiety really bad - police took car	4	N/A	Fun - music with prompt - calming
2/13	3	Anxiety not bad - okay day	3	Pencil	Relaxed - music during prompt - calming
2/14	3	Not too much going on	3	N/A	N/A
2/15	2	N/A	2	Sharpie	Boring - didn't like it - it was okay - will do prompt again - no music - feel the same
2/16	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Olga</b>	<b>WEEK #: 4</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	3	N/A	3	N/A	N/A
2/21	3	N/A	2	N/A	Drawing - relaxed
2/22	3	Not too bad - good day - happy with girlfriend - happy when home	2	Chalk Pastel	Felt happy - enjoyed prompt - would do again - thinking about happy place brings happiness
2/23	3	N/A	2	Pen	Felt good - would do prompt again - happy

<b>STUDENT NAME:</b> Olga	<b>WEEK #:</b> 5
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	4	Tired - want to go home	3	Pencil	Didn't like it - good - would not do again - not creative
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Olga	<b>WEEK #:</b> 6
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	3	Alright day - not bad - could be better	2	Pencil and Oil Pastels and Markers	Would not do prompt again - Happy
3/6	3	Feel alright	3	Pencil	Felt good - would do prompt again - good memories- good vibes - feel no different
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Olga</b>	<b>WEEK #: 7</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	2	Haven't felt this good in a while - pretty happy	2	Markers	Liked prompt - would do again - feel good - like thinking about future
3/13	3	N/A	2	N/A	N/A
3/14	2	Few students in class - love it	2	Pencil and Chalk Pastels	Feel great - love self - wouldn't do prompt again
3/15	4	Feel shaky - want to leave class	4	N/A	N/A
3/16	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Olga</b>	<b>WEEK #: 8</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	3	N/A	N/A	N/A	N/A
3/20 ABSENT	N/A	N/A	N/A	N/A	N/A
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	3	Feel calm - chill - not a bad day	N/A	N/A	N/A



**Emanon's Journal Matrices**

STUDENT NAME: Emanon					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	N/A	N/A	N/A	N/A	N/A
1/30	4	Feeling stressed - anxious today - sleep deprived - anxious about college	N/A	Chalk Pastels	Felt unsure - mind felt blocked - liked how bright some colors were - pleasant materials - liked freedom of prompt
1/31 ABSENT	N/A	N/A	N/A	N/A	N/A
2/1	6	Feeling conflicted emotionally - overwhelmed	3	Charcoal Pencils and Chalk Pastels	Felt good after drawing - simple prompt - vented while drawing
2/2	3	Feeling alright - stress levels neutral	3	Markers	Feeling the same - liked making patterns - liked order - messy materials
STUDENT NAME: Emanon					WEEK #: 2
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5	1	Feeling good - chill mood	1	Markers	Still doing well - good vibes - fun drawing
2/6	4	Anxious - blurred vision - headache - depressed morning	3	Pencil	Felt free - good - fond of pencil - creative - zentangle is one of favorites - focused - creativity flowed
2/7 ABSENT	N/A	N/A	N/A	N/A	N/A
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9	2	N/A	2	Pencil and Markers	Felt chill - like mandalas - symmetrical - like pencil - would do again - free flow of prompt improved mood

<b>STUDENT NAME: Emanon</b>	<b>WEEK #: 3</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	2	N/A	1	Oil Pastels	Felt great - really enjoyed - good form of expression - absolutely would do again - mood improved - love music while drawing
2/13	3	Feeling fine - hope art will improve mood	2	Markers	Really calming - good vibes - color was good for prompt - would do again - loved music while drawing - zen mood
2/14	2	Not stressed	4	Oil Pastels and Charcoal	Felt random - unsure of enjoyment - feel materials not used well - feel less satisfied after
2/15	2	Feeling confident - not as bad as previous day	1	Colored Pencils	Felt peaceful - separated from reality - liked prompt - used colors to separate sounds
2/16	5	Overwhelming work, no sleep	3	Oil Pastels	Fun - feeling better - less stressed - like feeling unaware of drawing - would do again

<b>STUDENT NAME: Emanon</b>	<b>WEEK #: 4</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	6	No sleep - no food - anxious about school work	4	Markers	Felt expressive - enjoyed prompt - material was perfect - feeling released - would do again
2/21	3	N/A	4	Charcoal	Feeling not good - unsatisfied - feel worse - would do again with different material
2/22 ABSENT	N/A	N/A	N/A	N/A	N/A
2/23	2	N/A	2	Markers	Felt expressive - felt good - like creating bleeding colors - feeling okay - felt good to

<b>STUDENT NAME: Emanon</b>	<b>WEEK #: 5</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	3	Sleep deprived - job interview after school - not too stressed	N/A	N/A	N/A
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Emanon</b>	<b>WEEK #: 6</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5 ABSENT	N/A	N/A	N/A	N/A	N/A
3/6	3	Lacking on sleep	2	Charcoal	Feeling enlightened - enjoyed prompt - liked darkness of material - would do again with different material - felling better
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Emanon</b>	<b>WEEK #: 7</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	3	Feeling "meh" - tired	3	Charcoal	Felt lost - good materials - created blurry marks - described thoughts about future feel the same
3/13	4	Tired	3	Markers and Pencil	Felt serene - prompt was nice - feeling more relaxed - would do again
3/14	1	Feeling good - excited for STEAM night	1	Charcoal and Pencil	Enjoyed material - unsure of doing prompt again - liked how prompt inspired thought of future
3/15	2	Excited	2	Charcoal and Marker	Felt inspired - liked combining materials - would do again - feeling optimistic
3/16	1	Feeling great - well rested - excited for art project	1	Charcoal and Chalk Pastels	Felt artistic - felt like materials worked well together - might do again

<b>STUDENT NAME: Emanon</b>	<b>WEEK #: 8</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	2	N/A	2	Oil Pastels	Felt expressive - enjoyed prompt - like variety of colors - would do again with different materials
3/20 ABSENT	N/A	N/A	N/A	N/A	N/A
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	3	N/A	3	Graphite	Felt expressive - free - like ribbon effect - would do again - like random motions - elegant - unpredictable

**Sofia's Journal Matrices**

STUDENT NAME: Sofia					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	4	Optimistic about tomorrow	2.5	Oil Pastels	Getting out feelings - enjoyed prompt - abstract - forced to think - material felt good - cleared mind - might do again - don't like how material blends - prompt was calming
1/30	5	Bothered	4	Charcoal Pencil and Colored Pencils	Calm - enjoyed prompt - therapeutic - liked materials - would do again - don't have to think - slight change in mood
1/31	2	Happy	2	Sharpie	Felt good - awake and alert - like pattern - material felt good - bold - even color - would do again
2/1	2	N/A	1.5	Charcoal Pencil	Getting rid of anger - felt nice - enjoyed prompt - material felt good - would do again - want more time
2/2	1	Feeling great	1	Chalk Pastels	Felt good - likes pattern - material felt good - liked blending - would do again - wants more time - feels great

STUDENT NAME: Sofia					WEEK #: 2
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5	3	Tired	3	Sharpie	Felt alright - material felt ok - a little stressed - Doesn't like mandalas - wouldn't do again
2/6	2	Tired	2	Sharpie	N/A
2/7	2	Feeling good	2	Sharpie	Felt good after - like zentangles® - took more thinking - material opaque - likes material - would do again
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9	3	N/A	3	Markers	Felt ok - little stressed - Doesn't like mandalas - prompt was nice - likes material - wouldn't do again

<b>STUDENT NAME: Sofia</b>	<b>WEEK #: 3</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	4	Not feeling well - irritable	3	Pencil	Liked prompt - felt good - subconscious - didn't have to think - material easy to control - fun - would do again - feeling better
2/13	6	Stressed	2	Chalk Pastels	Felt calm - saw images in head - material felt good - blending - would do again - felt good after
2/14 ABSENT	N/A	N/A	N/A	N/A	N/A
2/15	2	Feeling good	2	Chalk Pastels	Felt good - in happy place - Liked material - Would do again - like nature - fave thing to draw
2/16	1	N/A	1.5	Marker and Pencil	Material felt good - did not like prompt - would not do again - stressing - felt uncomfortable - material felt good

<b>STUDENT NAME: Sofia</b>	<b>WEEK #: 4</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	2	N/A	2	Markers, Chalk Pastels, White Charcoal Pencil, and Colored Pencils	Felt peaceful - something new - felt good - materials didn't work well together - would not do again
2/21	1	Feeling good	1	Chalk Pastels	Felt ok - didn't enjoy - liked material - would not do again
2/22	3	N/A	2	Chalk Pastels	Felt good - liked prompt - Liked material - would do again - calming
2/23	3	Mad	2	Sharpie	Felt good - liked prompt - put emotions on paper - would do again - soothing - liked material

<b>STUDENT NAME: Sofia</b>	<b>WEEK #: 5</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	3	"eh"	3	Vine Charcoal, Charcoal Pencil, and Chalk Pastels	Felt ok - nice prompt - material felt good - blending - would do again with different word
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Sofia</b>	<b>WEEK #: 6</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	3	Ok day	3	Colored Pencil	Felt good - liked prompt - felt happy - liked material - would do again - feels the same
3/6	2	Tired	2	Charcoal Pencil and Chalk Pastels	Felt ok - material blends well - would not do again
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Sofia</b>	<b>WEEK #: 7</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12 ABSENT	N/A	N/A	N/A	N/A	N/A
3/13	3	N/A	3	Pencil	Felt ok - relaxing - material felt good - solid lines - would do again - wants more time
3/14	1	N/A	1	Chalk Pastels	Felt good - material blends well - would do again - wants more time
3/15	2	N/A	2	Sharpie	Felt ok - difficult - liked material - would not do again
3/16	2	N/A	2	Chalk Pastels	Felt good - calming - nice prompt - liked material - would do again

<b>STUDENT NAME: Sofia</b>	<b>WEEK #: 8</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	2	N/A	2	Chalk Pastels	Continued drawing from 3/16 - felt the same as 3/16 - calming - felt good - would do again
3/20 ABSENT	N/A	N/A	N/A	N/A	N/A
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	1	N/A	1	Pencil	Felt good - felt creative - liked layering material - would do again



## Olive's Journal Matrices

STUDENT NAME: Olive					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	4	N/A	2	Oil Pastels	Relaxed easy to blend would do again creative ideas did decent job on drawing
1/30	3	"human blob" "wrinkly tissue"	4	Oil Pastels	Didn't know how to bring everything together Hard to draw subject with chosen materials No fine point Would do again Doesn't feel did enough on drawing
1/31	3	N/A	1	Charcoal Pencil	Enjoyed prompt Can do a lot with lines Liked material Would do again Confident Simple but unique
2/1	1	N/A	1	Colored Pencil	Fun prompt Relaxing go with the flow precise lines easy to layer would do again easy and diverse not finished yet
2/2	2	N/A	1	Markers	confident easy to use material and simple would do again more ideas not finished but feels successful
STUDENT NAME: Olive					WEEK #: 2
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5 ABSENT	N/A	N/A	N/A	N/A	N/A
2/6	4	N/A	1	Colored Pencils	Feels creative and calm – relaxed Going with the flow Wished used sharpie for contrast Fun Would do again
2/7	1	N/A	1	Marker	Relaxed and relieved Good – material felt smooth Simplicity Would do again
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9	2	N/A	4	Colored Pencil	confident easy to use material and simple would do again more ideas not finished but feels successful

<b>STUDENT NAME: Olive</b>	<b>WEEK #: 3</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	2	N/A	5	Marker	Stuck – not sure how to express sounds Colors go with mood of the music Would NOT do again Feels her drawing is weak
2/13 ABSENT	N/A	N/A	N/A	N/A	N/A
2/14	1	Music soothing	1	Oil Pastels	Relaxed and calm Love classical music Rhythms neat Easy to blend material Fun – would do again – feels drawing is calm
2/15	1	N/A	1	Oil Pastels	Felt into it – came out good Material blended easily Enjoyed – relaxing – calming Would do again
2/16	1	N/A	2	Oil Pastels	Fun – nervous – dark Didn't know what was going on Would do again Material smooth and easy to use Came out differently than imagined

<b>STUDENT NAME: Olive</b>	<b>WEEK #: 4</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	3	N/A	1	Oil Pastels	Relaxed – enjoyed – carefree Material easy to blend Would do again fun
2/21	5	N/A	1	Oil Pastels	calm prompt based on emotion Material easy to blend Would do again fun drawing came out good
2/22	3	Music soothing	2	Oil Pastels	Felt good Material easy to blend Would do again relaxing drawing came out good
2/23	3	Can't think straight Everything feels jumbled	1	Charcoal Pencil	Enjoyed prompt Drew how I felt and released it into drawing Likes texture of material Would do again Has more ideas for prompt It looks how I felt

<b>STUDENT NAME: Olive</b>	<b>WEEK #: 5</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	4	Having a bad day	3	Marker	Prompt was ok Material easy to use Would NOT do again Had hard time thinking of idea
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Olive</b>	<b>WEEK #: 6</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	3	N/A	2	Charcoal	Relaxed – went with the flow Felt could've added color to make image happier Would do again Has other ideas for prompt Not finished drawing yet Happy with the drawing
3/6	3	N/A	2	Oil Pastels	Felt serious – depending on memory to draw image of her phone Material easy to blend Would do again Easy prompt
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Olive</b>	<b>WEEK #: 7</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	3	N/A	3	Pencil	Focused – liked prompt Pictured self in the future at job Material easy to use Would do again Has other ideas for prompt Feels drawing looks “plain”
3/13	3	N/A	4	Markers	Felt anxious Struggled to draw without photo reference Felt bad while using the materials Feels drawing looks “sloppy” Wouldn’t do again – feels drawing could have been neater
3/14	3	N/A	2	Charcoal pencil	Felt relaxed – into it Easy to use material Would do again fun drawing came out well
3/15	3	N/A	3	Pencil	Felt calm – prompt was ok Precise lines – material felt good Would do again Fun Didn’t finish drawing
3/16	3	N/A	2	Charcoal pencil	Calm – concentrated Material easy to shade with – felt good using material Would do again – “it was cool” Feels drawing came out well

<b>STUDENT NAME: Olive</b>	<b>WEEK #: 8</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	2	N/A	2	Marker	Happy and relaxed Vibrant Material felt good Would do again – fun Drawing came out well
3/20	N/A	N/A	N/A	N/A	N/A
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	3	N/A	2	Charcoal pencils	Calm – focused Material felt good – dark like my hair Would do again – fun Looks like my hair

**Osewald’s Journal Matrices**

<b>STUDENT NAME: Osewald</b>					<b>WEEK #: 1</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	3	Feel ok School work to make up	3	Charcoal	Felt the same – fun – enjoyed – material felt good – would do again
1/30	2	Feel pretty good	2	Oil Pastels	Felt focused – fun – random shapes – material felt alright – not sure how to use material – didn’t like material – would do again
1/31	3	Feel ok Tired A lot of work to do	2	Markers	Felt happy – enjoyed prompt – material felt good – comfortable – would do again
2/1	2	Felt good today	2	Pencil	Felt good during drawing – enjoyed prompt – struggled with material – hard to erase – would do again
2/2	1	Good day – doing well - happy	1	Chalk Pastels	Fun – enjoyed colors – material felt good – would do again

<b>STUDENT NAME: Osewald</b>					<b>WEEK #: 2</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5 ABSENT	N/A	N/A	N/A	N/A	N/A
2/6	2	Feel good Not much work to do	2	Sharpie	Calm – enjoyed – done before – material felt good – easy to use – calming – would do again
2/7	2	Feel good	2	Sharpie	Relaxed – enjoys prompt – felt good – material easy to work with – would do again
2/8 NO SCHOOL					
2/9	3	Feel ok Tired Lacking sleep	2	Sharpie	Concentrated – calm – enjoyed – relaxing – felt good – thin lines – would do again

<b>STUDENT NAME: Osewald</b>	<b>WEEK #: 3</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	3	Feel ok Tired Long day	2	Chalk Pastels	Motivated – enjoyed – music – different – material felt good – textures – would do again
2/13	2	Feel good Did well on test	2	Markers	Relaxed – calm – felt good – material easy to use – would do again
2/14	3	Ok Tired A lot of HW	3	Colored Pencils	Felt good – enjoyed – likes materials – fun – would do again
2/15	2	Feel good Not a lot of HW	2	Oil Pastels	Felt good – enjoyed – drawing what I hear – listening to music – don't like material – unfamiliar – would do again
2/16	2	Good day excited	2	Charcoal Pencils and Markers	Sloppy – enjoyed – different – good using material – fun – would do again

<b>STUDENT NAME: Osewald</b>	<b>WEEK #: 4</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL					
2/20 ABSENT	N/A	N/A	N/A	N/A	N/A
2/21	3	Ok Tired Stomach ache	3	Charcoal and Chalk Pastel	Creative – enjoyed material – felt all-right – enjoyed material – would do again
2/22	2	Feel good	2	Colored Pencil and Chalk Pastel	Felt good – enjoyed – fun – material felt good – enjoyed material – would do again
2/23	2	Feel good	2	Markers	Calm – enjoyed – drew how I felt – material felt good – fun to use – would do again

<b>STUDENT NAME: Osewald</b>	<b>WEEK #: 5</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	3	Feel ok Headache Want to go home	3	Chalk Pastels	Felt good – enjoyed prompt – fun – material felt good – feeling more confident in ability to use material – would do again
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Osewald</b>	<b>WEEK #: 6</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	3	Feel ok Hurt toe	3	Charcoal	Felt good – happy – enjoyed – material felt good – enjoyed material – would do again
3/6	2	Feel good	2	Pencil	Felt good – enjoyed prompt – like my drawing – material felt good – familiar with material – would do again- fun
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Osewald</b>	<b>WEEK #: 7</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	3	Feel ok Tired Feel annoyed	3	Charcoal	Felt alright – unsure what to draw – enjoyed – enjoyed material – felt good – material is fun – would do again
3/13	2	N/A	2	Oil Pastels	Felt good – enjoyed prompt – fun – material felt good – enjoyed material – becoming more confident in a ability to use material – would do again
3/14	1	N/A	2	Chalk Pastels	Felt happy – enjoyed prompt – drawing came out well – material felt good – likes colors – would do again
3/15	2	Feel good Good day	2	Chalk Pastels	Felt good – enjoyed – fun – material feels good – would do again
3/16	2	Feel good Decent day	2	Charcoal and Chalk Pastels	Felt happy – expressing self – enjoyed – material felt good – enjoyed material – would do again – liked prompt

<b>STUDENT NAME: Osewald</b>	<b>WEEK #: 8</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	3	Ok headache	2	Chalk Pastel	Felt happy – enjoyed – likes his drawing – material felt good – enjoyed material – getting better at using material – would do again
3/20	2	Feel good Spring break next week	2	Pencil	Felt good – enjoyed prompt – fun – material easy to use and enjoyable – would do again
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23 ABSENT	N/A	N/A	N/A	N/A	N/A



## Jenny's Journal Matrices

STUDENT NAME: Jenny					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	2	Good day Sick	2	Charcoal	Enjoyed prompt – freedom – possibilities – enjoyed material – hard to use – smears – would do again with different shape
1/30	3	Headache	3	Markers	Tired – enjoyed prompt – freedom – enjoyed material – worked well for prompt – would do again – a little more relaxed
1/31	2	Good day	2	Pencil	Felt good – fun – enjoyed material – easy to use – control – would do again – freedom
2/1	2	Good day	2	Colored Pencils	Felt alright – not happy with drawing produced – liked material – fun to shade with – would do again – fun
2/2	2	Good day	2	Markers	Relaxing – calming – enjoyed material – vibrant – would do again – fun
STUDENT NAME: Jenny					WEEK #: 2

DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5	2	Boring day	2	Oil Pastels	Enjoyed prompt – likes mandalas – likes material – texture – would do again
2/6	2	Good day	2	Pencil	Happy with drawing – enjoyed prompt – free flowing – material allowed for small details – would do again – fun – carefree
2/7	2	Great day	2	Pencil	Enjoyed prompt – relaxing – liked material – would do again – want to continue drawing
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9	3	Stressed	3	Pencil	Enjoyed prompt – clears head – liked material – would do again – still a little stressed

<b>STUDENT NAME: Jenny</b>	<b>WEEK #: 3</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	2	Good day	2	Markers and Colored Pencils	Enjoyed prompt – like music and art together – enjoyed material – bright colors – would do again - fun
2/13	2	Good day	2	Oil Pastels	Enjoyed prompt and music – smooth melody – material worked well with idea – would do again
2/14	2	Good day	2	Chalk Pastels	Enjoyed prompt – liked music – interesting drawing – liked texture and color of material – would do again – fun – happy with drawing
2/15	2	Good day	2	Compressed Charcoal	Relaxing – soothing – Liked material – messy – would do again – like music prompts – liked drawing produced
2/16	2	Good day	2	Colored Pencils	Liked prompt – wasn't favorite but was fun – like material – easy to use – would do again with different song

<b>STUDENT NAME: Jenny</b>	<b>WEEK #: 4</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	2	Good day	2	Chalk Pastels	Enjoyed prompt – enjoyed visually interpreting emotions – liked material – blending – would do again – fun – peaceful
2/21	2	Good day	2	Charcoal	Enjoyed drawing – thinking about representing emotions – not favorite material – worked well with idea – would do again – happy with drawing – might add to it
2/22	2	Tired Good day	2	Charcoal	Continued drawing from 2/21 – liked adding to drawing – would do again – drawing going well
2/23	2	Good day	2	Colored Pencils	Liked prompt – like material – fun to layer – would do again – drew how it feels to be stressed – still feel good

<b>STUDENT NAME:</b> Jenny	<b>WEEK #:</b> 5
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	2	Good day	2	Pencil	Liked prompt - a lot of ideas - material worked well for idea - would do again - still feel good
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME:</b> Jenny	<b>WEEK #:</b> 6
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	2	Good day	2	Colored Pencil and Pen	Enjoyed prompt - liked material - fun to use - would do again - happy with drawing
3/6	2	Good day	2	Oil Pastels	Enjoyed prompt - fun - small still life - like texture of material - would do again - a lot of possibilities - happy with drawing
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Jenny</b>	<b>WEEK #: 7</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	2	Good day	2	Pencil	Enjoyed prompt - liked material - blending material - would do again - happy with drawing
3/13	2	Good day	2	Oil Pastels	Enjoyed prompt - "not my best drawing" - Like texture of material - would do again - a lot of ideas
3/14	2	Good day	2	Chalk Pastels	Enjoyed prompt - drawing not finished - material worked well for idea - would do again - happy with drawing
3/15	2	Good day	2	Oil Pastels	Fun - abstract - material is vibrant - would do again - interesting - happy with drawing
3/16	2	Good day Friday	2	Chalk Pastels	Continued drawing from 3/14 - would do again - happy with progress of drawing- want to continue working on it

<b>STUDENT NAME: Jenny</b>	<b>WEEK #: 8</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	2	Good day	2	Chalk Pastels	Continued drawing from 3/14 - finished drawing - likes how material blends - would do again - happy with drawing produced
3/20 ABSENT	N/A	N/A	N/A	N/A	N/A
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	2	Good day	2	Colored Pencils	Enjoyed prompt - details - material worked well for prompt - would do again - fun - a lot of ideas

## Sophia's Journal Matrices

STUDENT NAME: Sophia					WEEK #: 1
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	2	Rested – feeling ok	2	Markers	Felt strategic – concentrated – enjoyed – tried something new – felt cautious – bound to mess up – enjoyed material – would do again
1/30	4	Had to present in another class	3	Colored Pencils	Tired – liked the prompt – creative freedom – felt better – more concentrated – enjoys material – would do again – music and prompt good distraction from feelings
1/31	3	Tired – didn't sleep enough	2	Compressed Charcoal	Concentrated – alert – enjoyed prompt – abstract – material ok – would do again – “so much more I could do”
2/1 ABSENT	N/A	N/A	N/A	N/A	N/A
2/2 ABSENT	N/A	N/A	N/A	N/A	N/A

STUDENT NAME: Sophia					WEEK #: 2
DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5	1	N/A	1	Markers	Relaxed – enjoyed it – control – comfortable – understand (material) – would do again
2/6	3	N/A	3	Chalk Pastels	Calm – didn't have to think – enjoyed prompt – needed to be careful with material – smudges – likes material – smooth – create freely – would do again
2/7	2	N/A	2	Markers	Focused – concentrated – interesting – comfortable – can use material efficiently – would rather do another prompt
2/8 NO SCHOOL					
2/9	3	N/A	2	Colored Pencils and Markers	Inspired and ready – many possibilities – enjoyed a lot – comfortable with material – enjoyed – easy to work with – would do again – a lot of ideas

<b>STUDENT NAME: Sophia</b>	<b>WEEK #: 3</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12	4	N/A	3	Pencil	Chilled out – mellow – tune out to music – let the sounds guide hand – liked prompt a lot – comfortable with material – would do again
2/13	5	N/A	3	Chalk Pastels	Relaxed – a lot on mind – cleared head – process thoughts better – fun using pastels – colors blend – would do again – like meditation music – clears mind – calming sounds
2/14	2	Anxiety going away	1	Colored Pencils	Love classical music – feel better – cleared mind – liked effect of material – smooth – soft – love – would do again
2/15	2	N/A	1	Oil Pastels, Vine Charcoal, and Chalk Pastels	Felt at ease – liked sounds – liked effect of materials – blending – would do again – feel better
2/16	2	Rough start of day – feel great	1	Markers	Confused – couldn't see – material smooth – would do again – would see other results

<b>STUDENT NAME: Sophia</b>	<b>WEEK #: 4</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	2	Tired – anxious – focusing on work	1	Vine Charcoal, Chalk Pastels, and Oil Pastels	Concentrated – enjoyed overall – careful – enjoyed materials – would do again with different emotion
2/21	2	Tired – worried about tomorrow – good day	1	Markers	Concentrated – fun – comfortable – would do again – different emotions
2/22	2	Tired – pushing through	1	Pencil and Oil Pastels	Felt happy – created a drawing that brought joy – peace – enjoyed – liked how piece came out – would do again – a lot of ideas
2/23	1	N/A	1	Charcoal and Chalk Pastels	Expressing how I feel – Honest – Using artistic style to express self – enjoyed prompt – liked materials – worked with idea well – would like to use again to express feelings when stressed

<b>STUDENT NAME: Sophia</b>	<b>WEEK #: 5</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	1	N/A	N/A	Pencil	ok overall – had a hard time portraying idea – liked prompt – struggles to visually interpret – felt confident with material – would do prompt again with a different word
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Sophia</b>	<b>WEEK #: 6</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	1	Birthday – feel hyped up	1	Pencil	At peace – relaxed – drawing what makes me happy – calm – likes material – would do again
3/6	2	N/A	2	Oil Pastels	Indifferent and calm – liked drawing things of importance – liked material – smooth – would do again – wants to improve drawing
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Sophia</b>	<b>WEEK #: 7</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	2	N/A	1	Markers and Pencil	Felt pretty chill - thinking about future - took comedic approach - felt great using materials - would do again - has other ideas
3/13	3	N/A	2	Oil Pastels	Felt content - like how work came out - liked materials - would do again - has other ideas
3/14	2	N/A	2	Charcoal Pencil	Felt the same - got a little frustrated while drawing - enjoyed prompt - liked material - would like to try again but wants to improve
3/15	2	N/A	2	Oil Pastels	Enjoyed prompt - got lost in thought - a lot of possibilities - material messy - wished had chosen another material - would do again
3/16	3	N/A	2	Pencil and Vine Charcoal	Liked prompt - "felt nice to get that off my chest" - felt sneaky - like materials - would do again

<b>STUDENT NAME: Sophia</b>	<b>WEEK #: 8</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	1	N/A	1	Marker	Like prompt a lot - a lot of ideas - don't like how drawing came out - had fun anyway - felt cautious with material - smudges - would do again
3/20 ABSENT	N/A	N/A	N/A	N/A	N/A
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	3	N/A	2	Chalk Pastels	Made me feel better about myself - thought about positives about myself - material felt natural to use - smooth - blended - would do again



**Daniel's Journal Matrices**

<b>STUDENT NAME: Daniel</b>	<b>WEEK #: 1</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
1/29	3	N/A	3	Colored Pencil	Relaxed – liked prompt Simple shapes – pattern Doesn't require thought Easy – material familiar and comfortable Easy to use
1/30	2	Snowing!	2	Chalk Pastels	Liked prompt – abstract Incorporated pattern – fun Pastels feel nostalgic messy
1/31	4	Hot Heat hindering thought	3	Pencil	Exhausting – enjoyed prompt – lines easy to draw – can make anything – material easy to use – open to interpretation – would do again
2/1	4	exhausted	2	Marker	Relaxed – easy to draw – marker good for prompt – doesn't like marker as much as the other materials
2/2 ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Daniel</b>	<b>WEEK #: 2</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/5	1	Eagles Super bowl	1	Colored Pencils	Relaxed – hyped – cooling down – material less stressful – easy to use – would do again
2/6	2	Still excited about the eagles	4	Marker Sharpie	Frustrated – couldn't get lines straight – not sure what I was doing – like material – control – would use markers more
2/7	4	Hungry Affecting work ethic	3	Pencil	Limits creativity – frustrated – felt like couldn't get a new material – would NOT do again
2/8 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/9	3	N/A	3	Marker	Liked prompt – material easy to use – likes material – would do prompt again

<b>STUDENT NAME: Daniel</b>	<b>WEEK #: 3</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/12 ABSENT	N/A	N/A	N/A	N/A	N/A
2/13 ABSENT	N/A	N/A	N/A	N/A	N/A
2/14 ABSENT	N/A	N/A	N/A	N/A	N/A
2/15 ABSENT	N/A	N/A	N/A	N/A	N/A
2/16	3	Recovering from the flu	2	Oil Pastels	Confused – fun – liberated – couldn't see anything – would do again to different songs

<b>STUDENT NAME: Daniel</b>	<b>WEEK #: 4</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/19 NO SCHOOL	N/A	N/A	N/A	N/A	N/A
2/20	2	N/A	3	Charcoal Pencil	Sad – liked prompt – sad from focusing on negative emotions during drawing – liked material – would do again with a different emotion
2/21	2	Feel great Good weather	2	Oil Pastels	Panicked – confused – frustrated – bubbly – colorful – material is crayon like – material made me crazy – would do again with a different emotion
2/22	3	N/A	2	Oil Pastels	Happy – liked prompt – brought me joy – enjoyed material – free-flowing
2/23	3	N/A	5	Marker	Felt stressed – didn't think would feel stressed – markers feel uniform – would use material again

<b>STUDENT NAME: Daniel</b>	<b>WEEK #: 5</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
2/26	3	N/A	3	Marker	Calm - relaxed - liked prompt - material is solid and bold - would do again with different association or emotion
2/27 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
2/28 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/1 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/2 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Daniel</b>	<b>WEEK #: 6</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/5	3	N/A	2	Marker	Felt rushed -late to class - felt relaxed - would do again - safe space
3/6	N/A	N/A	3	Pencil	Confused - dazed - liked prompt - forced to reflect - easy to use material - would do again because reflection is important
3/7 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/8 RESEARCHER ABSENT	N/A	N/A	N/A	N/A	N/A
3/9	N/A	N/A	N/A	N/A	N/A

<b>STUDENT NAME: Daniel</b>	<b>WEEK #: 7</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/12	3	N/A	3	Chalk Pastel	Calm – excited for the future – liked material – worked for prompt idea – wouldn't do again 0 doesn't like "looking into future"
3/13	3	N/A	4	Pencil and Oil Pastels	Didn't like prompt – couldn't think of an idea – confused about material – wouldn't do again
3/14	3	N/A	2	Markers	Pure joy – cool – likes boxes – material easy to use – prompt fun – would do again
3/15	3	N/A	4	Marker	Had trouble responding to journal question – loves marker – would not do again – trouble coming up with an idea
3/16	3	N/A	3	Colored Pencil	Indifferent about prompt – material easy to use – wouldn't do again – don't like talking about self

<b>STUDENT NAME: Daniel</b>	<b>WEEK #: 8</b>
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DATE	ANXIETY/STRESS RATING BEFORE DRAWING	KEY WORDS IN PRE-JOURNAL	ANXIETY/STRESS RATING AFTER DRAWING	MATERIAL USED	KEY WORDS IN POST-JOURNAL
3/19	3	Continued drawing from 3/16	3	Colored Pencils	Unsure – uncomfortable – wanted to feel uncomfortable for prompt – felt conservative while using material – would do again
3/20 ABSENT	N/A	N/A	N/A	N/A	N/A
3/21 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/22 SNOW DAY	N/A	N/A	N/A	N/A	N/A
3/23	3	Continued drawing form 3/16	3	Colored Pencil and Pencil	Relaxing – figuring it out – material easy to use – easy to fix – would do again

APPENDIX G

Interview Data Matrices

Interview 1 Data Matrices

	Savannah	Angelica
How do you feel about your overall performance in school? Why do you feel that way?	Feels good Feels could do better Doesn't feel always has enough time to prepare for all classes	Good Has good grades
What is your favorite subject in school? Why?	Art and English Likes to read Feels art is "me time"	Art Loves creating things
What is your least favorite subject in school? Why?	Geometry Not good at math	Math Subject is difficult Causes stress
Do you often feel stressed or anxious at school? How do these feelings affect your performance in school?	Sometimes Tries not to let stress get in the way	Test anxiety Causes negative thoughts and difficulty with focusing
What do you do when you feel stressed or anxious at school?	Doesn't do anything about stress Tries to "deal with it"	Tries to focus on something else Tries to ignore stress
What prior experiences do you have with drawing?	Mom used to be art teacher Draws with mom every week	Goes to weekend workshops at local colleges Takes classes outside of school
Do you draw in your free time? What do you like to draw? Do you draw in a sketchbook? If not, where do you draw? What do you usually draw with? How often do you draw?	Yes - draws when in a bad mood Nature - draws with mom Draws mostly in sketchbook but also likes to paint Charcoal pencils and pencils At least once per week	Yes Likes drawing portraits Drawings in a sketchbook primarily Sometimes draws outside of sketchbook Draws with pencil Draws every day
How do you feel when you draw?	Sometimes mad - when not happy with drawing Usually feels good	Feels relaxed when drawing for fun Stressed when under time constraints
Have you ever used drawing to relax? Why or why not?	Yes Drawing time is time that can help one get their thoughts together	Yes Keeps mind off of things Distracts from stress
Are there any drawing materials that frustrate you? If so, which materials frustrate you? What about them frustrates you?	Chalk pastel messy	Charcoal Messy Difficulty controlling

	Helga	Olga	Amare
How do you feel about your overall performance in school? Why do you feel that way?	Good Puts in best effort	Feels good Grades are good	Feels good - Could do better Gets tired and overwhelmed by work sometimes
What is your favorite subject in school? Why?	Art Break from stress	Math and Engineering Wants a career in engineering	History, English, and Art Likes to learn, likes color, likes music
What is your least favorite subject in school? Why?	Pre-calculus. Because it's hard.	Writing and English Not good at it	Math because it has been hard this year - Sometimes science - Depends on the teacher
Do you often feel stressed or anxious at school? How do these feelings affect your performance in school?	Yes Tests cause stress Gets overwhelmed by school work - Anxiety and stress causes a struggle to focus	All the time - anxious Gets scared to do things Negative impacts Has trouble focusing	Sometimes Depends on amount of school work and sleep Can negatively impact test grades by lowering confidence
What do you do when you feel stressed or anxious at school?	Tries to think positive	Cry Shuts down Sits and does nothing Takes breaks to try to get self together	Listens to music Tries not to stress before a test Reads and talks to friends Sketches Drinks tea
What prior experiences do you have with drawing?	Drawing frequently in childhood	Went to art camp in childhood - Used to make art in childhood but stopped	Little prior experience Had classes in middle school
Do you draw in your free time? What do you like to draw? Do you draw in a sketchbook? If not, where do you draw? What do you usually draw with? How often do you draw?	Doesn't draw in free time Too busy to draw Only draws a few times per month	Sometimes - not often Draws cartoons Draws in sketchbooks Draws with pencil - most familiar with and accessible Occasionally as a way to relax	Yes - Doodles - occasionally tries anatomy Uses sketchbook or notebook paper/computer paper - uses whatever is available Uses pencil - accessible Doesn't like pen - can't erase Doodles frequently in school and at home
How do you feel when you draw?	Calm and Content Puts thoughts on paper	Calm Relaxing	Usually happy - Annoyed when drawing doesn't turn out Doodling helps improve mood
Have you ever used drawing to relax? Why or why not?	Yes - likes to draw nature Relaxed by drawing	Occasionally Takes mind off of things	Yes - makes her happy - loves to draw but struggles to come up with ideas
Are there any drawing materials that frustrate you? If so, which materials frustrate you? What about them frustrates you?	Charcoal Messy Has trouble controlling	No Has fun with all materials	Pencil - sometimes it is too thin Likes thicker materials and materials that smudge Oil pastels - can't smudge to blend - Likes to blend by smudging

Emanon	
How do you feel about your overall performance in school? Why do you feel that way?	Feels good – could improve – doesn't feel like has to do any better
What is your favorite subject in school? Why?	Doesn't have favorite – Likes Art and Science the best Likes learning about how the world works – Likes expression
What is your least favorite subject in school? Why?	History – doesn't feel is as important as other subjects
Do you often feel stressed or anxious at school? How do these feelings affect your performance in school?	Sometimes – especially when has a lot of school work – struggles with time management Can both motivate to do work and cause to shut down Can overwhelm
What do you do when you feel stressed or anxious at school?	Tries to separate self from situation that is causing stress and looks for way to make situation easier Tries to breath and keep mind focused so it doesn't wander Tries to distract self but focusing on one thing
What prior experiences do you have with drawing?	Has had a few art classes in other schools – had researcher last year for art 1 – has family members who are artists
Do you draw in your free time? What do you like to draw? Do you draw in a sketchbook? If not, where do you draw? What do you usually draw with? How often do you draw?	Yes Draws in a sketchbook and goes on walks – draws things that are interesting in the park – usually architectural structures – journals about subject of drawing Draws with pencil Draws frequently – usually when having a bad day Feels free – “Like nothing really matters except me.” – expresses self – feels amazing
How do you feel when you draw?	Yes – frequently when having a bad day
Have you ever used drawing to relax? Why or why not?	
Are there any drawing materials that frustrate you? If so, which materials frustrate you? What about them frustrates you?	Frustrated by pencil – likes color watercolors – difficulty controlling

	Daniel	Jenny	Sophia
How do you feel about your overall performance in school? Why do you feel that way?	Doing well Feels could be doing better Content with work Stress of being a teenager can prevent from doing best work	Feels good - good grades Works hard	Feels good - struggles sometimes but overall feels good
What is your favorite subject in school? Why?	Art Can be creative and explore	Art Wants a career in the arts Art is relaxing Enjoys being creative	English and Art - Good at English - likes writing and reading Likes to express self through art
What is your least favorite subject in school? Why?	Health Not interested in subject Grammar - didn't learn anything	Physics and pre-calculus Struggles with math	Math Confusing
Do you often feel stressed or anxious at school? How do these feelings affect your performance in school?	Yes - more commonly stressed - sometimes anxious Hinders performance but can motivate to get work done	Test anxiety Stressed by a lot of school work Not often stressed in school Can help focus or motivate to get work done Can be distracting	Sometimes Causes a lack of focus Has trouble paying attention Distracts from work
What do you do when you feel stressed or anxious at school?	Tries to just deal with it	Takes deep breaths Breathing exercises Organizes self	Draws in sketchbook Doodles to relieve stress
What prior experiences do you have with drawing?	Took art in elementary - family members like art	Took art classes outside of school Did art internship at a camp	Started in elementary school - Started drawing in a sketchbook
Do you draw in your free time? What do you like to draw? Do you draw in a sketchbook? If not, where do you draw? What do you usually draw with? How often do you draw?	Occasionally when has an idea Architecture and people Frequently throws out drawings because isn't happy with them	Yes - frequently Mandalas because they're relaxing Likes blending Draws on a piece of paper - more accessible and easier to control Draws with pencil or chalk pastels Once per week at least	Yes Likes drawing characters and cartoons - designing characters - likes bright colors Draws in a sketchbook Draws with pencil and pen Draws very frequently
How do you feel when you draw?	Relaxed. Relieves stress.	Helps to focus - relieves stress - helps to relax	Happy and relaxed
Have you ever used drawing to relax? Why or why not?	Sometimes. Occasionally doodles when anxious. Helps reduce anxiety and stress.	Yes - helps to relax	Uses drawing to relax frequently Uses drawing to distract from stresses
Are there any drawing materials that frustrate you? If so, which materials frustrate you? What about them frustrates you?	Watercolors. Difficult to control.	Charcoal - struggles to control material	Charcoal because it smudges



	Osewald	Sofia	Olive
How do you feel about your overall performance in school? Why do you feel that way?	Feels good Gets good grades	Good days and bad days Feels discouraged some days and motivated others	Struggling with government and math Struggles to pay attention when other students interrupt the teachers Gets anxious during the school day
What is your favorite subject in school? Why?	English Likes reading and writing	Gym Loves playing sports	Art - Relieves stress English - Likes reading
What is your least favorite subject in school? Why?	Math Hard Struggles	Pre-calculus Has difficulty understanding	Math Gets harder and harder
Do you often feel stressed or anxious at school? How do these feelings affect your performance in school?	Not often Doesn't feel it affects school work	Not always Stressed when overwhelmed by school work Has trouble concentrating when stressed	Yes - frequently Can't focus Discouraged Feels like failure Fears having to repeat a class Gets overwhelmed and is struggling
What do you do when you feel stressed or anxious at school?	Doodles to relax	Tries to focus on work Tries to avoid feelings	Tries to deal with it Doesn't talk to anyone Keeps to herself Internalizes anxiety Holds it in
What prior experiences do you have with drawing?	Draws in free time Self-taught primarily	Art classes in middle school Paints in spare time	Drew a lot in childhood Was interested very early in life Likes exploring the arts
Do you draw in your free time? What do you like to draw? Do you draw in a sketchbook? If not, where do you draw? What do you usually draw with? How often do you draw? How do you feel when you draw?	Yes Animals and people Sometimes in sketchbook - usually on whatever paper is available Draws with Pencil Draws Occasionally Relaxed and Calm	Yes Likes to draw nature Rarely draws in a sketchbook - mostly paints Draws with pencil Doodles daily Feels good Distracted from feelings	Sometimes sketches when she's bored Draws people and buildings Draws in sketchbook or whatever paper is available Draws with pencil Once or twice per week - sets aside time to draw Calming Relaxing Draws how she feels No rules in drawing
Have you ever used drawing to relax? Why or why not?	Yes Drawing relieves stress and calms emotions	Sometimes Has tried drawing emotions when stressed	Yes Draws whatever ideas she has Relaxes
Are there any drawing materials that frustrate you? If so, which materials frustrate you? What about them frustrates you?	Oil Pastels Doesn't like texture	Oil Pastels Struggles to blend and control	Charcoal - messy - struggles to control material

**Interview 2 Data Matrices**

	<b>Savannah</b>	<b>Angelica</b>
Which of the drawing prompts that we have done so far did you most enjoy? What did you enjoy about it? How did you feel when completing that drawing prompt?	Liked more open ended prompts that gave more choice Gave a new perspective on things Considers the many things she could do with the prompts	Liked music and sound Prompt was interesting Had never considered sound and art together before Exposed to a new way to express sound
Which of the drawing materials that you have experimented with so far did you enjoy working with the most? What did you enjoy about working with that material?	Chalk Pastels Easy to blend Likes bright colors Never used before	Chalk and Oil Pastels Like vibrant colors Easy to blend Has experience with both materials
Which of the drawing prompts that we have done so did you like the least? What did you not like about that prompt? How did you feel when completing that prompt?	Drawing Sounds Didn't know how to interpret visually Struggled to know what to draw Felt okay while drawing - wouldn't do them again but didn't feel more stressed as a result	Didn't have a least favorite Likes all of the prompts Feels all prompts exposed her to knew ways of drawing
Which of the drawing materials that you have experimented with so did you like the least? What did you not like about the material? How did you feel when using that material?	Charcoal Messy Hard to control Felt annoyed when using Did not feel more stressed by material	Markers "They're like basic." Can't blend Sharp lines Struggled to manage material Did not feel more stressed by material
Are there any drawing materials that you wish you had access to for our drawing activities?	Wished had access to watercolors	Wished had access to watercolors
Have you started drawing more frequently in your free time? If yes: What types of things have you been drawing in your free time? Have you been drawing in a sketchbook? If not, where have you been drawing? What drawing materials have you been using?	Yes - has been drawing more frequently Drawing whatever comes to mind Has been drawing in a sketchbooks Using pencil	Yes - has been drawing more frequently Drawing digitally on her iPad Prefers drawing digitally now

	Helga	Olga	Amare
Which of the drawing prompts that we have done so far did you most enjoy? What did you enjoy about it? How did you feel when completing that drawing prompt?	Self - reflection and focusing on positive emotions or memories Future self Likes self-reflection Feels happy and motivated Chalk Pastels Likes blending Easy to work with	Self - reflection and focusing on positive emotions or memories and future self Self reflection makes her happy Feels relaxed Chalk Pastels Likes blending	Drawing Sound Could just draw what she felt and go with the flow Loves music Felt happy - enjoyed Chalk Pastels Easy to blend and move around on paper
Which of the drawing materials that you have experimented with so far did you enjoy working with the most? What did you enjoy about working with that material?	Struggles with shape and line ones Struggled with ideas Didn't dislike any prompts Felt less invested	Can't remember Would either draw something else or not complete drawing if she didn't like prompt Some days didn't do prompt is she was overwhelmed by anxiety Felt anxious when doing a prompt she didn't like or when she didn't know what to draw	Self - reflection Not sure how to draw ideas or what to draw about self Struggled with drawing future based prompts Happy because liked thinking about future Frustrated because not sure how to visually portray Would have felt better if she could look up image references
Which of the drawing materials that you have experimented with so did you like the least? What did you not like about the material? How did you feel when using that material?	Oil Pastels Doesn't like texture Felt agitated	Oil Pastels "They're like bad crayons." Doesn't like texture Felt frustrated	Sharpie Doesn't like permanent materials Can't erase Hard to fix mistakes Worried about messing up drawing Paint materials
Are there any drawing materials that you wish you had access to for our drawing activities?	Wanted glitter	No	Paint materials
Have you started drawing more frequently in your free time? If yes: What types of things have you been drawing in your free time? Have you been drawing in a sketchbook? If not, where have you been drawing? What drawing materials have you been using? If no: What is keeping you from drawing in your free time?	Yes - at work when she's bored Doodles more frequently Draws flowers and things she sees around her at work Brings sketchbook to work Draws in sketchbook and notebooks Uses pencil	No - just draws in art class Too busy to draw in spare time Sleeps and works instead Probably wouldn't draw more if given more free time	Yes - bought a sketchbook to draw in Trying to draw anatomy/people Trees and flowers Drawing from observation primarily Doodles in notebooks, on hands, napkins, etc Drawing with pencil and colored pencils Has tried charcoal pencils

<b>Emanon</b>	
Which of the drawing prompts that we have done so far did you most enjoy? What did you enjoy about it? How did you feel when completing that drawing prompt?	Drawing to music Likes being stimulated by sound and letting sound influence drawings Sometimes relaxed/heightened mood Sometimes more stressed even though enjoyed prompt Markers – making them bleed Mixing marker and charcoal or mixing materials Like how materials can be manipulated Liked fluidity of materials
Which of the drawing materials that you have experimented with so far did you enjoy working with the most? What did you enjoy about working with that material?	Drawing future self Doesn't like thinking about the uncertainty of the future Frustrated by trying to imagine future and put it on paper Felt restricted – likes going with the flow more Felt more stressed out
Which of the drawing prompts that we have done so did you like the least? What did you not like about that prompt? How did you feel when completing that prompt?	Oil Pastels Messy – doesn't like colors or blending them Unsatisfied and unhappy
Which of the drawing materials that you have experimented with so did you like the least? What did you not like about the material? How did you feel when using that material?	Painting materials – watercolors Crayons
Are there any drawing materials that you wish you had access to for our drawing activities?	Yes
Have you started drawing more frequently in your free time? If yes: What types of things have you been drawing in your free time? Have you been drawing in a sketchbook? If not, where have you been drawing? What drawing materials have you been using?	Working in sketchbook still Painting more Doodling organic shapes and shading Still drawing from observation in book when taking walks Using pencil and paint It's accessible and easiest thing to pack in a bag

	Daniel	Jenny	Sophia
Which of the drawing prompts that we have done so far did you most enjoy? What did you enjoy about it? How did you feel when completing that drawing prompt?	Emotions - representing happiness Liked how open to interpretation it was Felt relaxed Marker - likes how uniform the material is - comfortable to use and easy to control Enjoyed Chalk Pastels	Line and Shape - open ended choice based Drawing sound - liked going with the flow Felt peaceful Chalk and Oil Pastels Texture of oil pastels Likes blending - smooth	Drawing sounds - blind folded one - liked the element of surprise Felt amused Chalk and Oil Pastels Likes to blend them
Which of the drawing materials that you have experimented with so far did you enjoy working with the most? What did you enjoy about working with that material?	Future self Doesn't like thinking about uncertainty of future Didn't like doing them	Didn't have a least favorite Like all of the prompts Struggled more with self-reflection ones but didn't dislike them Not more stressed by it	Didn't have a least favorite Felt self-reflection ones increased confidence by making her think about the positive qualities about herself
Which of the drawing prompts that we have done so did you like the least? What did you not like about that prompt? How did you feel when completing that prompt?	Oil Pastels Doesn't like texture Struggles to control	Charcoal Hard to blend and control Struggled with material	Marker Too permanent - hard to fix mistakes Frustrated by unintentional marks Hard to control
Which of the drawing materials that you have experimented with so did you like the least? What did you not like about the material? How did you feel when using that material?	Wish had easier access to chalk pastels - not enough for everyone to share Yes Mandalas and things with repetition Whatever paper is around - scrap paper Sketchbook not as available as scrap paper Uses pen or pencil - easy to access	Wish had easier access to chalk pastels - not enough for everyone to share Yes Flowers Whatever paper is around Uses pencil and fine point markers	Wish had easier access to chalk pastels - not enough for everyone to share Yes Characters, clothing design for her characters, some nature things. Sketchbook Uses pencil and fine point markers
Are there any drawing materials that you wish you had access to for our drawing activities?			
Have you started drawing more frequently in your free time? If yes: What types of things have you been drawing in your free time? Have you been drawing in a sketchbook? If not, where have you been drawing? What drawing materials have you been using?			

	Osewald	Sofia	Olive
Which of the drawing prompts that we have done so far did you most enjoy? What did you enjoy about it? How did you feel when completing that drawing prompt?	Future self Like thinking about future Felt happy and relaxed	Zentangles® Liked how it can become a recognizable image Lots of possibilities Felt satisfied and calm	Drawing sound – blind folded or eyes closed Relaxing Liked the element of surprise Liked the abstraction Liked that it was open to interpretation
Which of the drawing materials that you have experimented with so far did you enjoy working with the most? What did you enjoy about working with that material?	Chalk Pastels Like shading and blending it	Chalk Pastels Liked to blend and how buildable it is	Oil Pastels Never worked with them before Feels smooth and blends Likes colors Easy to work with
Which of the drawing prompts that we have done so did you like the least? What did you not like about that prompt? How did you feel when completing that prompt?	Didn't dislike any but wasn't a fan of self-reflection and thinking about himself Had trouble thinking of an idea	Forgets which one but there was one she hated Felt stressed out by it Didn't now how to put it on paper or how to answer the question	Drawing contemporary pop music Had a hard time thinking about what to draw – had trouble visually interpreting Felt drawing could have been better Unsatisfied – stressed out Felt drawing wasn't good enough
Which of the drawing materials that you have experimented with so did you like the least? What did you not like about the material? How did you feel when using that material?	Oil Pastels Didn't like the way drawings came out Felt annoyed	Oil Pastels Felt annoyed by them Struggles to blend Doesn't like texture	Markers Can't blend them Doesn't like the permanence Felt like she was messing up her drawings with them Prefers fluid materials
Are there any drawing materials that you wish you had access to for our drawing activities?	Wish had easier access to chalk pastels – not enough for everyone to share Yes Animals Whatever paper is around Uses Pencil	Wish had easier access to chalk pastels – not enough for everyone to share Yes Nature – landscapes Canvas Doodling in notes Uses Pencil and ink pens	No Loves Oil Pastels
Have you started drawing more frequently in your free time? If yes: What types of things have you been drawing in your free time? Have you been drawing in a sketchbook? If not, where have you been drawing? What drawing materials have you been using?	Yes Animals Whatever paper is around Uses Pencil	Yes Nature – landscapes Canvas Doodling in notes Uses Pencil and ink pens	Drawing a little more frequently Doodling Drawing faces Drawing on loose paper or in notebooks on notes Uses pencil or pen – material most accessible

**Interview 3 Data Matrices**

	<b>Savannah</b>	<b>Angelica</b>
How does drawing make you feel? Does drawing reduce your stress or anxiety? Does drawing increase your anxiety at all?	Calm and relaxed Reduced stress and anxiety Doesn't increase stress	Joyful Reduces and distracts from stress Sometimes increases stress when frustrated by result of drawing or material
Do you feel that the drawing activities we did in class reduced your stress?	Some of the prompts reduced stress on bad days	Yes Distracted from stress
Which drawing materials were your favorite to work with? Why were they your favorite?	Oil Pastels Likes blending them	Chalk Pastels Likes colors and blending
Which of the drawing prompts was your favorite? Why was it your favorite?	Emotions and Color Associations Open to interpretation	Drawing to music/sound Never tried before
Were there any drawing activities that increased your stress levels? What about the prompt(s) was/were stressful for you?	Drawing animal sounds Struggled to know how to visually interpret	No
Were there any drawing materials that you feel increased your stress levels? What about the material was stressful for you?	Chalk Pastels Messy	Charcoal Messy and difficult to control
Do you feel this study has increased your confidence in your drawing abilities? What about the study has made you feel more confident in your artistic skill?	Increased confidence Introduced to new materials and opened up to new ways of drawing Opportunity to explore freely	Yes Opened up to new ways of drawing
Will you continue to draw, in your free time, as a result of this study?	Yes	Yes
Do you feel this study has given you tools to help you manage your anxiety?	Yes	Yes
Do you feel more motivated to draw, as a result of this study?	Yes	Yes
Will you continue to use any of these drawing activities of materials outside of the study? Which materials do you think you are most likely to continue to use? Which drawing prompts do you think you are most likely to continue to use?	Yes Will continue using markers and oil pastels Will continue to draw emotions and colors associated with emotions	Yes Will continue to use chalk pastels Will continue to try drawing to music



	Helga	Olga	Amare
How does drawing make you feel? Does drawing reduce your stress or anxiety? Does drawing increase your anxiety at all?	Calm - distracts from reality - focused Reduces stress Doesn't increase stress	Relaxed - sometimes reduces stress - increases anxiety when she doesn't know what to draw	Happy - helps to forget - distracts from reality and stress Reduces stress and anxiety Increases when unsure how to draw or has to do a prompt she doesn't want to do
Do you feel that the drawing activities we did in class reduced your stress?	Yes - abstract ones especially reduced stress	Not overall - reduced anxiety some but still felt anxious after drawing	Overall yes Distracted from anxiety and stress caused by personal life
Which drawing materials were your favorite to work with? Why were they your favorite?	Chalk Pastels Likes blending them Messy (con)	Chalk Pastels Smooth - fun - fluid	Chalk Pastels Liked colors and blending Like messiness
Which of the drawing prompts was your favorite? Why was it your favorite?	Future self and drawing emotions Likes reflecting on the future Likes visually interpreting emotions on paper Likes abstraction	Future and past memories Personal Self reflection Easier to figure out what to draw when it is personal	Liked open-ended prompts Lines, emotions, interpreting definition of strength, conflicting emotions Open to interpretation
Were there any drawing activities that increased your stress levels? What about the prompt(s) was/were stressful for you?	No overall Occasionally stressed when drawings doesn't come out the way she wants	A few - doesn't remember specific ones Skipped prompt on days that caused anxiety Didn't know what to draw	Future self Unsure of future Nervous about change and the future
Were there any drawing materials that you feel increased your stress levels? What about the material was stressful for you?	Oil Pastels Doesn't like texture Messy - hard to blend	Charcoal Messy - hard to control Black in color	Sharpie and markers Doesn't like the permanence Can't erase
Do you feel this study has increased your confidence in your drawing abilities? What about the study has made you feel more confident in your artistic skill?	Yes Came into art class feeling self-conscious Gave an opportunity to practice and experiment	Yes Feels more comfortable drawing in front of other people now Support from peers helped confidence	Yes An opportunity to experiment and see what she could do Exposed to new ways of drawing
Will you continue to draw, in your free time, as a result of this study?	Yes - occasional doodling	No - Doesn't have time	Yes - has been drawing a lot more
Do you feel this study has given you tools to help you manage your anxiety?	Yes - can draw when stressed - doodling helps stress	Yes	Yes - sketches when stressed
Do you feel more motivated to draw, as a result of this study?	Yes	Yes - just doesn't have time too Would like to draw more often	Yes
Will you continue to use any of these drawing activities of materials outside of the study? Which materials do you think you are most likely to continue to use? Which drawing prompts do you think you are most likely to continue to use?	Yes Not sure which drawing prompts she would continue to use Would continue to use charcoal	Will continue using pencils Likes using more open-ended fluid prompts	Yes Likes Charcoal Conflicting emotions Word associations Drawing symbols Color associations Drawing to music



	Emanon
How does drawing make you feel? Does drawing reduce your stress or anxiety? Does drawing increase your anxiety at all?	Free – Can express self Reduces stress Can increase stress sometimes
Do you feel that the drawing activities we did in class reduced your stress?	Yes overall
Which drawing materials were your favorite to work with? Why were they your favorite?	Markers Mixing markers and charcoal Mixing materials Contrasting materials Likes fluidity of making markers bleed Likes blending and spreading charcoal
Which of the drawing prompts was your favorite? Why was it your favorite?	Music – likes being stimulated by sound and music
Were there any drawing activities that increased your stress levels? What about the prompt(s) was/were stressful for you?	Yes – future self prompts Stressed by uncertainty of the future Some stress coming from not being happy with drawing produced – effected confidence in skills
Were there any drawing materials that you feel increased your stress levels? What about the material was stressful for you?	Oil Pastels Messy – Texture – hard to control and blend
Do you feel this study has increased your confidence in your drawing abilities? What about the study has made you feel more confident in your artistic skill?	Yes The variety of the prompts and having a guide helped stimulate ideas
Will you continue to draw, in your free time, as a result of this study?	Yes
Do you feel this study has given you tools to help you manage your anxiety?	Yes
Do you feel more motivated to draw, as a result of this study?	Yes
Will you continue to use any of these drawing activities of materials outside of the study? Which materials do you think you are most likely to continue to use? Which drawing prompts do you think you are most likely to continue to use?	Yes Will continue to draw to sound and music – likes music stimulation Will continue to use mandalas and contrasting emotions prompt Will continue to use markers, fluid materials, and charcoal

	Daniel	Jenny	Sophia
How does drawing make you feel? Does drawing reduce your stress or anxiety? Does drawing increase your anxiety at all?	Relaxing – reduces stress sometimes Sometimes prompts cause stress	Relaxed Takes mind off of things Reduces stress Gets frustrated when struggling with drawing but overall no	Complete and happy Reduces stress Uses to reduce stress Overall doesn't increase stress Occasionally frustrated when drawings something difficult
Do you feel that the drawing activities we did in class reduced your stress?	Yes overall	Yes	Yes
Which drawing materials were your favorite to work with? Why were they your favorite?	Markers – easy to control – uniform and consistent	Colored Pencils Likes blending with them – colors – shading – can control	Pencil and Chalk Pastels Can control pencil easily Likes blending pastels
Which of the drawing prompts was your favorite? Why was it your favorite?	Zentangles® and Mandalas Visually interpreting emotions Drawing sound Likes structured and organized prompts	Drawing to music and sound Loves music Likes tying art and music together	Drawing sound – eyes closed Liked element of surprise
Were there any drawing activities that increased your stress levels? What about the prompt(s) was/were stressful for you?	Like repetition in drawing Future self Stressed out by thinking about future	When she couldn't think of an idea Future goals – had trouble putting on paper	Future self Nervous about whether or not her future will come out the way she pictures
Were there any drawing materials that you feel increased your stress levels? What about the material was stressful for you?	Charcoal and oil pastels Texture of oil pastels Charcoal is hard to control	No	Charcoal – difficult to work with Smudges Doesn't stress – just frustrated
Do you feel this study has increased your confidence in your drawing abilities? What about the study has made you feel more confident in your artistic skill?	Yes a little Exposed to new materials Variety of prompts Exposed to new topics to draw "It opened my mind to other things."	Yes Helped to come up with ideas on the spot	Yes - a little bit Variety of prompts exposed to new ways of drawings Experimented with materials
Will you continue to draw, in your free time, as a result of this study?	Yes	Yes	Yes
Do you feel this study has given you tools to help you manage your anxiety?	Yes	Yes	Yes
Do you feel more motivated to draw, as a result of this study?	No	Yes	Yes
Will you continue to use any of these drawing activities of materials outside of the study? Which materials do you think you are most likely to continue to use? Which drawing prompts do you think you are most likely to continue to use?	Yes Will use chalk pastels again Will keep drawing mandalas	Yes Will continue drawing to music Will continue to use colored pencils, charcoal, and chalk pastels	Yes Will keep using oil and chalk pastels, charcoal, and markers Will continue to draw expression of emotions Likes to draw emotions

	Osewald	Sofia	Olive
How does drawing make you feel? Does drawing reduce your stress or anxiety? Does drawing increase your anxiety at all?	Calm Sometimes reduces stress Never increases stress	Calm Reduces stress Doesn't really increase stress Stressed by one drawing prompt from study	Relaxed, calm, and focused Yes - doodles when stressed Increases stressed when being graded on drawing
Do you feel that the drawing activities we did in class reduced your stress?	Sometimes	Yes	Yes - found warm-ups to be fun
Which drawing materials were your favorite to work with? Why were they your favorite?	Chalk Pastels Likes colors and blending them	Chalk Pastels - Likes blending Sharpie - sharp lines and easy to control Likes fluid materials and restrictive materials	Oil Pastels - smooth and likes blending
Which of the drawing prompts was your favorite? Why was it your favorite?	Likes future based drawings and zentangles@ Prompts with repetition Relaxing - fun adding to them over time	Zentangles@ -	Lines - using five different types of lines Emotions Most content with the drawings produced
Were there any drawing activities that increased your stress levels? What about the prompt(s) was/were stressful for you?	No	Just one - couldn't remember which one it was	Drawing to pop culture music - Not content with the drawing produced Future self - stressed by not having a photo reference
Were there any drawing materials that you feel increased your stress levels? What about the material was stressful for you?	Oil Pastels Doesn't like texture Struggles with material	Oil Pastels Doesn't like texture Has difficulty controlling	Charcoal Messy
Do you feel this study has increased your confidence in your drawing abilities? What about the study has made you feel more confident in your artistic skill?	Yes a little bit Exposed to new materials and gave time to familiarize self with materials	Yes Exposed to new possibilities - new ideas and materials	Yes Gave more experience and opportunities to experiment with materials
Will you continue to draw, in your free time, as a result of this study?	Yes	Yes - drawing more frequently	Yes Mostly doodling on scrap paper with pen or pencil
Do you feel this study has given you tools to help you manage your anxiety?	Yes	Yes	Yes
Do you feel more motivated to draw, as a result of this study?	Yes	Yes	Yes Feels more confident about drawing abilities
Will you continue to use any of these drawing activities of materials outside of the study? Which materials do you think you are most likely to continue to use? Which drawing prompts do you think you are most likely to continue to use?	Yes Will continue using chalk pastels Will continue using zentangles@ in free time	Yes Will continue using chalk pastels Will continue drawing zentangles@ and drawing to music	Yes Will continue using oil pastels Will continue to use the drawing emotions prompts

# APPENDIX H

## Artwork and Observation Data Matrices

### Savannah's Artwork and Observation Matrices

PARTICIPANT:		Savannah										LEVEL OF ARTISTIC EXPERIENCE: Beginner												
LINE AND SHAPE	1/29	x		x	x	x	x	x	x	x	x	x		x		x		x				x	x	
	1/30		x	x			x	x	x	x	x	x			x		x					x		x
MANDALAS AND ZENTANGES	1/31			x			x	x	x	x	x				x		x					x		x
	2/1		x	x			x	x							x	x		x					x	x
DRAWING TO MUSIC	2/2						x								x		x					x		x
	2/5	x	x	x	x	x									x	x		x				x		x
EMOTIONS	2/6	x	x	x	x	x	x								x	x		x				x		x
	2/7			x			x	x							x	x		x				x		x
DRAWING TO MUSIC	2/9	x	x	x	x	x									x	x		x				x		x
	2/12			x			x	x							x	x		x				x		x
EMOTIONS	2/13		x	x	x	x	x								x	x		x				x		x
	2/14		x	x	x	x	x								x	x		x				x		x
DRAWING TO MUSIC	2/15		x	x	x	x	x	x							x			x				x		x
	2/16																							
EMOTIONS	2/19																							
	2/20	x			x	x	x	x	x						x			x				x		x
DRAWING TO MUSIC	2/21				x	x	x	x	x						x			x				x		x
	2/22	x	x	x	x	x	x								x			x				x		x
DRAWING TO MUSIC	2/23	x			x	x	x	x	x						x			x				x		x
	2/26	x	x	x		x	x								x			x				x		x

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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PARTICIPANT:		Savannah										LEVEL OF ARTISTIC EXPERIENCE: Beginner												
ASSOCIATIONS	2/26	x	x	x		x	x	x							x			x						x
	2/27																							
SELF-REFLECTION	2/28																							
	3/1																							
ASPIRATIONS AND DESIRES	3/2																							
	3/5	x			x	x			x	x					x			x				x		x
SELF-REFLECTION	3/6	x	x	x		x									x			x				x		x
	3/7																							
ASPIRATIONS AND DESIRES	3/8																							
	3/9																							
SELF-REFLECTION	3/12	x	x	x	x	x									x			x				x		x
	3/13	x	x	x	x	x									x			x				x		x
ASPIRATIONS AND DESIRES	3/14	x	x	x	x	x									x			x				x		x
	3/15	x	x		x	x	x								x			x				x		x
SELF-REFLECTION	3/16																							
	3/19	x	x	x	x	x	x								x			x				x		x
SELF-REFLECTION	3/20	x	x	x	x	x	x								x			x				x		x
	3/21																							
DRAWING TO MUSIC	3/22																							
	3/23	x	x																					

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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Angelica's Artwork and Observation Matrices

		PARTICIPANT: Angelica										LEVEL OF ARTISTIC EXPERIENCE: Advanced														
THEME OF THE WEEK	DATE	1/29	x		x		x	x	x	x			x	x	x		x				x			x	x	
		1/30		x	x	x	x	x	x	x			x	x		x					x			x		x
		1/31	x		x	x	x	x	x		x	x			x		x				x			x		x
		2/1	x		x	x	x	x	x			x		x		x					x			x	x	
		2/2			x		x	x						x		x						x			x	
		2/5	x	x	x		x							x	x	x		x				x			x	
		2/6	x	x	x	x	x								x		x					x			x	
		2/7		x	x		x	x							x		x					x			x	
		2/8																								
		2/9	x	x	x	x	x	x			x	x		x	x	x		x				x			x	
		2/12			x	x	x	x						x	x		x					x			x	
		2/13	x	x	x	x	x	x	x	x					x		x					x			x	
		2/14			x	x	x	x	x	x	x				x		x					x			x	
		2/15		x	x	x	x	x	x						x	x		x				x			x	
		2/16																								
		2/19																								
		2/20		x	x	x	x	x	x	x				x	x	x		x				x			x	
		2/21		x	x	x	x	x	x	x				x	x		x					x			x	
		2/22	x	x	x		x	x	x	x	x				x		x					x			x	
		2/23		x	x	x	x	x	x	x					x		x					x			x	
			SHAPE	LINE				COLOR				IMAGERY			USE OF PROMPT			ENGAGEMENT			COMPLETION					

		PARTICIPANT: Angelica										LEVEL OF ARTISTIC EXPERIENCE: Advanced														
THEME OF THE WEEK	DATE	2/26	x		x		x	x	x			x	x		x					x			x		x	
		2/27																								
		2/28																								
		3/1																								
		3/2																								
		3/5	x	x	x	x	x	x	x	x				x	x		x					x			x	
		3/6	x	x	x		x								x		x					x			x	
		3/7																								
		3/8																								
		3/9																								
		3/12	x		x	x	x	x	x					x	x		x					x			x	
		3/13	x	x	x	x	x							x	x		x					x			x	
		3/14	x		x	x	x								x		x					x			x	
		3/15		x		x									x		x					x			x	
		3/16																								
		3/19																								
		3/20	x	x	x		x	x							x		x					x			x	
		3/21																								
		3/22																								
		3/23	x	x	x	x	x	x	x						x		x					x			x	
			SHAPE	LINE				COLOR				IMAGERY			USE OF PROMPT			ENGAGEMENT			COMPLETION					

Amare’s Artwork and Observation Matrices

		PARTICIPANT: Amare										LEVEL OF ARTISTIC EXPERIENCE: Beginner														
THEME OF THE WEEK	DATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	GEOMETRIC			x	x	x	x	x	x	x	x	x	x		x	x		x					x			x
THEME OF THE WEEK	DATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	GEOMETRIC			x	x	x	x	x	x	x	x	x	x		x	x		x					x			x
THEME OF THE WEEK	DATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	GEOMETRIC			x	x	x	x	x	x	x	x	x	x		x	x		x					x			x
THEME OF THE WEEK	DATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	GEOMETRIC			x	x	x	x	x	x	x	x	x	x		x	x		x					x			x
THEME OF THE WEEK	DATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	GEOMETRIC			x	x	x	x	x	x	x	x	x	x		x	x		x					x			x

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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		PARTICIPANT: Amare										LEVEL OF ARTISTIC EXPERIENCE: Beginner														
THEME OF THE WEEK	DATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	GEOMETRIC			x	x	x	x	x	x	x	x	x	x		x	x		x					x			x
THEME OF THE WEEK	DATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	GEOMETRIC			x	x	x	x	x	x	x	x	x	x		x	x		x					x			x
THEME OF THE WEEK	DATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	GEOMETRIC			x	x	x	x	x	x	x	x	x	x		x	x		x					x			x
THEME OF THE WEEK	DATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	GEOMETRIC			x	x	x	x	x	x	x	x	x	x		x	x		x					x			x

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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### Helga's Artwork and Observation Matrices

PARTICIPANT:		Helga														LEVEL OF ARTISTIC EXPERIENCE: Moderate										
LINE AND SHAPE	1/29	x		x	x	x	x		x	x	x			x	x		x			x			x			x
	1/30	x	x	x	x	x	x	x	x	x					x	x				x						x
MANDALAS AND ZENTANGES	1/31	x	x	x	x	x	x	x	x	x					x											x
	2/1	x	x	x	x	x	x	x	x	x					x	x										x
DRAWING TO MUSIC	2/2	x																								x
	2/5	x	x	x	x	x	x								x	x	x									x
EMOTIONS	2/6		x	x	x	x	x								x		x									x
	2/7	x		x	x	x									x	x										x
DRAWING TO MUSIC	2/9	x	x	x	x	x	x								x	x	x									x
	2/12	x	x	x	x	x	x	x							x	x	x									x
EMOTIONS	2/13		x	x	x	x	x								x	x	x									x
	2/14		x	x	x	x	x								x		x									x
DRAWING TO MUSIC	2/15		x	x	x	x	x									x										x
	2/16																									
DRAWING TO MUSIC	2/19																									
	2/20		x	x	x	x	x	x							x	x										x
EMOTIONS	2/21		x	x	x	x	x	x	x						x	x	x									x
	2/22	x	x	x	x	x	x	x	x	x					x											x
EMOTIONS	2/23		x		x	x										x										x

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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PARTICIPANT:		Helga														LEVEL OF ARTISTIC EXPERIENCE: Moderate											
ASSOCIATIONS	2/26	x	x	x	x	x	x	x	x	x					x											x	
	2/27																										
SELF-REFLECTION	2/28																										
	3/1																										
ASPIRATIONS AND DESIRES	3/2																										
	3/5	x	x	x	x	x	x	x	x	x					x											x	
"SELF PORTRAITS"	3/6	x		x	x	x									x											x	
	3/7																										
ASPIRATIONS AND DESIRES	3/8																										
	3/9																										
ASPIRATIONS AND DESIRES	3/12	x	x	x	x	x									x											x	
	3/13		x	x	x	x									x											x	
"SELF PORTRAITS"	3/14	x	x	x	x	x									x											x	
	3/15	x	x	x	x	x									x											x	
"SELF PORTRAITS"	3/16																										
	3/19		x	x	x	x									x											x	
"SELF PORTRAITS"	3/20		x	x	x	x									x											x	
	3/21																										
"SELF PORTRAITS"	3/22																										
	3/23																										

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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Olga's Artwork and Observation Matrices

PARTICIPANT:		Olga											LEVEL OF ARTISTIC EXPERIENCE: Moderate															
LINE AND SHAPE	1/29																											
	1/30	x	x	x		x	x	x	x	x	x			x				x					x				x	x
MANDALAS AND ZENTANGES	1/31	x	x	x	x	x	x	x	x	x			x	x			x					x				x	x	
	2/1	x		x	x	x	x							x	x											x	x	
	2/2	x												x												x	x	
	2/5																											
	2/6	x	x	x	x	x	x	x						x	x			x								x	x	
DRAWING TO MUSIC	2/7																											
	2/8																											
	2/9																											
	2/12	x	x			x	x	x						x	x			x							x	x		
	2/13		x	x		x	x	x							x			x							x	x		
	2/14	x	x	x	x	x	x	x							x	x		x							x	x		
	2/15		x	x		x									x	x		x							x	x		
	2/16																											
	2/19																											
	EMOTIONS	2/20																										
		2/21		x		x	x	x	x	x	x				x	x			x							x	x	
2/22		x													x	x		x							x	x		
2/23		x		x	x	x									x										x	x		
THEME OF THE WEEK	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE	

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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PARTICIPANT:		Olga											LEVEL OF ARTISTIC EXPERIENCE: Moderate														
ASSOCIATIONS	2/26	x	x	x	x	x	x							x			x										
	2/27																										
	2/28																										
	3/1																										
	3/2																										
SELF-REFLECTION	3/5	x	x	x	x	x			x	x	x			x						x					x	x	
	3/6	x	x			x								x											x	x	
	3/7																										
	3/8																										
	3/9																										
ASPIRATIONS AND DESIRES	3/12	x	x		x	x			x	x	x			x						x					x	x	
	3/13	x		x		x	x	x						x	x					x					x	x	
	3/14	x		x	x	x	x	x						x	x										x	x	
	3/15																										
	3/16																										
"SELF PORTRAITS"	3/19																										
	3/20																										
	3/21																										
	3/22																										
THEME OF THE WEEK	3/23	x	x	x		x			x			x													x	x	
	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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Olive's Artwork and Observation Matrices

PARTICIPANT: Olive		LEVEL OF ARTISTIC EXPERIENCE: Advanced																									
LINE AND SHAPE	1/29	x		x	x	x	x		x	x	x			x		x			x	x							
	1/30		x	x		x			x	x	x			x	x		x			x	x						
MANDALAS AND ZENTANGES	1/31	x	x	x	x	x	x				x			x		x			x		x						
	2/1	x	x	x	x	x	x	x	x	x				x		x			x		x						
DRAWING TO MUSIC	2/2	x	x	x		x			x	x				x		x			x		x						
	2/5																										
EMOTIONS	2/6		x	x	x	x			x	x				x		x			x		x						
	2/7		x	x		x				x				x		x			x		x						
DRAWING TO MUSIC	2/8																										
	2/9	x	x	x	x	x	x		x	x				x		x			x	x							
EMOTIONS	2/12	x	x	x	x	x	x	x	x	x				x	x	x			x		x						
	2/13																										
DRAWING TO MUSIC	2/14		x	x	x		x	x	x	x				x		x			x		x						
	2/15		x	x	x		x	x	x	x	x			x		x			x		x						
EMOTIONS	2/16		x	x	x	x	x	x	x	x				x		x			x		x						
	2/19																										
DRAWING TO MUSIC	2/20		x	x	x		x	x		x	x	x	x	x	x	x			x	x							
	2/21		x	x	x		x	x	x	x	x	x	x	x	x	x			x	x							
EMOTIONS	2/22		x	x	x		x	x	x	x	x	x	x	x	x		x		x		x						
	2/23		x	x	x	x	x	x		x				x		x			x		x						
THEME OF THE WEEK	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE
		SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION																			

PARTICIPANT: Olive		LEVEL OF ARTISTIC EXPERIENCE: Advanced																										
ASSOCIATIONS	2/26		x	x		x	x			x				x		x	x			x					x	x		
	2/27																											
SELF-REFLECTION	2/28																											
	3/1																											
ASPIRATIONS AND DESIRES	3/2																											
	3/5	x	x	x	x	x	x	x			x		x	x	x	x	x				x				x	x		
"SELF PORTRAITS"	3/6	x		x	x	x	x				x		x	x	x	x					x				x	x		
	3/7																											
ASPIRATIONS AND DESIRES	3/8																											
	3/9																											
SELF-REFLECTION	3/12	x	x	x	x	x	x	x					x	x		x	x				x				x	x		
	3/13	x	x	x	x	x		x					x	x		x					x				x	x		
ASPIRATIONS AND DESIRES	3/14	x	x	x	x	x	x						x	x		x	x				x				x	x		
	3/15	x		x	x	x								x		x	x					x				x	x	
"SELF PORTRAITS"	3/16	x	x	x	x	x	x				x		x	x		x	x				x				x	x		
	3/19	x	x	x	x	x	x	x	x	x	x		x	x		x	x				x				x	x		
ASPIRATIONS AND DESIRES	3/20																											
	3/21																											
SELF-REFLECTION	3/22																											
	3/23		x	x	x	x	x				x		x	x		x	x				x				x	x		
THEME OF THE WEEK	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE	
		SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION																				

Oswald's Artwork and Observation Matrices

PARTICIPANT: Oswald		LEVEL OF ARTISTIC EXPERIENCE: Moderate																									
LINE AND SHAPE	1/29	x		x	x	x	x					x				x	x		x					x		x	
	1/30		x	x	x	x	x		x	x	x					x			x					x		x	
MANDALAS AND ZENTANGES	1/31		x	x	x	x	x	x	x	x	x				x				x					x		x	
	2/1	x		x	x	x	x								x				x					x		x	
DRAWING TO MUSIC	2/2	x							x	x	x					x								x		x	
	2/5																										
EMOTIONS	2/6	x	x	x		x	x	x	x							x			x					x	x		
	2/7	x	x	x		x	x	x	x							x			x					x	x		
DRAWING TO MUSIC	2/8																										
	2/9	x	x	x		x	x	x	x							x			x					x		x	
EMOTIONS	2/12			x	x	x	x	x	x	x						x			x					x		x	
	2/13	x	x	x	x	x	x		x	x	x					x			x					x		x	
DRAWING TO MUSIC	2/14	x	x	x	x	x	x	x	x	x	x					x	x		x					x		x	
	2/15		x	x	x	x	x	x	x	x	x					x	x		x					x		x	
EMOTIONS	2/16	x	x	x	x	x	x		x	x	x					x			x					x		x	
	2/19																										
DRAWING TO MUSIC	2/20																										
	2/21		x	x	x	x	x	x	x	x						x	x		x					x		x	
EMOTIONS	2/22		x	x	x	x	x	x	x	x						x	x		x					x		x	
	2/23		x	x		x			x	x						x			x						x		
THEME OF THE WEEK	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE
		SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION																			

PARTICIPANT: Oswald		LEVEL OF ARTISTIC EXPERIENCE: Moderate																									
ASSOCIATIONS	2/26		x	x		x	x	x				x	x	x		x	x					x			x		x
	2/27																										
SELF-REFLECTION	2/28																										
	3/1																										
ASPIRATIONS AND DESIRES	3/2																										
	3/5	x	x	x	x	x	x								x	x	x					x			x		x
"SELF PORTRAITS"	3/6	x	x	x	x	x		x						x	x	x	x					x			x		x
	3/7																										
ASPIRATIONS AND DESIRES	3/8																										
	3/9																										
SELF-REFLECTION	3/12	x	x	x	x	x	x	x						x	x		x					x			x		x
	3/13	x	x	x	x	x	x	x	x	x				x	x		x					x			x		x
ASPIRATIONS AND DESIRES	3/14	x		x	x	x		x					x	x	x	x	x					x			x		x
	3/15	x		x	x	x	x	x	x	x	x				x	x		x				x			x		x
"SELF PORTRAITS"	3/16	x	x	x		x	x	x	x	x				x			x					x			x		x
	3/19	x		x	x	x	x		x	x	x	x	x	x	x		x					x			x		x
ASPIRATIONS AND DESIRES	3/20																										
	3/21																										
SELF-REFLECTION	3/22																										
	3/23	x	x	x		x								x	x		x					x			x		x
THEME OF THE WEEK	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE
		SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION																			

Jenny's Artwork and Observation Matrices

PARTICIPANT: Jenny		LEVEL OF ARTISTIC EXPERIENCE: Advanced																									
LINE AND SHAPE	1/29	x		x	x	x	x				x	x		x				x	x								
	1/30		x	x	x	x	x		x	x				x				x		x							
MANDALAS AND ZENTANGES	1/31	x	x	x	x	x	x				x	x	x	x				x	x								
	2/1	x		x	x	x	x	x			x	x	x	x				x	x								
DRAWING TO MUSIC	2/2		x	x	x	x	x				x			x				x	x								
	2/5		x	x	x	x	x	x	x			x	x	x	x			x	x								
EMOTIONS	2/6	x	x	x	x	x	x				x	x	x	x				x	x								
	2/7	x	x	x	x	x	x				x			x			x	x									
DRAWING TO MUSIC	2/8																										
	2/9	x	x	x	x	x	x				x			x			x	x									
EMOTIONS	2/12		x	x	x	x	x	x	x				x	x			x	x									
	2/13				x		x	x	x				x	x			x	x									
DRAWING TO MUSIC	2/14	x		x	x	x	x	x	x				x	x			x	x									
	2/15	x	x	x	x	x	x				x	x	x	x			x	x									
EMOTIONS	2/16		x	x	x	x	x	x	x				x	x			x	x									
	2/19																										
DRAWING TO MUSIC	2/20		x		x								x	x			x	x									
	2/21		x	x	x	x	x				x		x	x			x	x									
EMOTIONS	2/22		x	x	x	x	x				x	x	x			x	x										
	2/23		x	x	x	x	x	x	x				x	x			x	x									
THEME OF THE WEEK	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE
		SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION																			

PARTICIPANT: Jenny		LEVEL OF ARTISTIC EXPERIENCE: Advanced																									
ASSOCIATIONS	2/26		x	x	x	x	x	x					x	x		x	x				x				x	x	
	2/27																										
SELF-REFLECTION	2/28																										
	3/1																										
ASPIRATIONS AND DESIRES	3/2																										
	3/5	x	x	x	x	x	x	x	x				x	x			x					x			x	x	
"SELF PORTRAITS"	3/6	x	x	x	x	x	x	x				x	x			x						x			x	x	
	3/7																										
ASPIRATIONS AND DESIRES	3/8																										
	3/9																										
"SELF PORTRAITS"	3/12	x	x	x	x	x	x	x					x	x			x					x			x	x	
	3/13		x	x	x	x	x	x	x				x	x			x					x			x	x	
ASPIRATIONS AND DESIRES	3/14	x		x	x	x	x	x				x	x			x						x			x	x	
	3/15		x	x	x		x	x	x				x	x			x					x			x	x	
"SELF PORTRAITS"	3/16	x	x	x	x	x	x	x	x				x	x			x					x			x	x	
	3/19	x	x	x	x	x	x	x	x				x	x			x					x			x	x	
"SELF PORTRAITS"	3/20																										
	3/21																										
"SELF PORTRAITS"	3/22																										
	3/23	x	x	x	x	x	x	x				x	x			x						x			x	x	
THEME OF THE WEEK	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE
		SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION																			

Sophia's Artwork and Observation Matrices

PARTICIPANT:		Sophia										LEVEL OF ARTISTIC EXPERIENCE: Moderate																	
LINE AND SHAPE	1/29	x	x	x	x	x	x	x	x	x					x	x			x							x	x		
	1/30		x	x	x	x	x	x	x	x					x	x			x								x		x
MANDALAS AND ZENTANGES	1/31	x	x	x	x	x	x							x		x											x		x
	2/1																												
DRAWING TO MUSIC	2/5	x	x	x	x	x	x	x	x	x					x	x			x								x		x
	2/6	x	x	x	x	x	x								x				x								x		x
EMOTIONS	2/7	x	x	x	x	x									x				x								x		x
	2/8																												
DRAWING TO MUSIC	2/9	x	x	x	x	x	x	x	x					x	x	x			x								x		x
	2/12	x	x	x	x	x	x	x	x					x	x	x			x								x		x
EMOTIONS	2/13		x	x	x	x	x	x	x						x				x								x		x
	2/14		x	x	x	x	x	x	x						x				x								x		x
DRAWING TO MUSIC	2/15		x	x	x	x	x	x	x						x				x								x		x
	2/16	x	x	x	x	x	x	x	x						x				x								x		x
EMOTIONS	2/19																												
	2/20		x	x	x	x	x	x	x						x	x			x								x		x
DRAWING TO MUSIC	2/21		x	x	x	x	x	x	x						x				x								x		x
	2/22	x	x	x	x	x	x	x	x						x				x								x		x
EMOTIONS	2/23	x	x	x	x	x	x								x	x			x								x		x
	DATE																												
THEME OF THE WEEK		GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE		

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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PARTICIPANT:		Sophia										LEVEL OF ARTISTIC EXPERIENCE: Advanced																	
ASSOCIATIONS	2/26	x	x	x	x	x	x																						
	2/27																												
SELF-REFLECTION	2/28																												
	3/1																												
ASPIRATIONS AND DESIRES	3/2																												
	3/5	x	x	x	x	x	x	x							x				x								x		x
"SELF PORTRAITS"	3/6		x	x		x	x	x	x	x					x				x								x		x
	3/7																												
ASPIRATIONS AND DESIRES	3/8																												
	3/9																												
SELF-REFLECTION	3/12	x	x	x	x	x	x	x	x	x					x				x								x		x
	3/13	x	x	x	x	x	x	x	x						x	x			x								x		x
ASSOCIATIONS	3/14	x	x	x	x	x	x	x							x	x			x								x		x
	3/15	x	x	x	x	x	x	x							x	x			x								x		x
SELF-REFLECTION	3/16	x	x	x	x	x	x								x	x			x								x		x
	3/19		x	x	x	x	x	x							x				x								x		x
ASPIRATIONS AND DESIRES	3/20																												
	3/21																												
SELF-REFLECTION	3/22																												
	3/23	x	x	x	x	x	x	x	x	x					x				x								x		x
THEME OF THE WEEK		GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE		

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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Daniel's Artwork and Observation Matrices

PARTICIPANT:		Daniel										LEVEL OF ARTISTIC EXPERIENCE: Advanced															
LINE AND SHAPE		x	x	x	x	x	x	x	x	x					x		x							x		x	
	1/30	x	x	x	x	x	x	x	x	x	x				x	x		x						x		x	
	1/31			x	x	x	x	x						x	x		x						x		x		
	2/1	x		x		x	x	x	x	x				x		x							x		x		
	2/2																										
MANDALAS AND ZENTANGES	2/5	x	x	x	x	x	x	x	x	x				x		x							x		x		
	2/6	x	x	x	x	x	x	x					x	x	x		x						x		x		
	2/7	x		x		x	x							x		x							x	x			
	2/8																										
	2/9	x	x	x	x	x	x	x	x					x		x							x	x			
DRAWING TO MUSIC	2/12																										
	2/13																										
	2/14																										
	2/15																										
	2/16		x	x	x	x	x	x	x	x				x		x							x		x		
	2/19																										
EMOTIONS	2/20		x	x	x	x	x	x					x	x		x							x		x		
	2/21		x	x	x	x	x	x	x	x				x		x							x		x		
	2/22	x	x	x	x		x	x	x	x	x			x	x		x						x		x		
	2/23	x	x	x		x		x	x					x		x							x	x			
THEME OF THE WEEK	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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PARTICIPANT:		Daniel										LEVEL OF ARTISTIC EXPERIENCE: Advanced															
ASSOCIATIONS	2/26	x		x	x	x	x	x	x	x				x	x		x							x		x	
	2/27																										
	2/28																										
	3/1																										
	3/2																										
SELF-REFLECTION	3/5	x		x	x	x	x	x	x	x				x		x								x		x	
	3/6	x	x	x	x	x	x							x		x								x		x	
	3/7																										
	3/8																										
	3/9																										
ASPIRATIONS AND DESIRES	3/12	x	x	x	x	x	x	x	x	x				x	x	x		x						x		x	
	3/13	x	x	x	x	x	x	x	x	x				x				x						x		x	
	3/14	x		x	x	x	x	x	x	x				x	x			x						x		x	
	3/15	x		x	x	x	x	x	x	x				x				x						x		x	
	3/16		x	x	x	x	x	x	x	x				x	x			x	x					x	x		
"SELF PORTRAITS"	3/19	x	x	x	x	x		x	x					x	x			x						x		x	
	3/20																										
	3/21																										
	3/22																										
	3/23	x	x	x	x	x	x	x	x					x				x						x		x	
THEME OF THE WEEK	DATE	GEOMETRIC	ORGANIC	SIZE VARIES	OVERLAPPING	OUTLINES	WEIGHT VARIES	HATCHING	COOL	WARM	NEUTRAL	NATURAL	VALUE VARIES	RECOGNIZABLE IMAGERY	ABSTRACT	ATTEMPT AT REALISM	FOLLOWS THEME	CONTINUING PREVIOUS DRAWING	DEVELOPED OWN THEME	SKIPPED WARM UP	DRAWING FULL TIME	DRAWING PART OF TIME	DRAWING MINIMALLY	TALKING	WORKING QUIETLY	INCOMPLETE	COMPLETE

SHAPE	LINE	COLOR	IMAGERY	USE OF PROMPT	ENGAGEMENT	COMPLETION
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## APPENDIX I

## Student Artwork on Days with Increased Anxiety and Stress Symptoms

Savannah



February 22, 2018

**Prompt:** What makes you happy or content? Think about at what point in your day you feel most happy/content. Where are you at that moment? What are you doing at that moment? Who are you with, if anyone? Illustrate the place that comes to mind.



**Emanon**



February 14, 2018

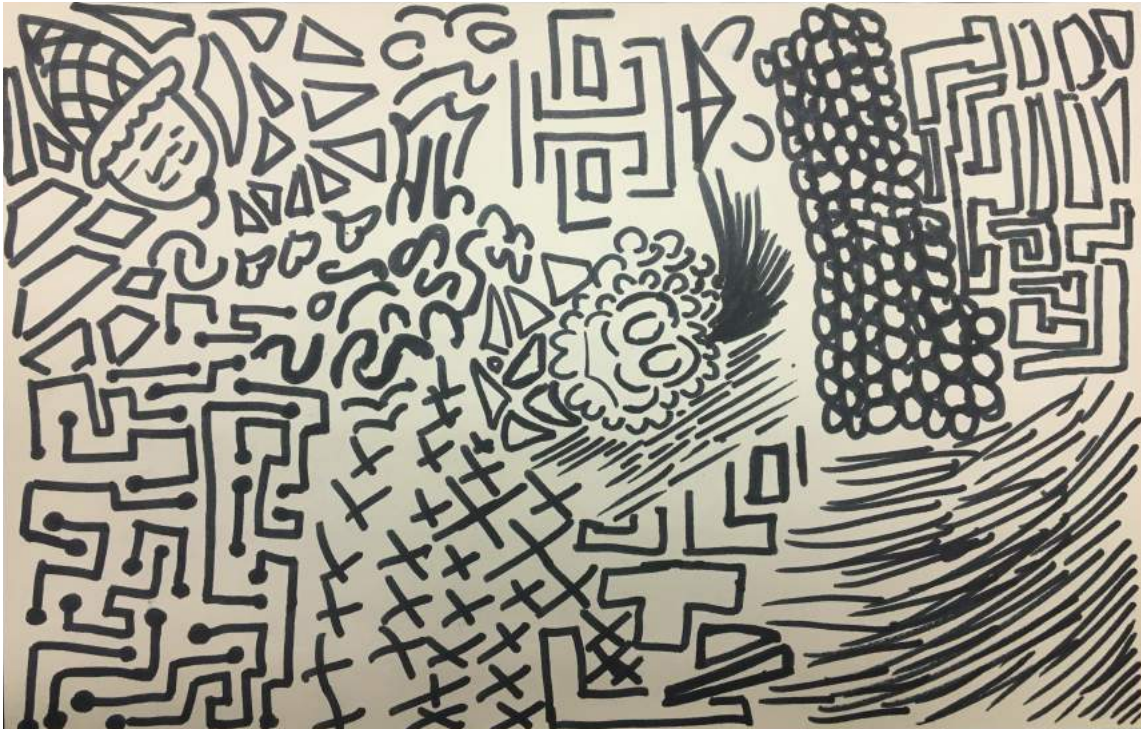
**Prompt:** Create a drawing while listening to a pre-made playlist of classical music.



February 21, 2018

**Prompt:** Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.

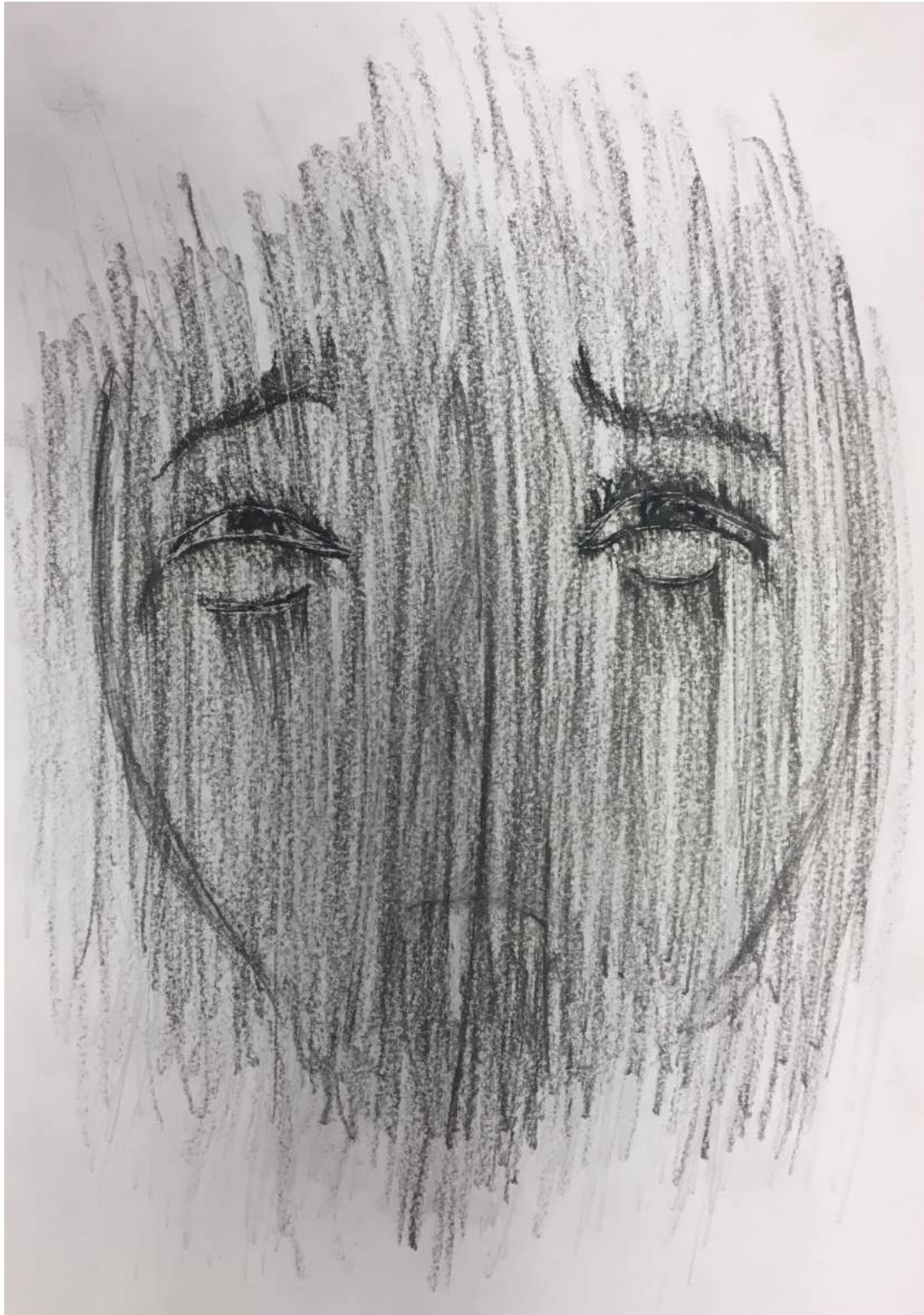
**Daniel**



February 6, 2018

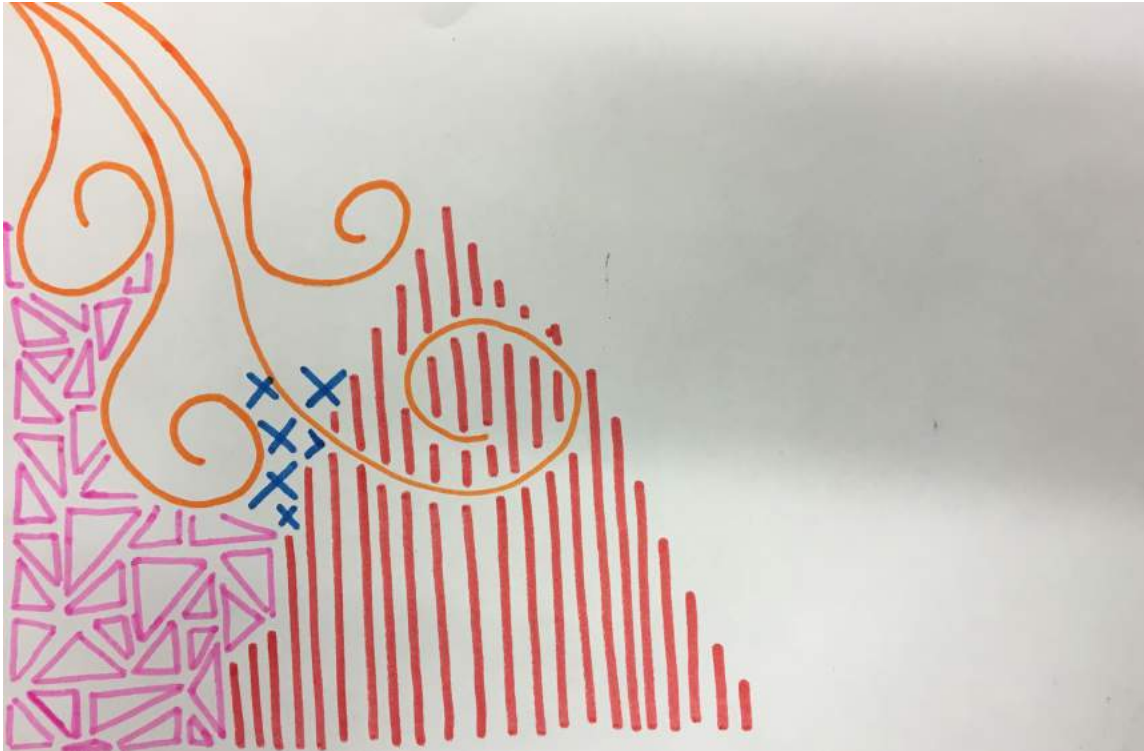
**Prompt:** Create a zentangle® using the material of your choice.





February 20, 2018

**Prompt:** Make a list of five emotions. Think about the color associations that each of those emotions have. Create a drawing using those colors, with those emotions in mind.



February 23, 2018

**Prompt:** Create a drawing that illustrated how you feel right now, using the material of your choice, or create a drawing illustrating what it feels like to be stressed or anxious.



March 13, 2018

**Prompt:** Think about a place you have always wanted to go. Why do you want to go there? How might you get to that place? Create a drawing that illustrates a place or types of place that you would like to visit.





March 15, 2018

**Prompt:** List three goals you have for your future. These goals can be short-term or long-term. Choose one goal to inspire your drawing. Create a drawing inspired by that goal. As you are drawing, consider how you might achieve this goal, how you feel about this goal, or how you feel about the future.

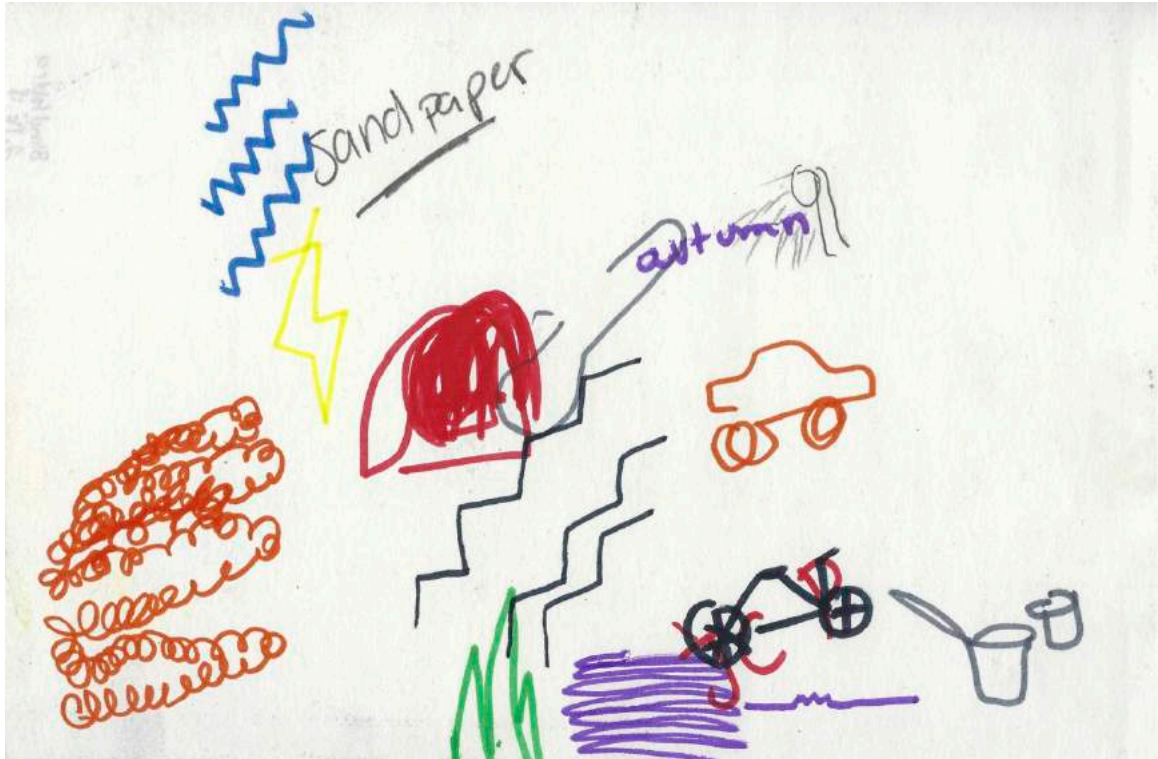
**Osewald**



March 14, 2018

**Prompt:** If you could live anywhere, where would you live? What would your home look like? Create a drawing designing your future home.

**Sofia**



February 16, 2018

**Prompt:** Draw blindfolded, or with your eyes closed, while listening to a pre-made playlist of sound effects.



**Olive**



January 30, 2018

**Prompt:** Create a drawing using repeating organic shapes.



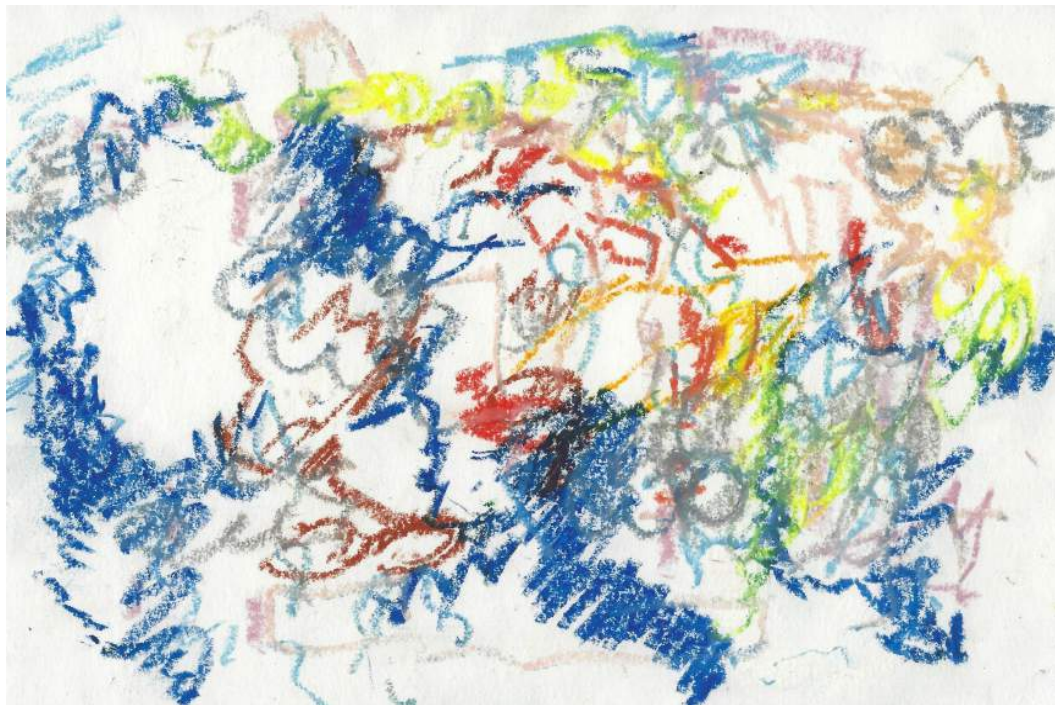
February 9, 2018

**Prompt:** Make a list of contrasting emotions. What colors and shapes do you associate with those emotions? Create a mandala inspired by contrasting emotions. Consider the colors and shapes associated with those emotions.



February 12, 2018

**Prompt:** Create a drawing inspired by the pre-made playlist of popular contemporary songs. Approximately thirty seconds of each song will be played for ten minutes.



February 16, 2018

**Prompt:** Draw blindfolded, or with your eyes closed, while listening to a pre-made playlist of sound effects.



March 13, 2018

**Prompt:** Think about a place you have always wanted to go. Why do you want to go there? How might you get to that place? Create a drawing that illustrates a place or types of place that you would like to visit.



## APPENDIX J

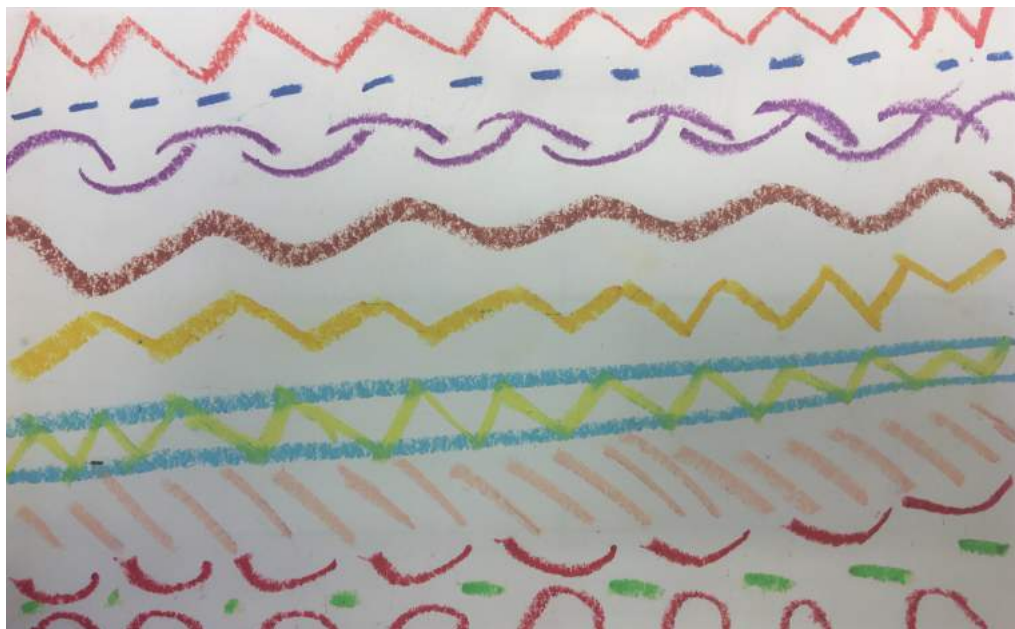
### Student Artwork on Days with Decreased Stress and Anxiety Symptoms

Savannah



January 29, 2018

**Prompt:** Make a list of geometric shapes. Create a drawing repeating those geometric shapes.



January 31, 2018

**Prompt:** Create a drawing using five different types of lines.



February 6, 2018

**Prompt:** Create a zentangle® using the material of your choice.



February 23, 2018

**Prompt:** Create a drawing that illustrated how you feel right now, using the material of your choice, or create a drawing illustrating what it feels like to be stressed or anxious.

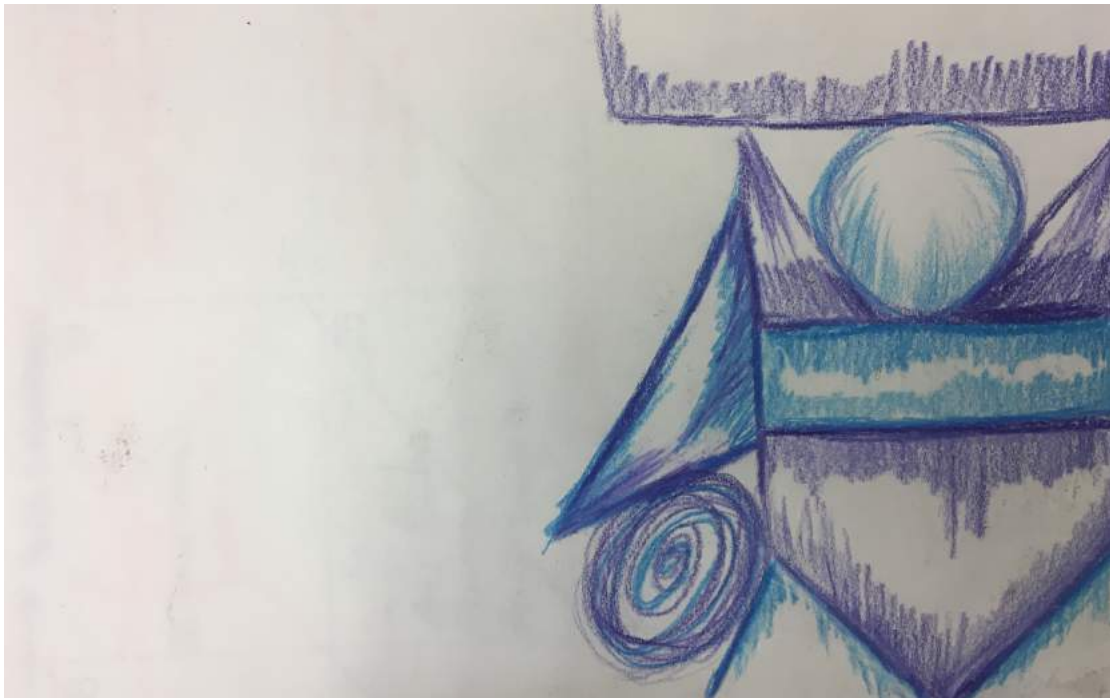


March 5, 2018

**Prompt:** What motivates or inspires you? Create a drawing inspired by what motivates or inspires you.



**Angelica**



January 29, 2018

**Prompt:** Make a list of five geometric shapes. Create a drawing repeating those geometric shapes.



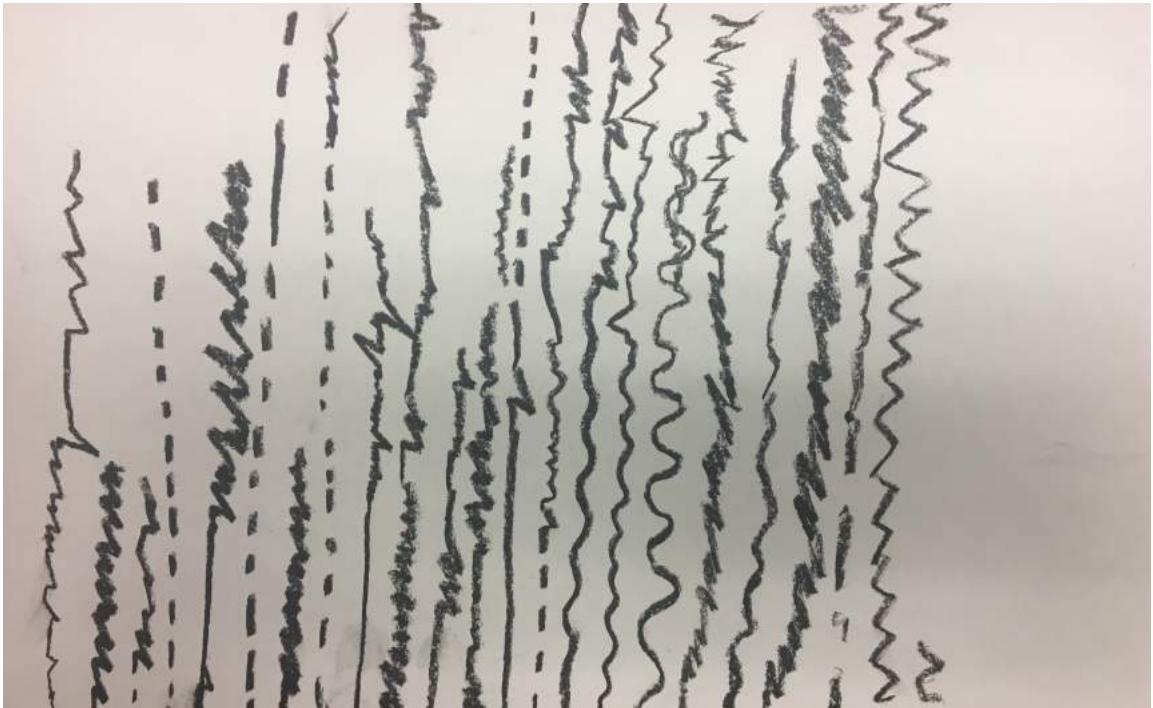
January 30, 2018

**Prompt:** Create a drawing using repeating organic shapes.



February 6, 2018

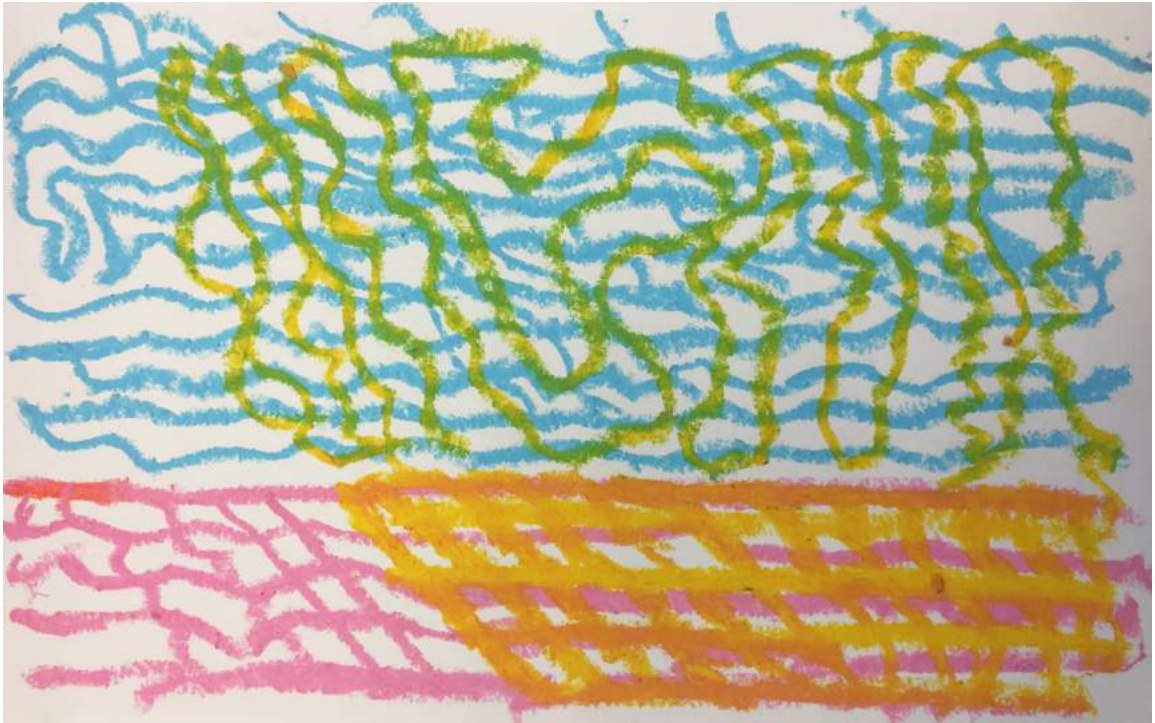
**Prompt:** Create a zentangle® using the material of your choice.



February 12, 2018

**Prompt:** Create a drawing inspired by the pre-made playlist of popular contemporary songs. Approximately thirty seconds of each song will be played for ten minutes.





February 13, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of meditative music.

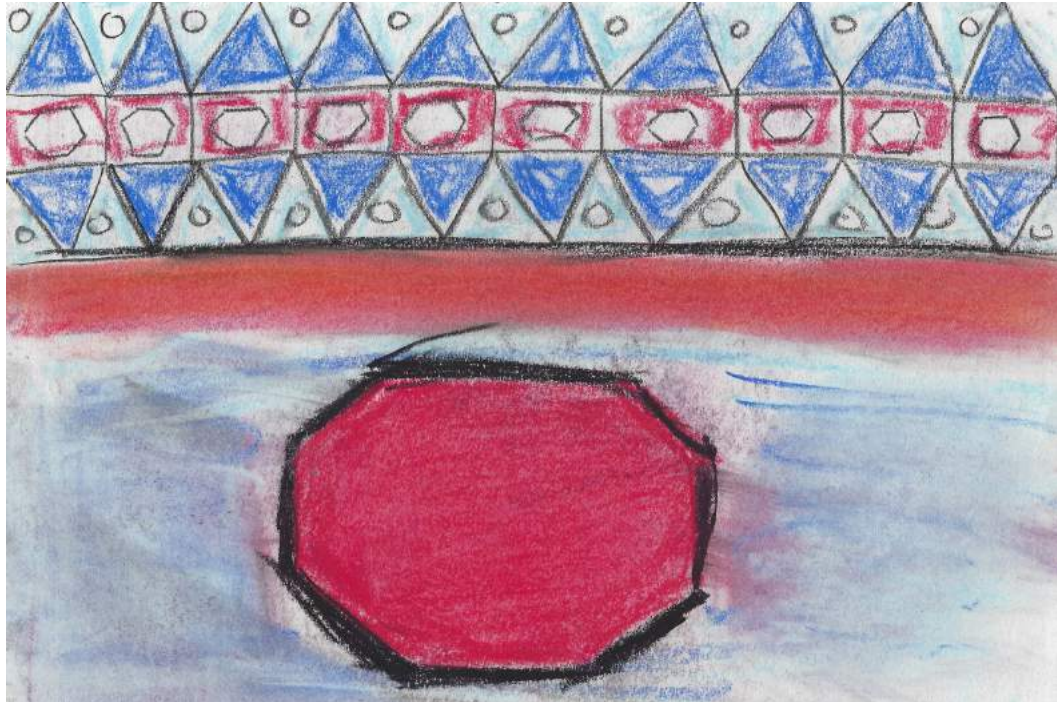


February 20, 2018

**Prompt:** Make a list of five emotions. Think about the color associations of each of those emotions. Create a drawing using those colors, with those emotions in mind.



**Amare**



January 29, 2018

**Prompt:** Make a list of geometric shapes. Create a drawing repeating those geometric shapes.



January 31, 2018

**Prompt:** Create a drawing using five different types of lines.



February 1, 2018

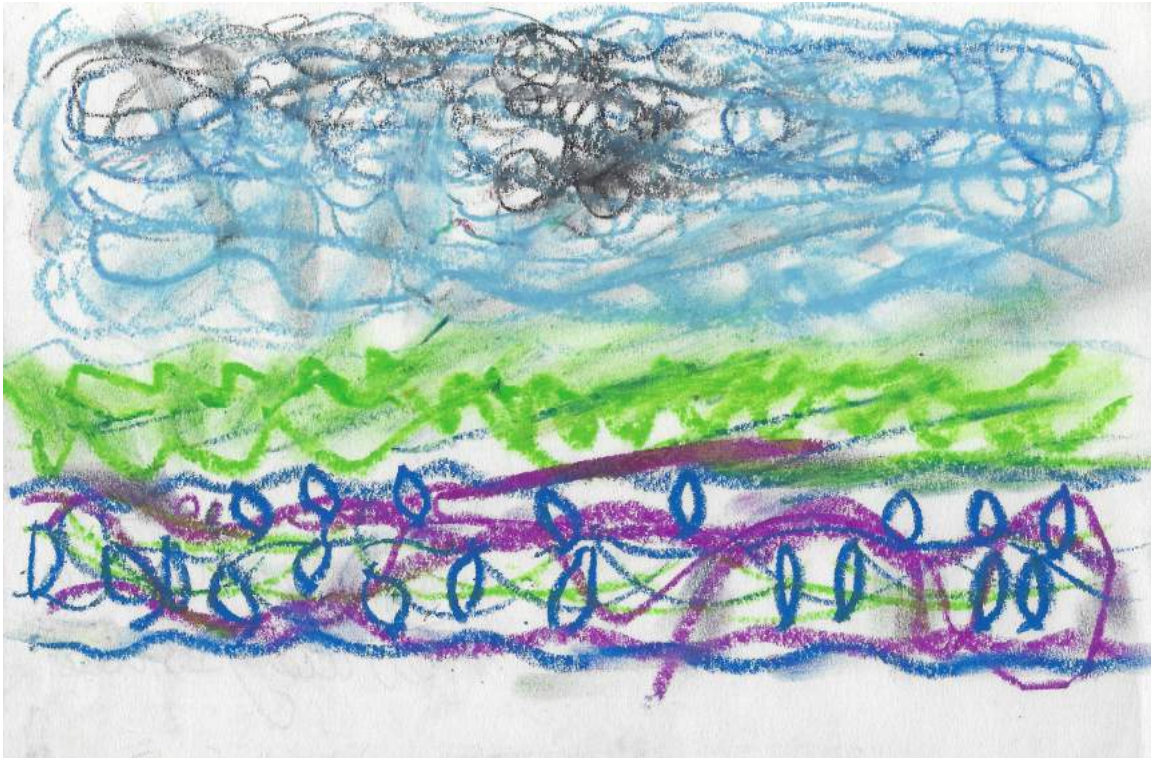
**Prompt:** Create a drawing using only straight lines.



February 9, 2018

**Prompt:** Make a list of contrasting emotions. What colors and shapes do you associate with those emotions? Create a mandala inspired by contrasting emotions. Consider the colors and shapes associated with those emotions.





February 13, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of meditative music.



February 14, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of classical music.





February 15, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of nature sounds.



February 21, 2018

**Prompt:** Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.





February 22, 2018

**Prompt:** What makes you happy or content? Think about at what point in your day you feel most happy/content. Where are you at that moment? What are you doing at that moment? Who are you with, if anyone? Illustrate the place that comes to mind.



February 26, 2018

**Prompt:** What does the word “strength” mean to you? Illustrate your definition.

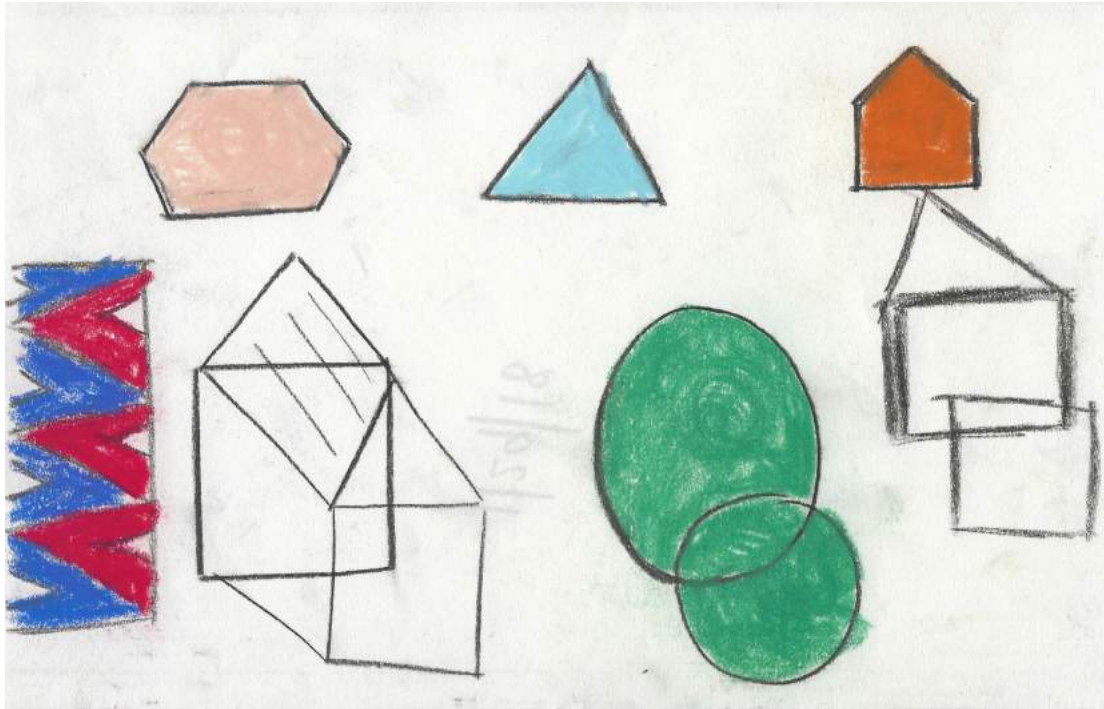


March 13, 2018

**Prompt:** Think about a place you have always wanted to go. Why do you want to go there? How might you get to that place? Create a drawing that illustrates a place or types of place that you would like to visit.



**Helga**



January 29, 2018

**Prompt:** Make a list of geometric shapes. Create a drawing repeating those geometric shapes.



January 30, 2018

**Prompt:** Create a drawing using repeating organic shapes.



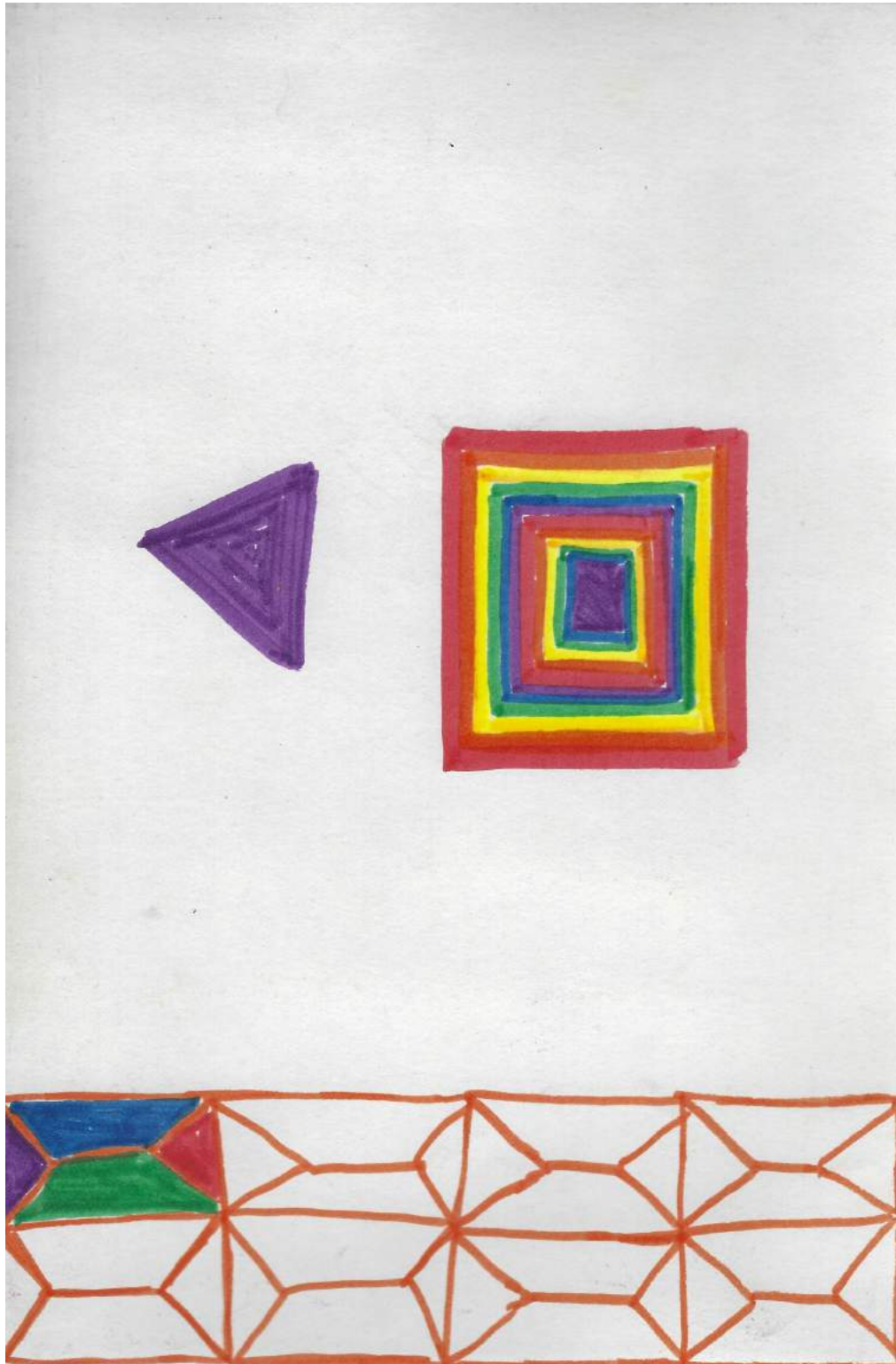


February 6, 2018

**Prompt:** Create a zentangle® using the material of your choice.



**Olga**



February 1, 2018

**Prompt:** Create a drawing using only straight lines.



February 12, 2018

**Prompt:** Create a drawing inspired by the pre-made playlist of popular contemporary songs. Approximately thirty seconds of each song will be played for ten minutes.



February 21, 2018

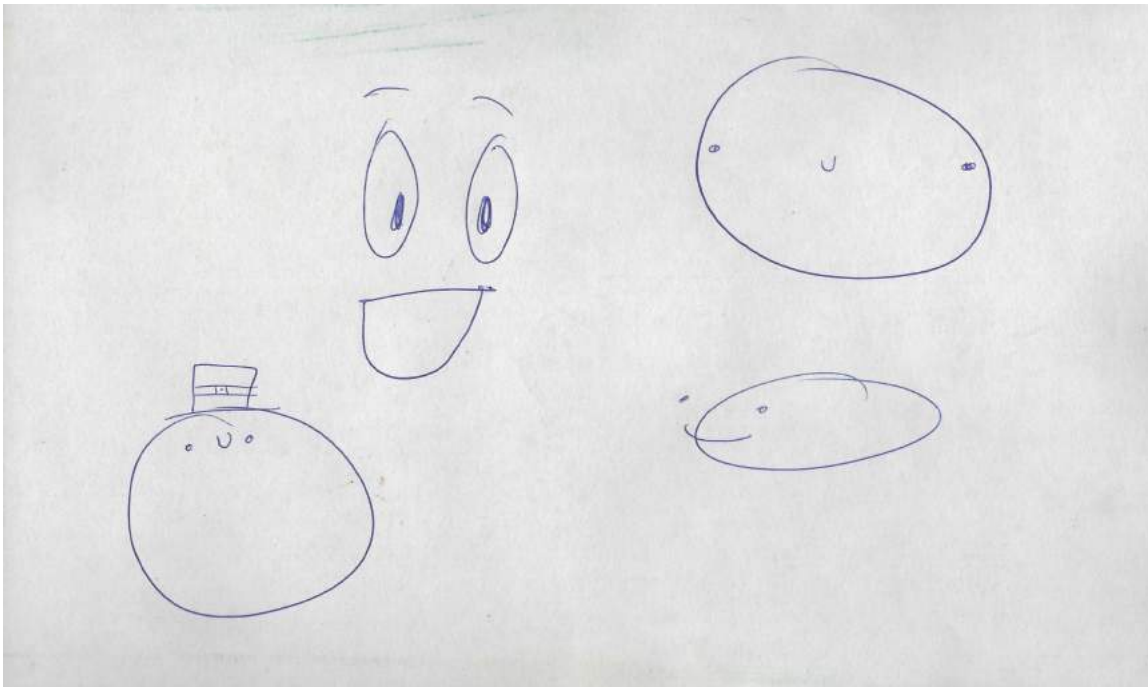
**Prompt:** Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.





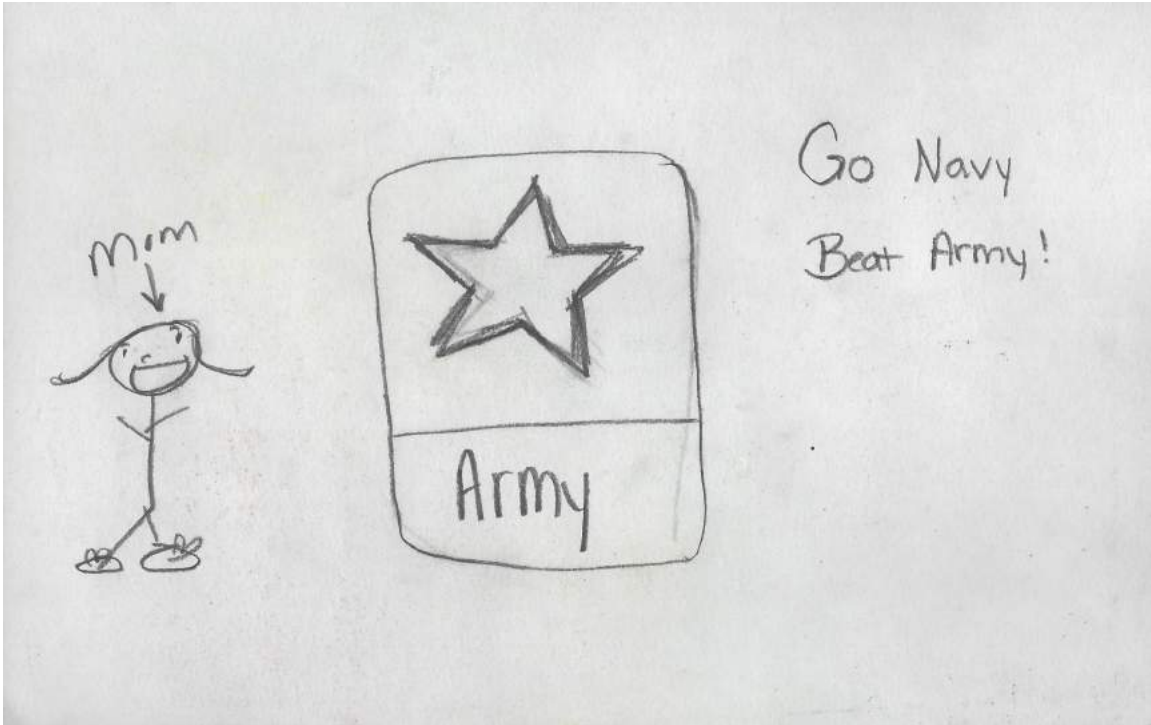
February 22, 2018

**Prompt:** What makes you happy or content? Think about at what point in your day you feel most happy/content. Where are you at that moment? What are you doing at that moment? Who are you with, if anyone? Illustrate the place that comes to mind.



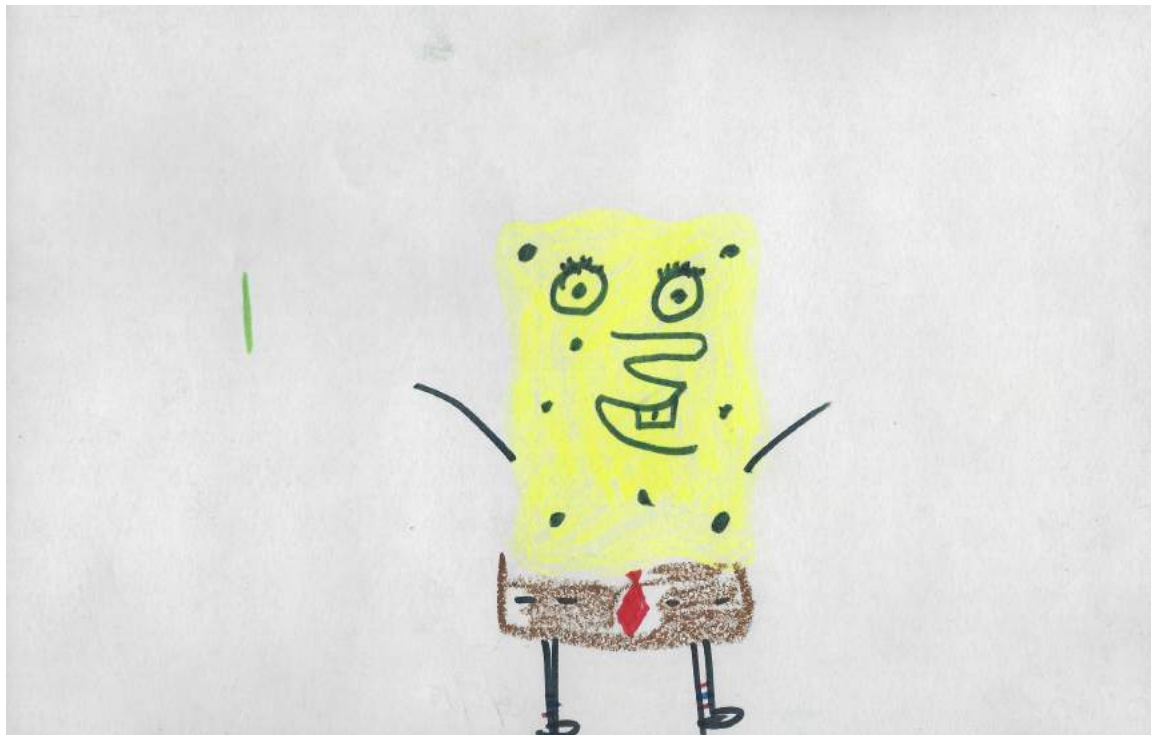
February 23, 2018

**Prompt:** Create a drawing that illustrated how you feel right now, using the material of your choice, or create a drawing illustrating what it feels like to be stressed or anxious.



February 26, 2018

**Prompt:** What does the word “strength” mean to you? Illustrate your definition.



March 5, 2018

**Prompt:** Create a drawing inspired by what motivates or inspires you.

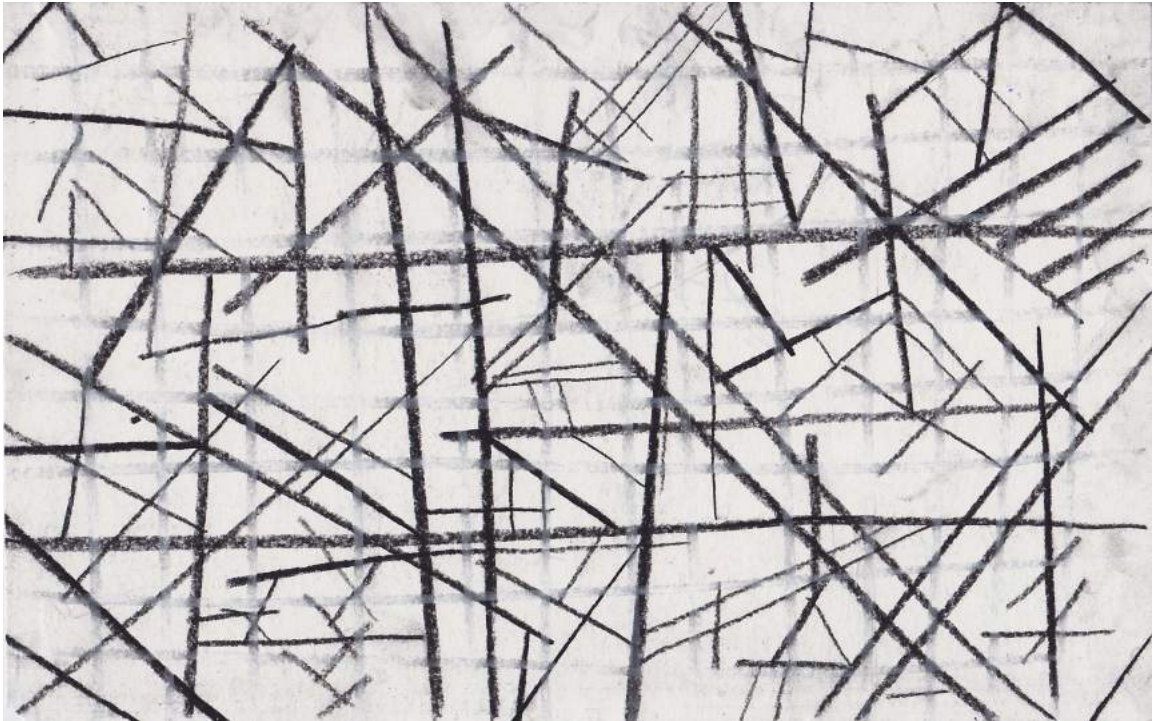


March 13, 2018

**Prompt:** Think about a place you have always wanted to go. Why do you want to go there? How might you get to that place? Create a drawing that illustrates a place or types of place that you would like to visit.

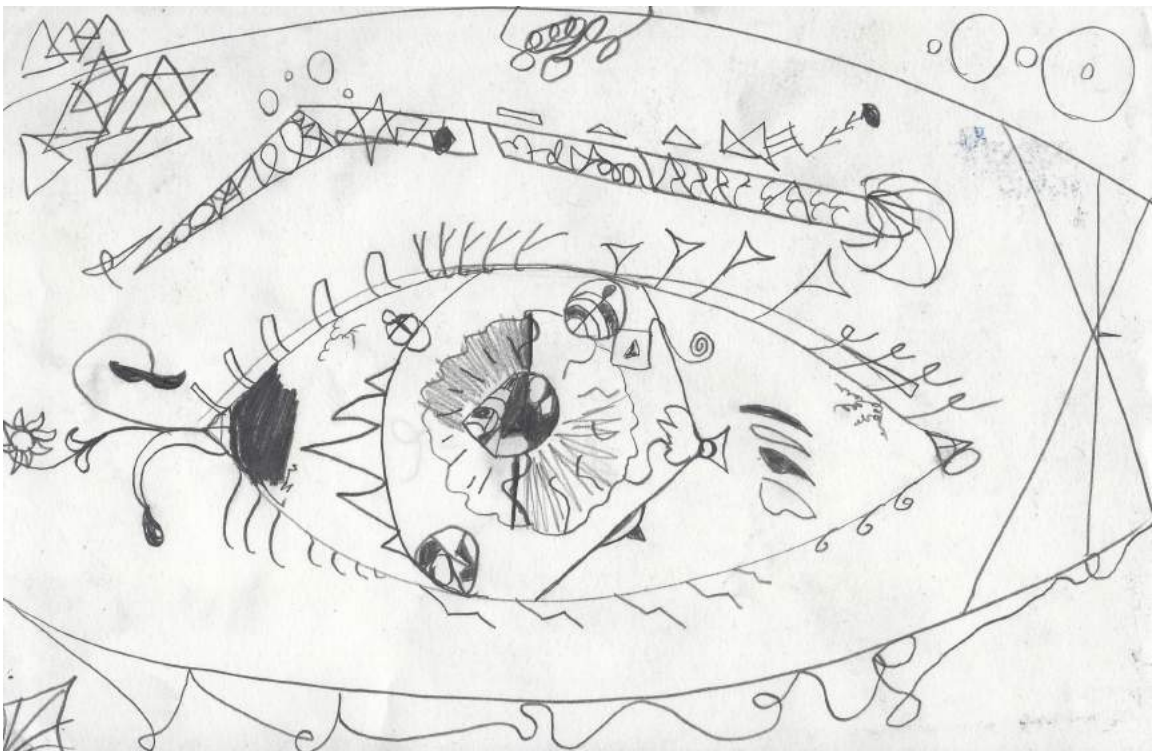


**Emanon**



February 1, 2018

**Prompt:** Create a drawing using only straight lines.



February 6, 2018

**Prompt:** Create a zentangle® using the material of your choice.





February 12, 2018

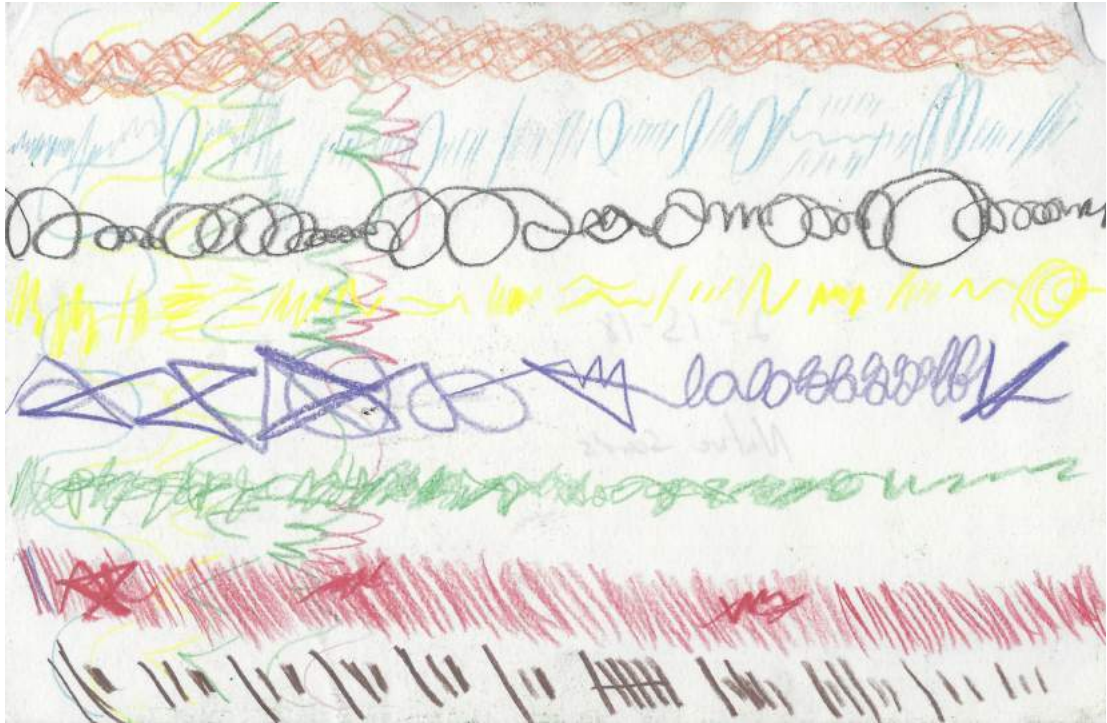
**Prompt:** Create a drawing inspired by the pre-made playlist of popular contemporary songs. Approximately thirty seconds of each song will be played for ten minutes.



February 13, 2018

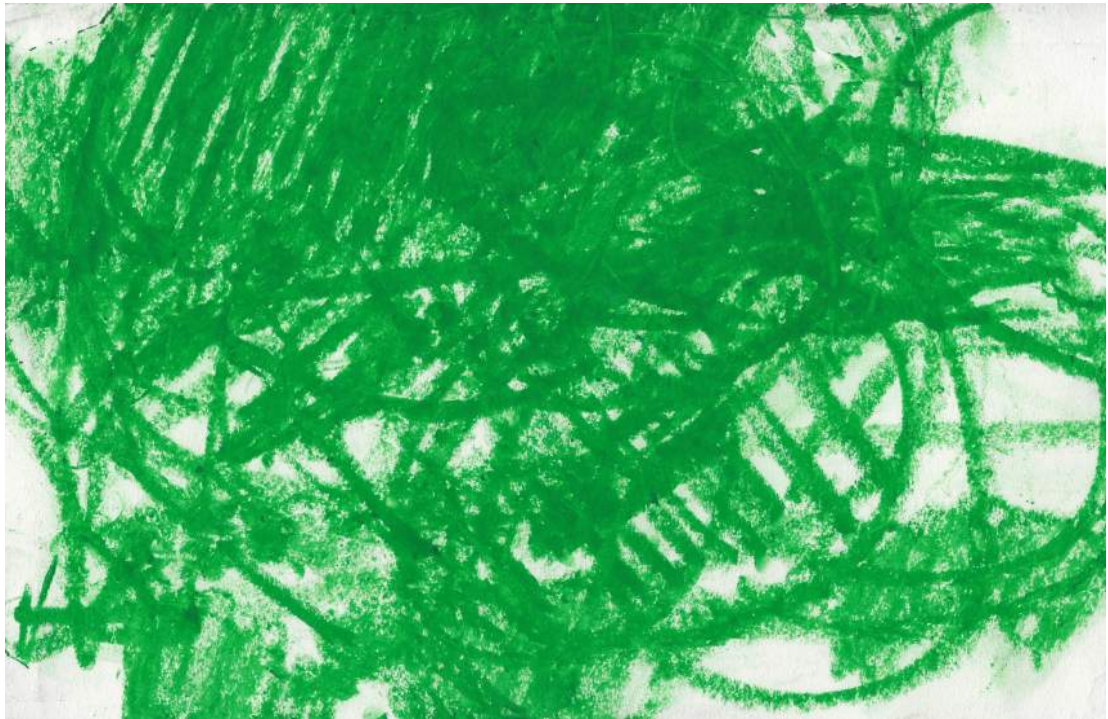
**Prompt:** Create a drawing while listening to a pre-made playlist of meditative music.





February 15, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of nature sounds.



February 16, 2018

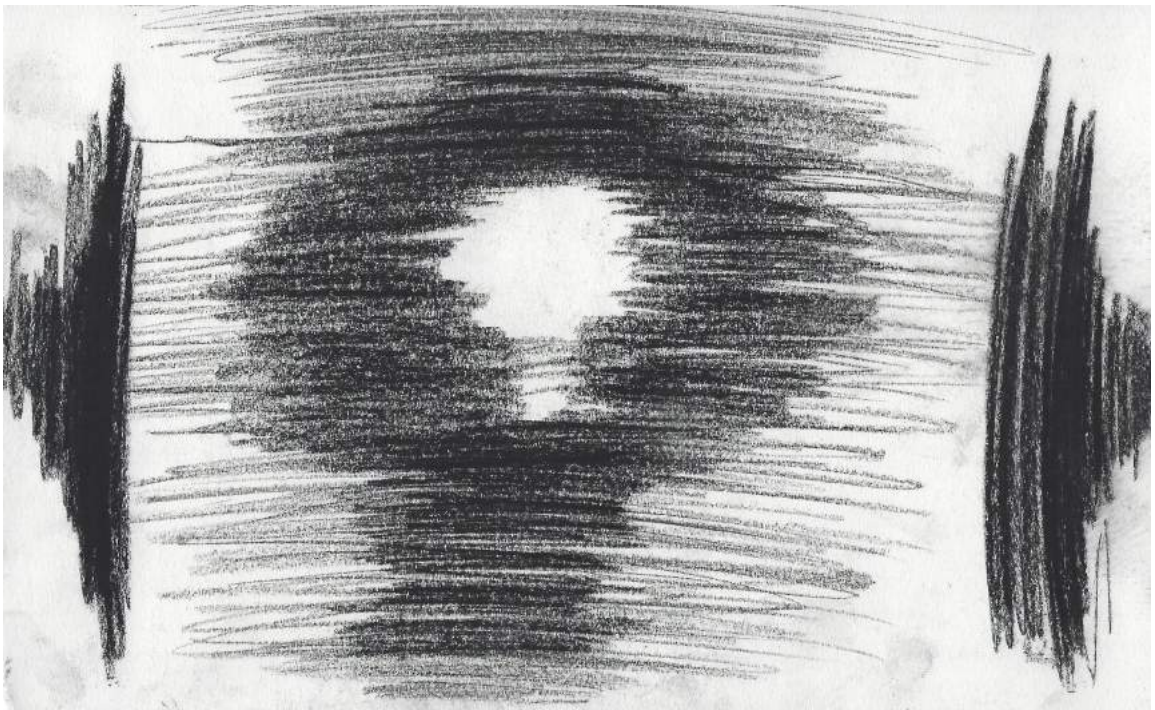
**Prompt:** Draw blindfolded, or with your eyes closed, while listening to a pre-made playlist of sound effects.





February 20, 2018

**Prompt:** Make a list of five emotions. Think about the color associations of each of those emotions. Create a drawing using those colors, with those emotions in mind.



March 6, 2018

**Prompt:** Illustrate something that you own that is really important to you.



March 13, 2018

**Prompt:** Think about a place you have always wanted to go. Why do you want to go there? How might you get to that place? Create a drawing that illustrates a place or types of place that you would like to visit.



**Daniel**



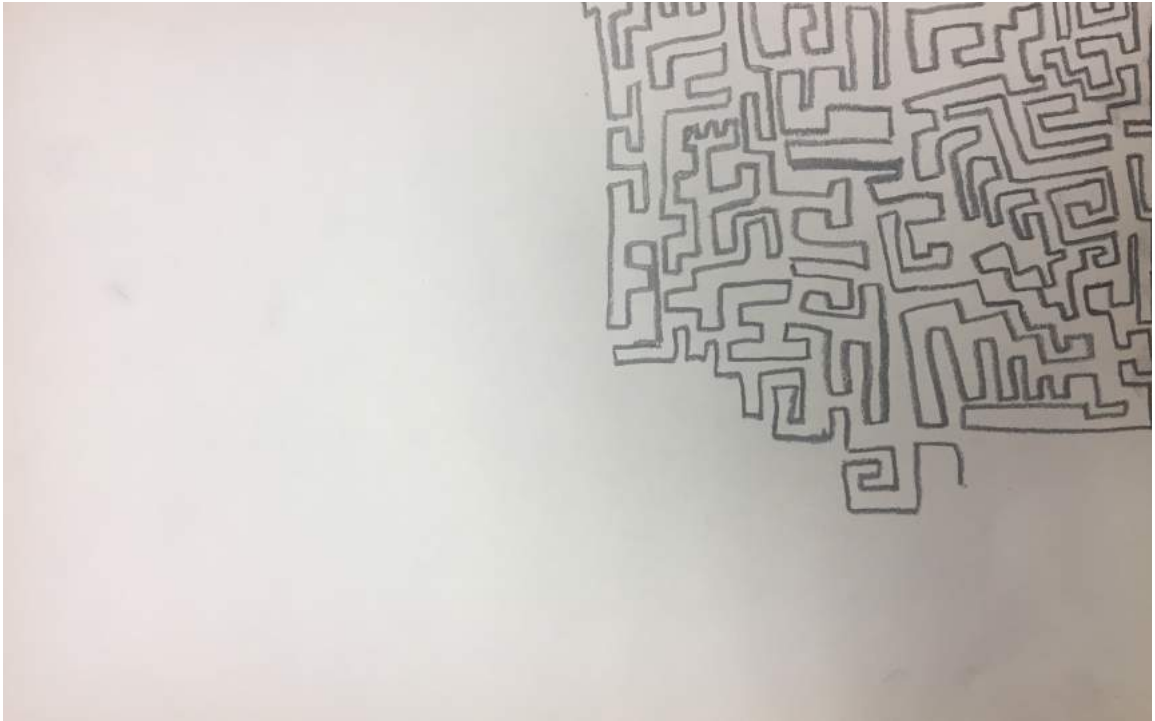
January 31, 2018

**Prompt:** Create a drawing using five different types of lines.



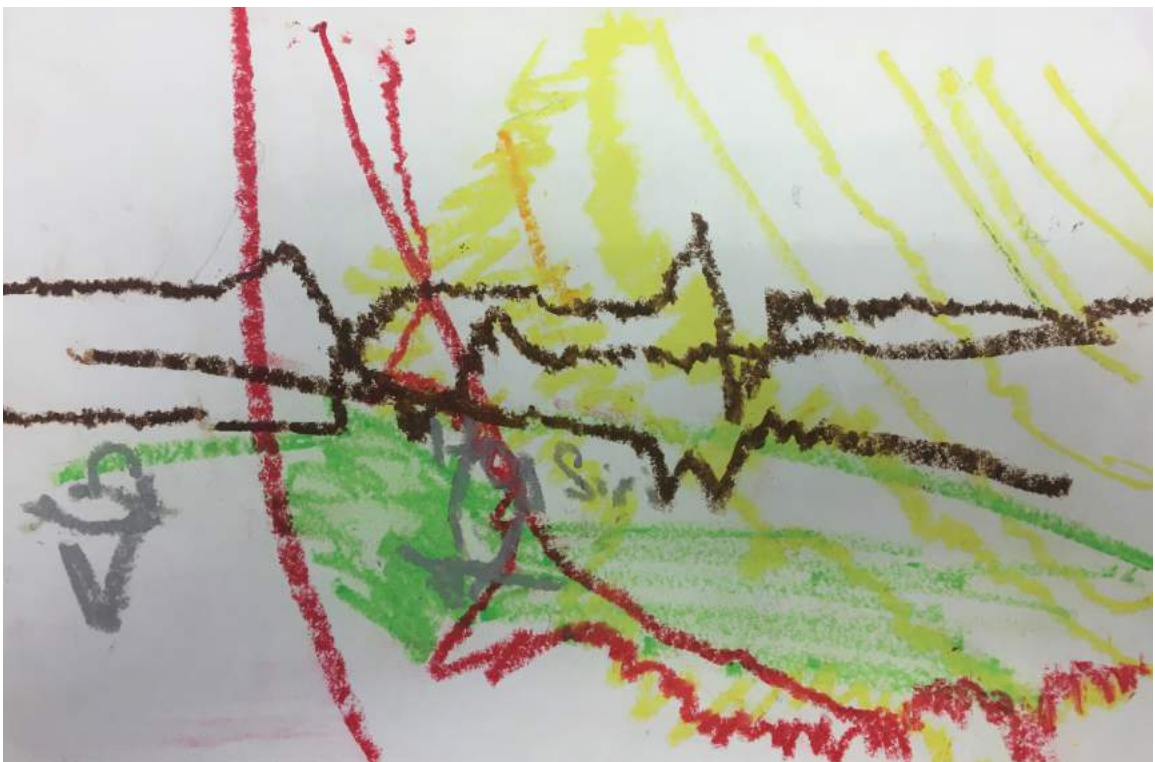
February 1, 2018

**Prompt:** Create a drawing using only straight lines.



February 7, 2018

**Prompt:** Create a zentangle® using one continuous line.



February 16, 2018

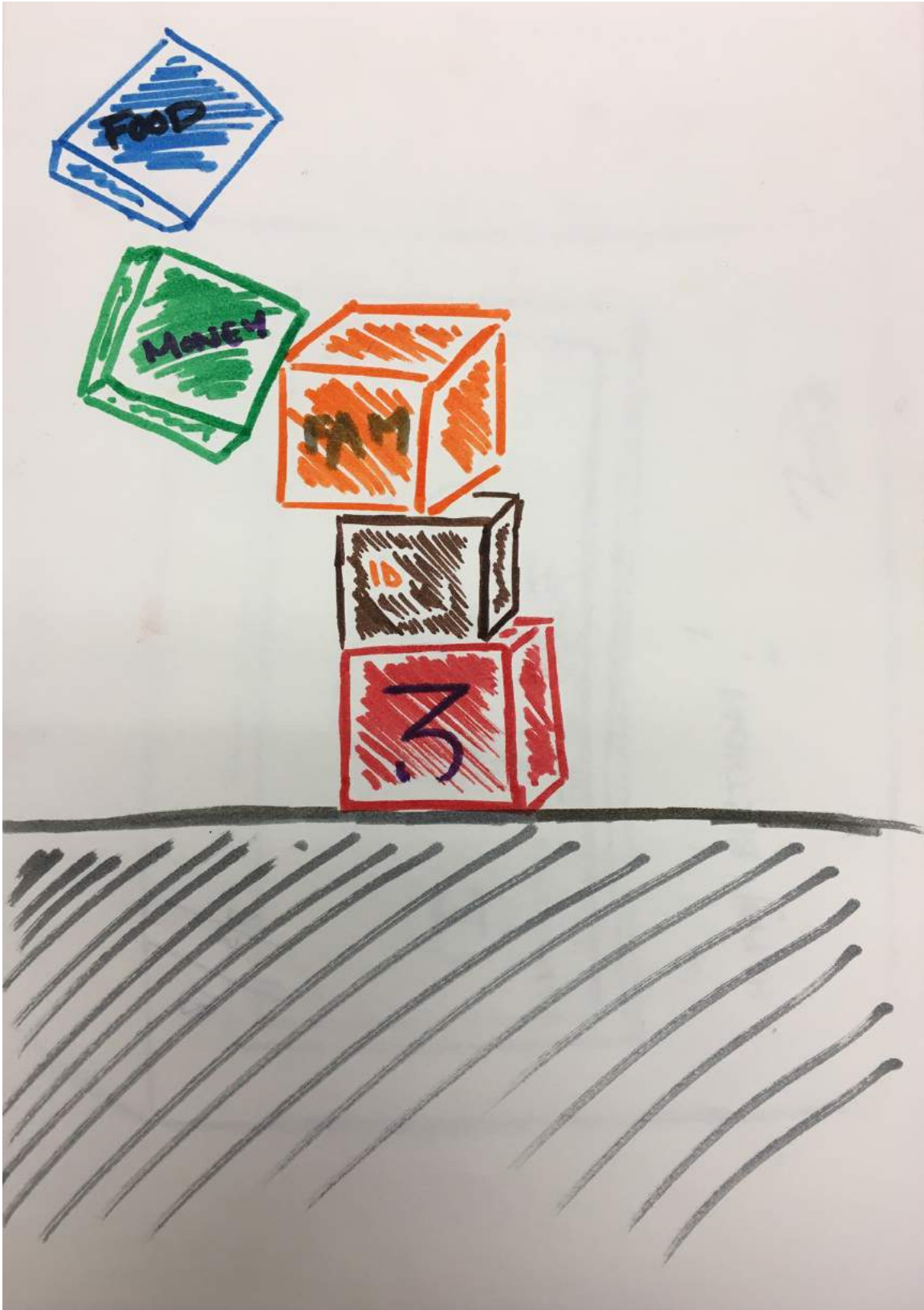
**Prompt:** Draw blindfolded, or with your eyes closed, while listening to a pre-made playlist of sound effects.



February 22, 2018

**Prompt:** What makes you happy or content? Think about at what point in your day you feel most happy/content. Where are you at that moment? What are you doing at that moment? Who are you with, if anyone? Illustrate the place that comes to mind.





March 5, 2018

**Prompt:** Create a drawing inspired by what motivates or inspires you.



March 14, 2018

**Prompt:** If you could live anywhere, where would you live? What would your home look like? Create a drawing designing your future home.

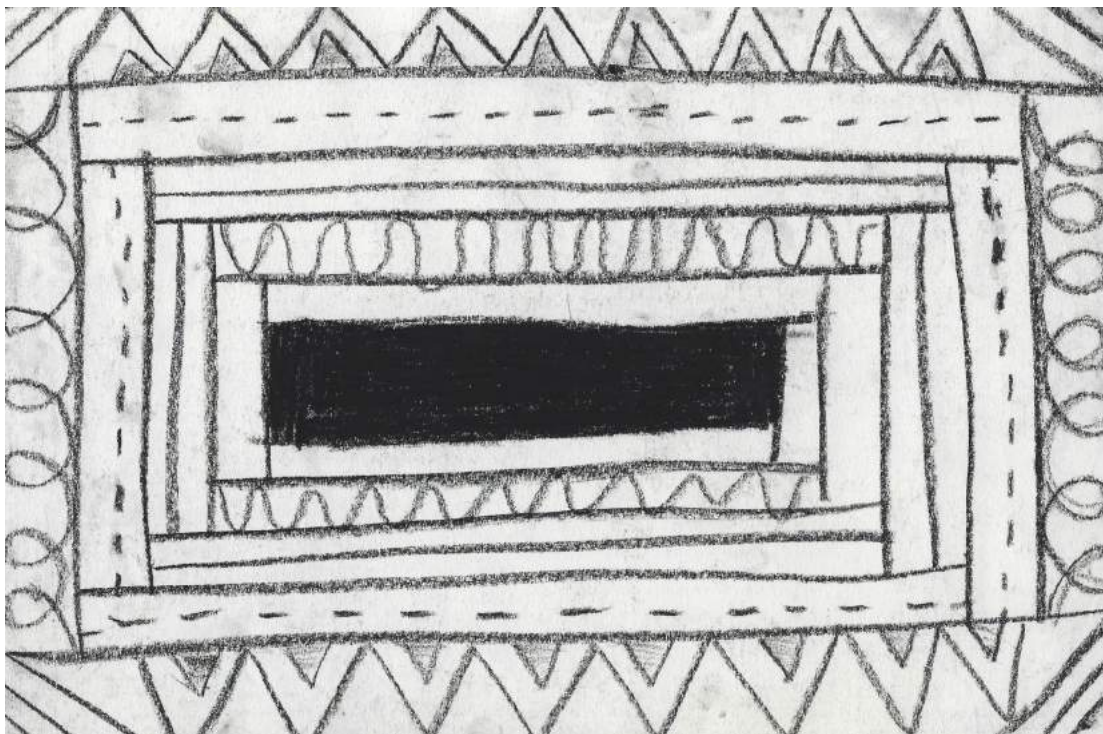


**Sophia**



January 30, 2018

**Prompt:** Create a drawing using repeating organic shapes.



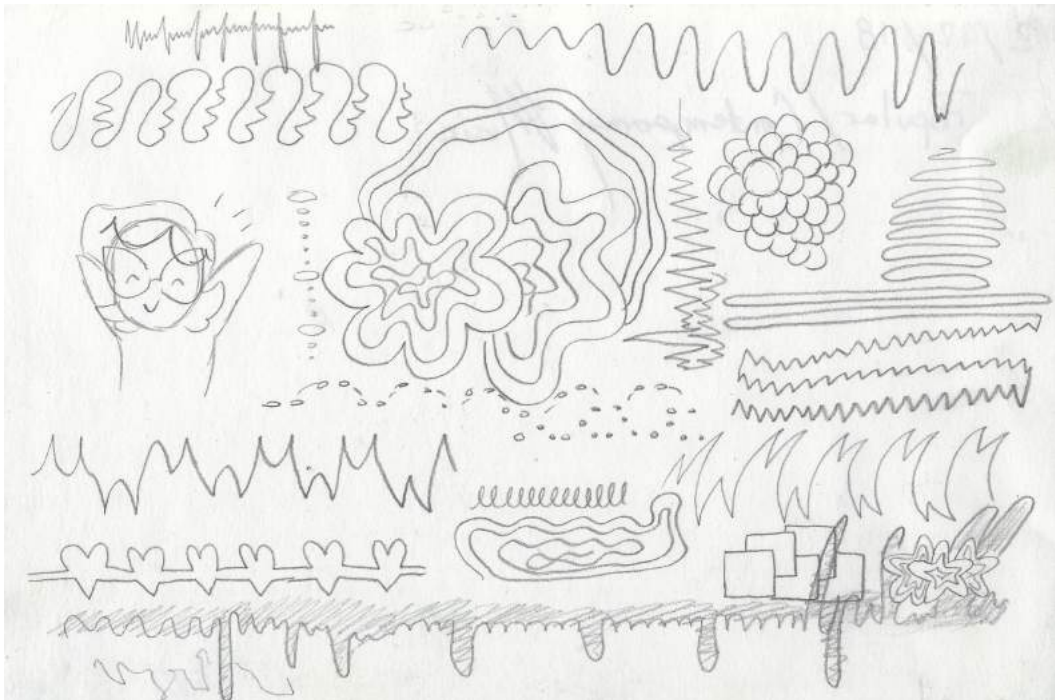
January 31, 2018

**Prompt:** Create a drawing using five different types of lines.



February 9, 2018

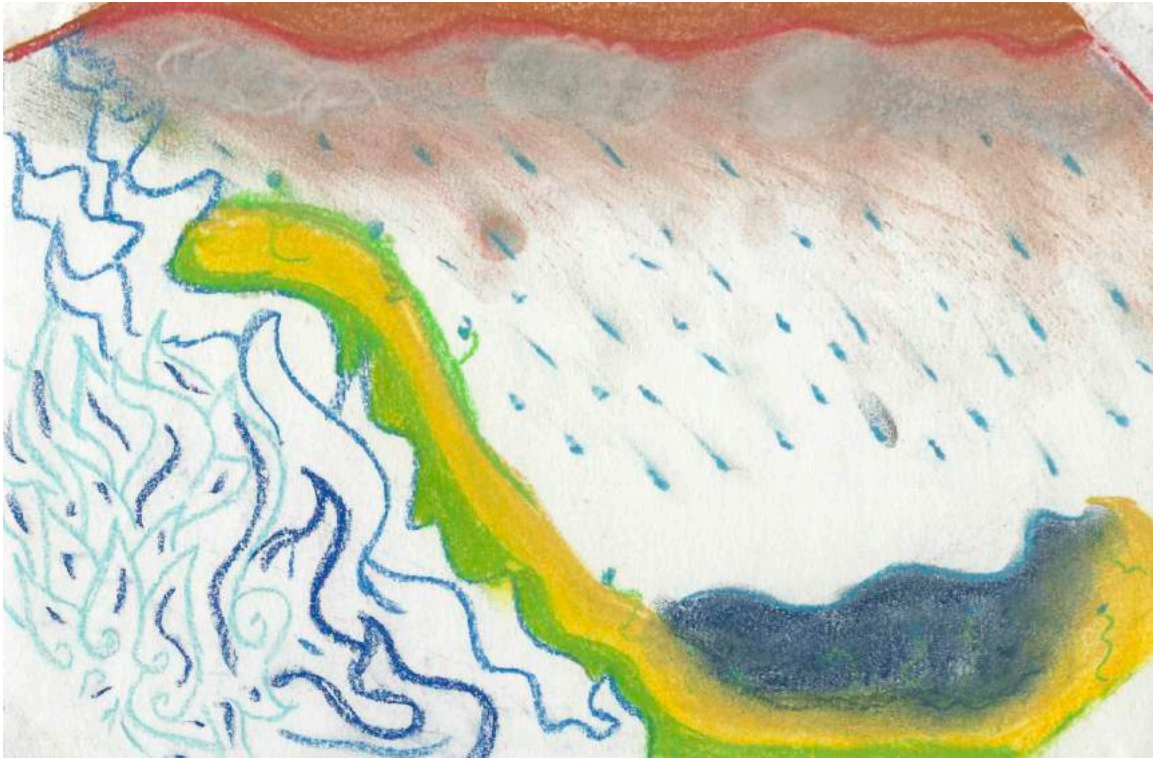
**Prompt:** Make a list of contrasting emotions. What colors and shapes do you associate with those emotions? Create a mandala inspired by contrasting emotions. Consider the colors and shapes associated with those emotions.



February 12, 2018

**Prompt:** Create a drawing inspired by the pre-made playlist of popular contemporary songs. Approximately thirty seconds of each song will be played for ten minutes.





February 13, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of meditative music.



February 14, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of classical music.





February 15, 2018

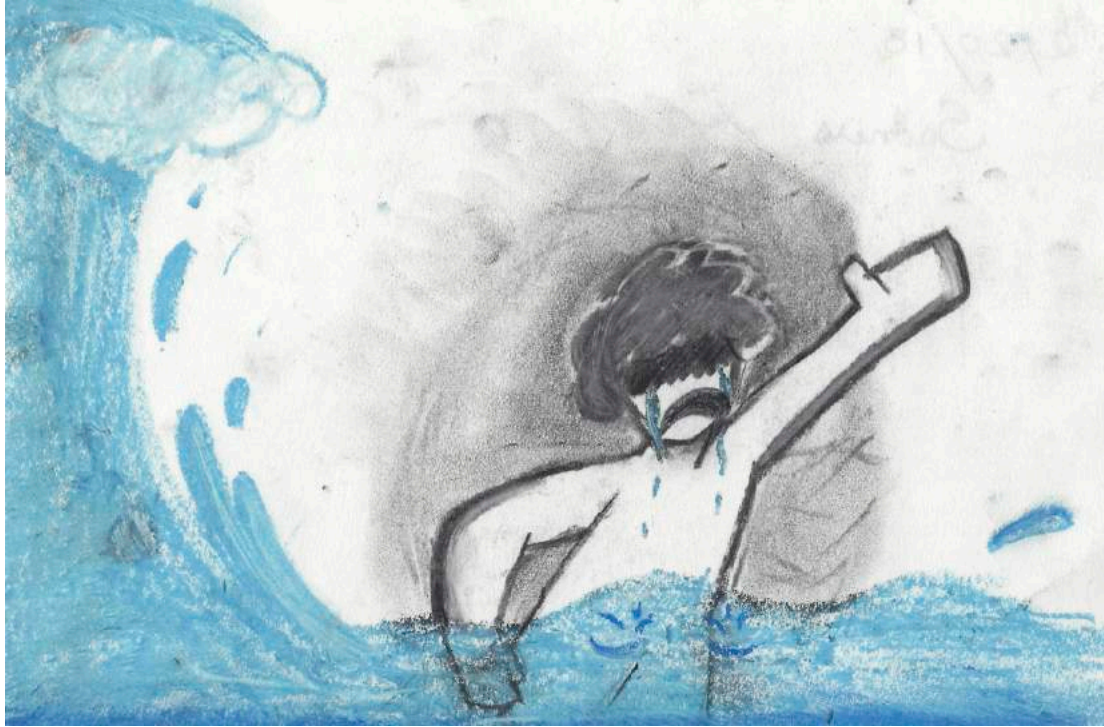
**Prompt:** Create a drawing while listening to a pre-made playlist of nature sounds.



February 16, 2018

**Prompt:** Draw blindfolded, or with your eyes closed, while listening to a pre-made playlist of sound effects.





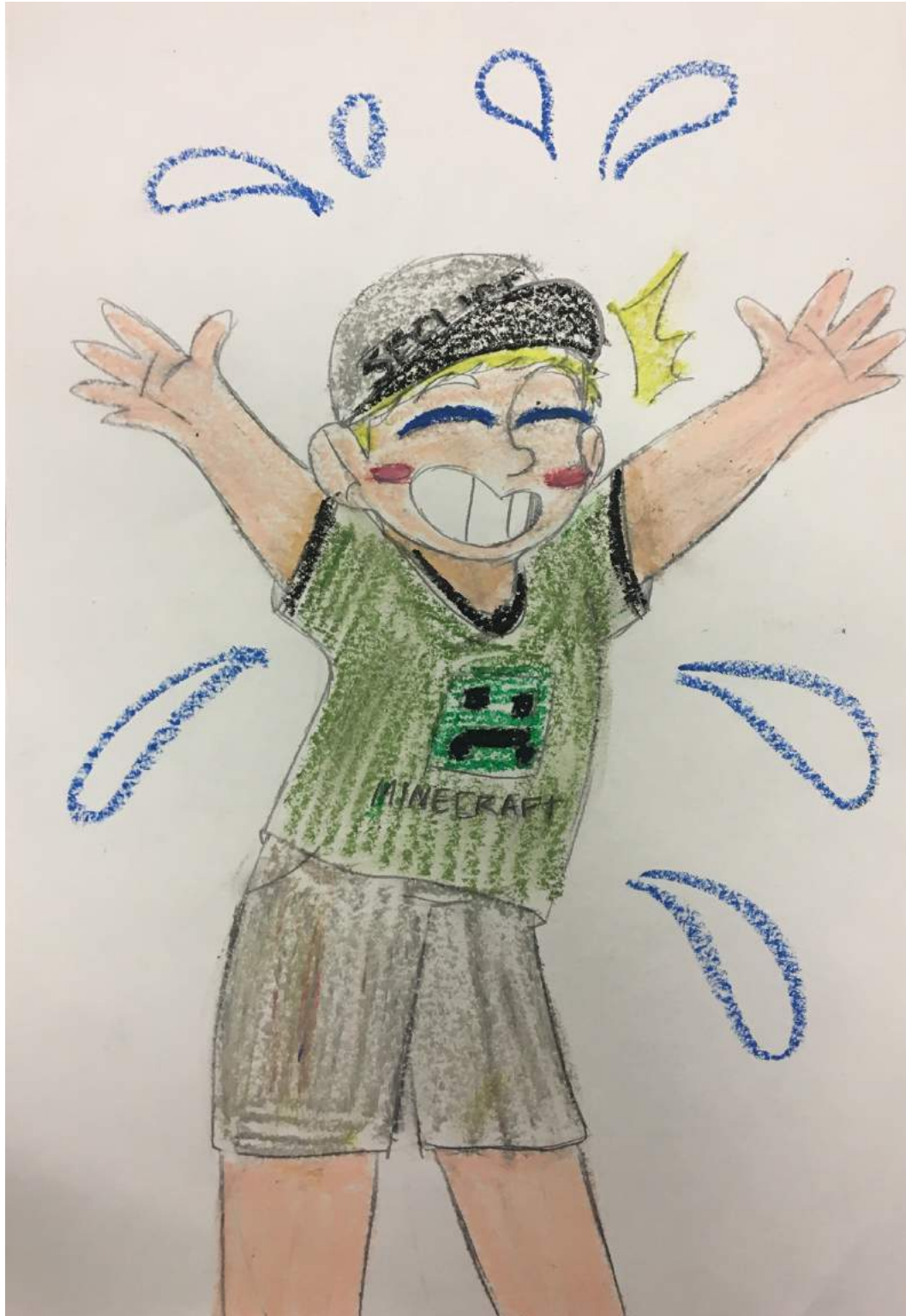
February 20, 2018

**Prompt:** Make a list of five emotions. Think about the color associations of each of those emotions. Create a drawing using those colors, with those emotions in mind.



February 21, 2018

**Prompt:** Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.



February 22, 2018

**Prompt:** What makes you happy or content? Think about at what point in your day you feel most happy/content. Where are you at that moment? What are you doing at that moment? Who are you with, if anyone? Illustrate the place that comes to mind.





March 6, 2018

**Prompt:** Illustrate something that you own that is really important to you.



March 12, 2018

**Prompt:** Create a drawing illustrating where you see yourself in ten years.



March 13, 2018

**Prompt:** Think about a place you have always wanted to go. Why do you want to go there? How might you get to that place? Create a drawing that illustrates a place or types of place that you would like to visit.





March 16, 2018

**Prompt:** What are three things that you wish people knew about you? Create a drawing inspired by one of those things.



March 23, 2018

**Prompt:** What are your favorite things about yourself? Create a drawing inspired by one of your favorite things about yourself.



**Osewald**



January 31, 2018

**Prompt:** Create a drawing using five different types of lines.



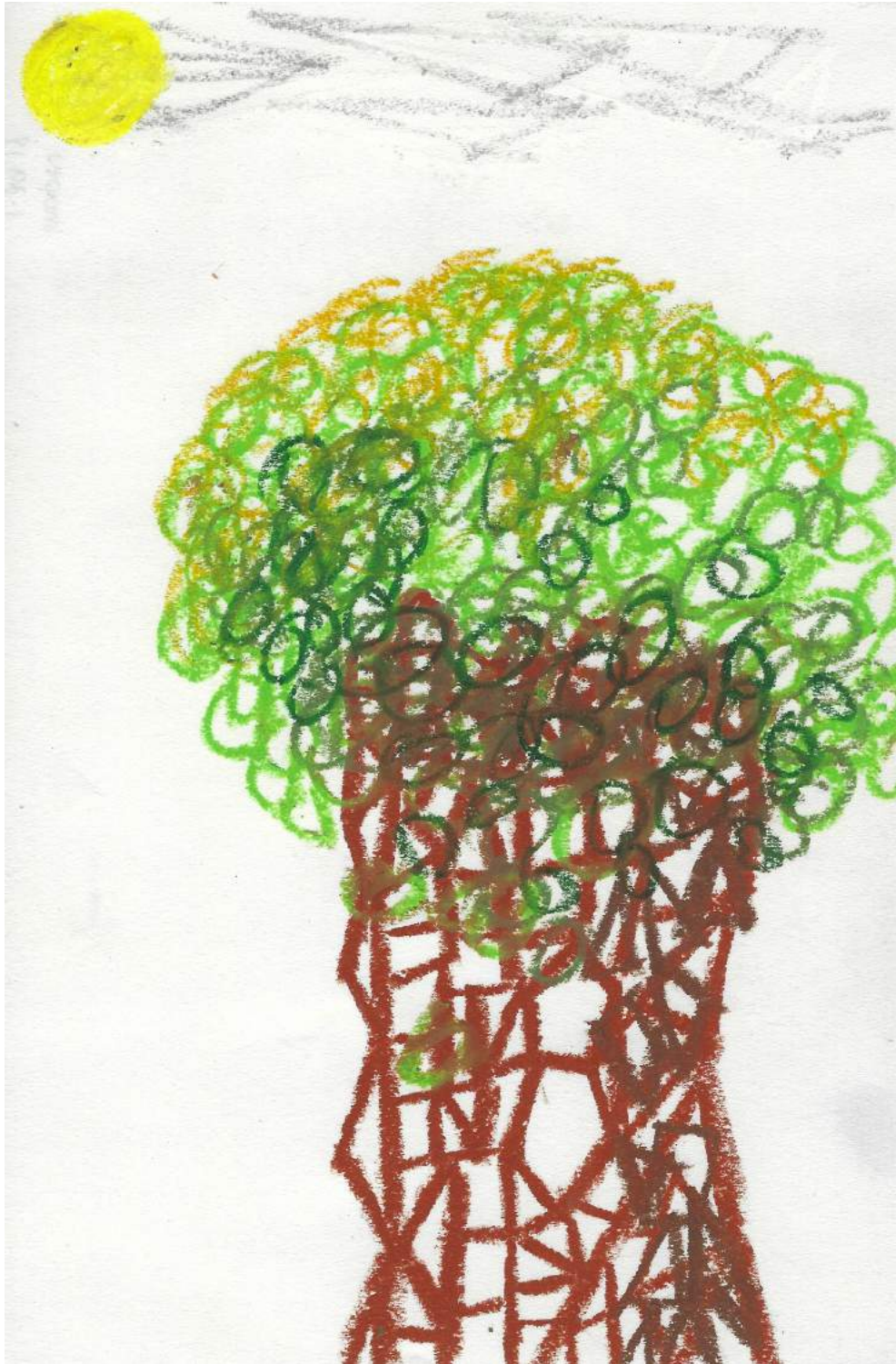


February 9, 2018

**Prompt:** Make a list of contrasting emotions. What colors and shapes do you associate with those emotions? Create a mandala inspired by contrasting emotions. Consider the colors and shapes associated with those emotions. Osewald continued zentangle® drawing from a previous day instead of working on this prompt.

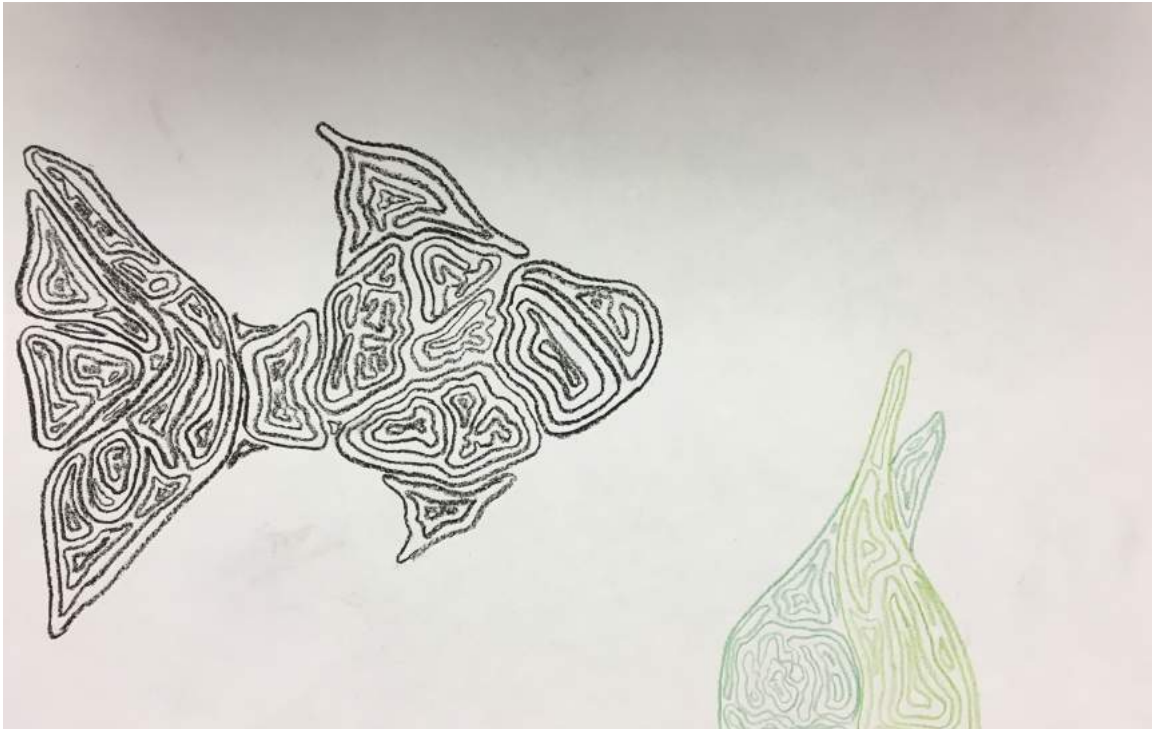


**Sofia**



January 29, 2018

**Prompt:** Make a list of geometric shapes. Create a drawing repeating those geometric shapes.



January 30, 2018

**Prompt:** Create a drawing using repeating organic shapes.



February 1, 2018

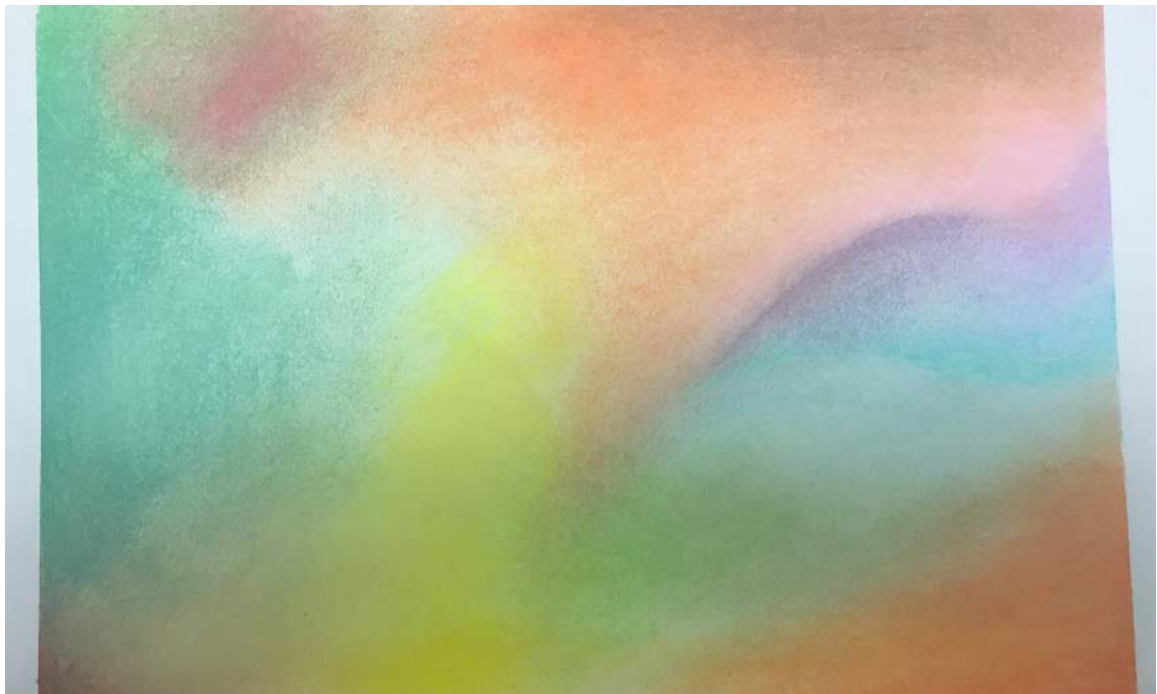
**Prompt:** Create a drawing using only straight lines.





February 12, 2018

**Prompt:** Create a drawing inspired by the pre-made playlist of popular contemporary songs. Approximately thirty seconds of each song will be played for ten minutes.



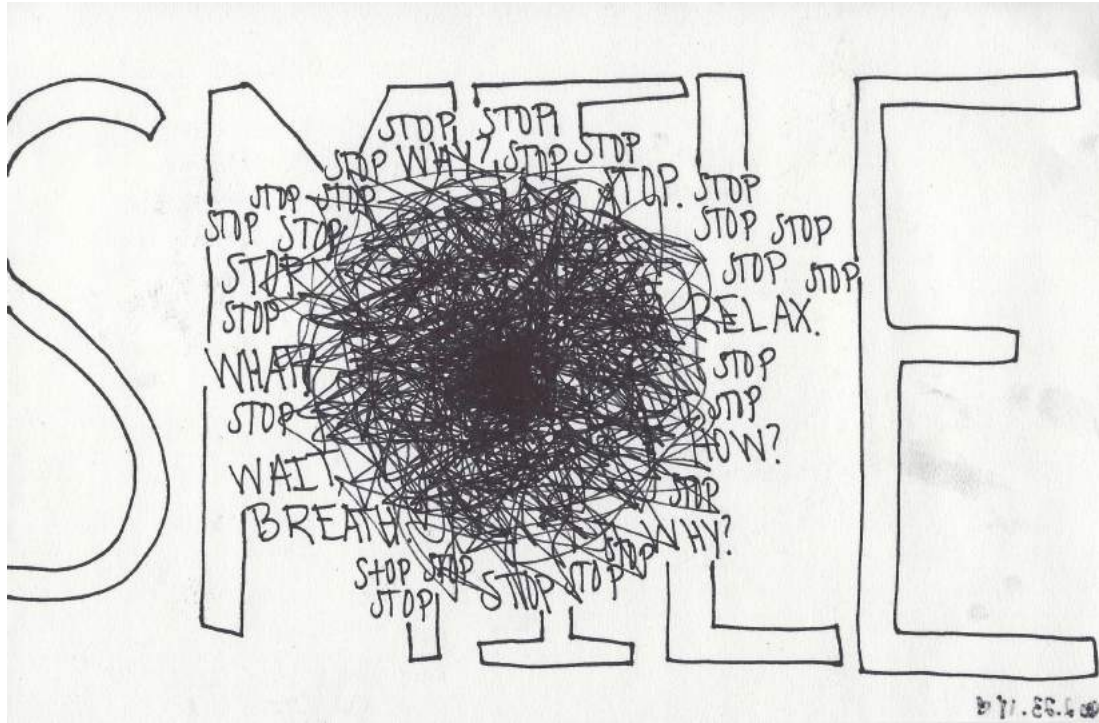
February 13, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of meditative music.



February 22, 2018

**Prompt:** What makes you happy or content? Think about at what point in your day you feel most happy/content. Where are you at that moment? What are you doing at that moment? Who are you with, if anyone? Illustrate the place that comes to mind.



February 23, 2018

**Prompt:** Create a drawing that illustrated how you feel right now, using the material of your choice, or create a drawing illustrating what it feels like to be stressed or anxious.

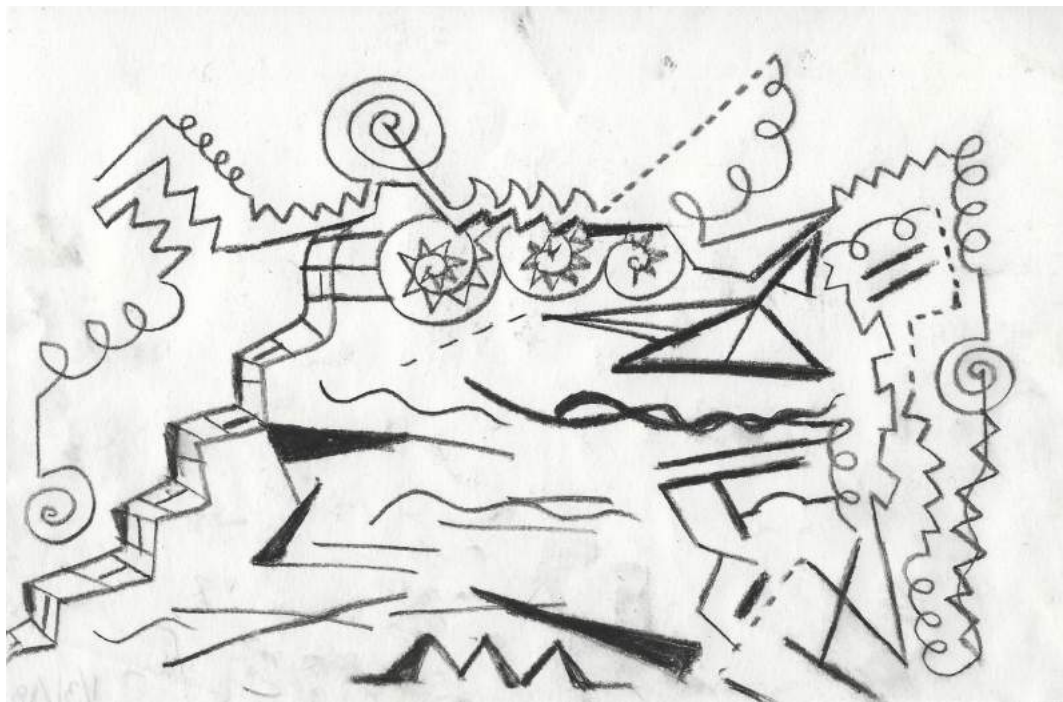


**Olive**



January 29, 2018

**Prompt:** Make a list of geometric shapes. Create a drawing repeating those geometric shapes.



January 31, 2018

**Prompt:** Create a drawing using five different types of lines.



February 2, 2018

**Prompt:** Design a pattern using repeating lines or shapes.



February 6, 2018

**Prompt:** Create a zentangle® using the material of your choice.



February 20, 2018

**Prompt:** Make a list of five emotions. Think about the color associations of each of those emotions. Create a drawing using those colors, with those emotions in mind.



February 21, 2018

**Prompt:** Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion. Olive chose to continue working on her drawing from February 20, instead of working on this prompt.





February 22, 2018

**Prompt:** What makes you happy or content? Think about at what point in your day you feel most happy/content. Where are you at that moment? What are you doing at that moment? Who are you with, if anyone? Illustrate the place that comes to mind. Olive chose to continue working on her drawing from February 20, instead of working on this prompt.



February 23, 2018

**Prompt:** Create a drawing that illustrated how you feel right now, using the material of your choice, or create a drawing illustrating what it feels like to be stressed or anxious.





February 26, 2018

**Prompt:** What does the word “strength” mean to you? Illustrate your definition.



March 5, 2018

**Prompt:** Create a drawing inspired by what motivates or inspires you.



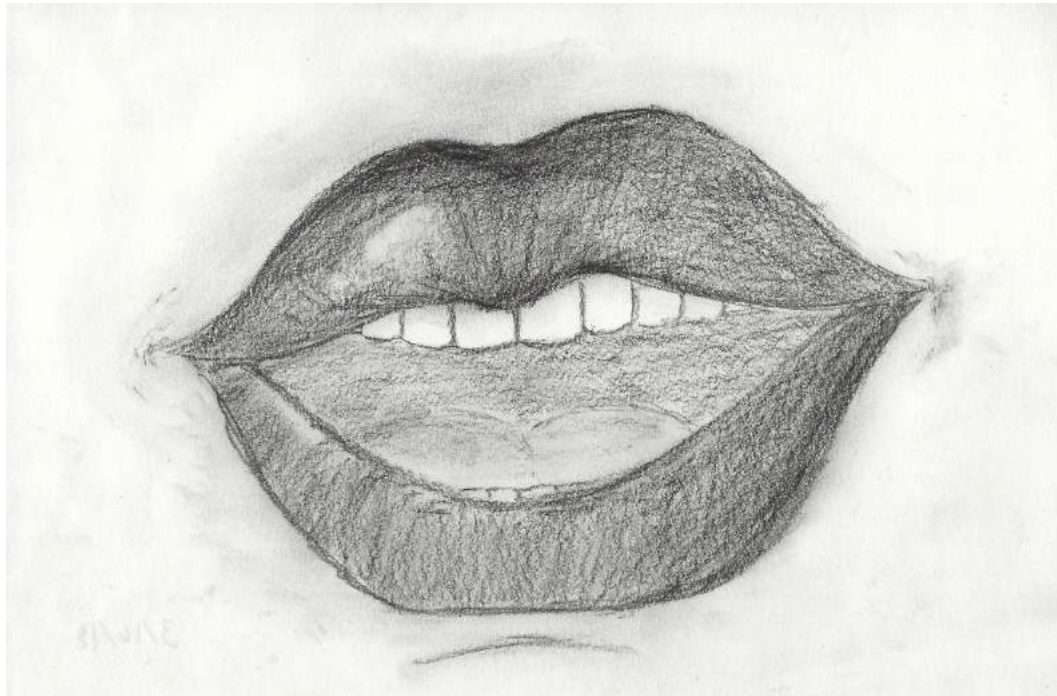
March 6, 2018

**Prompt:** Illustrate something that you own that is really important to you.



March 14, 2018

**Prompt:** If you could live anywhere, where would you live? What would your home look like? Create a drawing designing your future home.



March 16, 2018

**Prompt:** What are three things that you wish people knew about you? Create a drawing inspired by one of those things.



March 23, 2018

**Prompt:** What are your favorite things about yourself? Create a drawing inspired by one of your favorite things about yourself.



## APPENDIX K

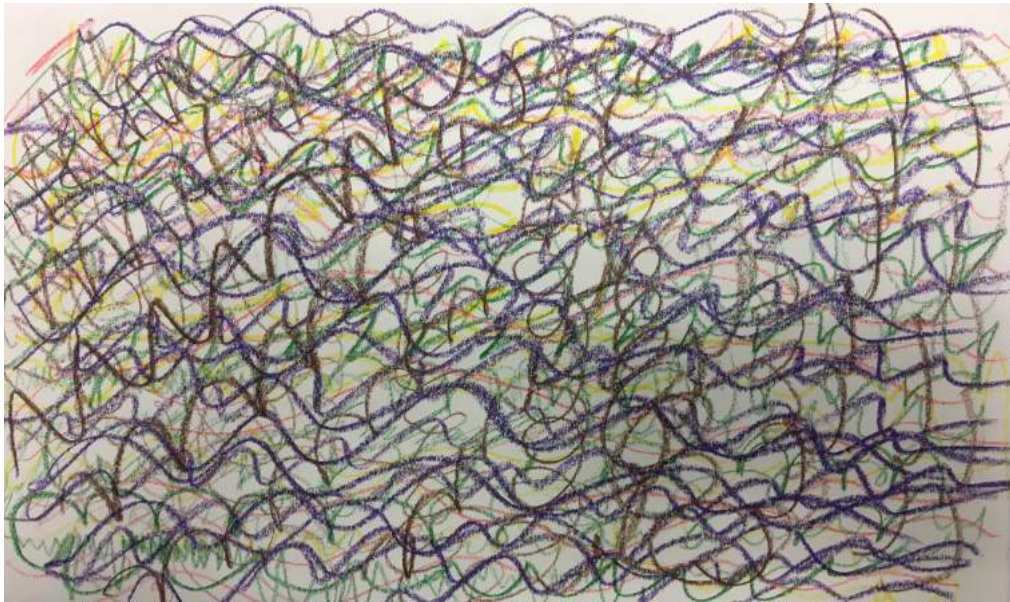
### Samples of Students' Artwork on Days with No Mood Change

#### Savannah



January 30, 2018

**Prompt:** Create a drawing using repeating organic shapes.



February 15, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of nature sounds.



February 20, 2018

**Prompt:** Make a list of five emotions. Think about the color associations of each of those emotions. Create a drawing using those colors, with those emotions in mind.





March 19, 2018

**Prompt:** Create a drawing of your alter ego.

**Angelica**



February 5, 2018

**Prompt:** Create a drawing of a mandala using the material of your choice.



February 9, 2018

**Prompt:** Make a list of contrasting emotions. What colors and shapes do you associate with those emotions? Create a mandala inspired by contrasting emotions. Consider the colors and shapes associated with those emotions.





February 21, 2018

**Prompt:** Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.

**Amare**



February 6, 2018

**Prompt:** Create a zentangle® using the material of your choice.



February 23, 2018

**Prompt:** Create a drawing that illustrated how you feel right now, using the material of your choice, or create a drawing illustrating what it feels like to be stressed or anxious.



**Helga**



February 14, 2018

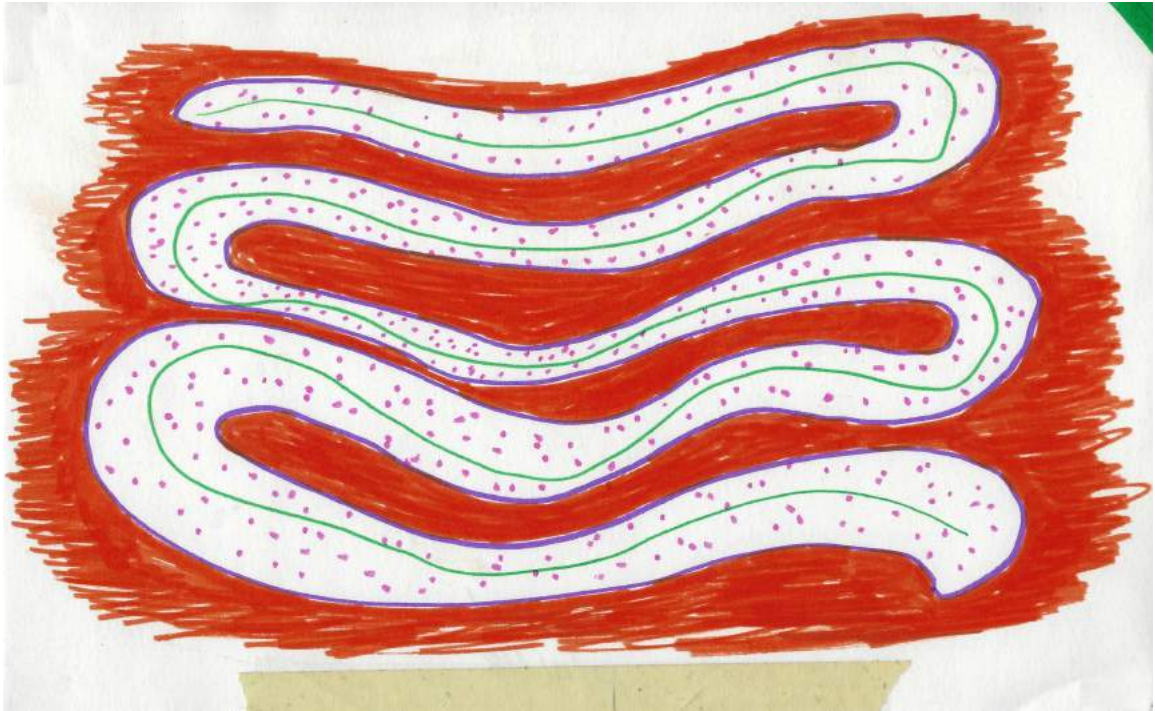
**Prompt:** Create a drawing while listening to a pre-made playlist of classical music.



February 21, 2018

**Prompt:** Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.

**Olga**



February 14, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of classical music.



February 15, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of nature sounds.



**Emanon**



January 30, 2018

**Prompt:** Create a drawing using repeating organic shapes.



March 14, 2018

**Prompt:** If you could live anywhere, where would you live? What would your home look like? Create a drawing designing your future home.





March 19, 2018

**Prompt:** Create a drawing of your alter ego.

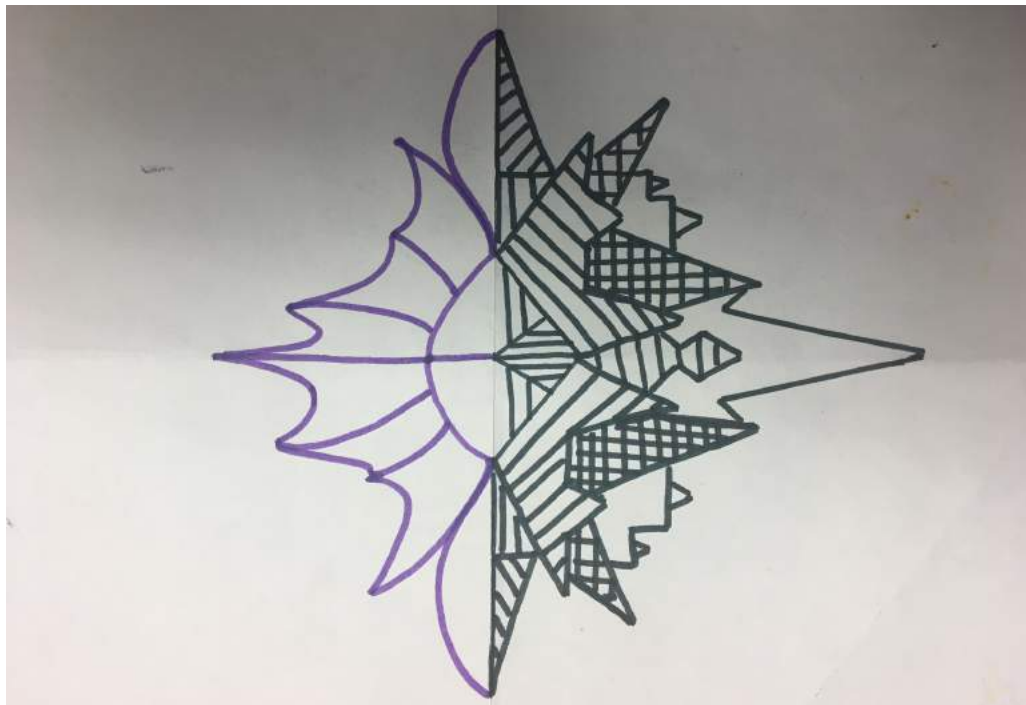


**Daniel**



January 30, 2018

**Prompt:** Create a drawing using repeating organic shapes.



February 9, 2018

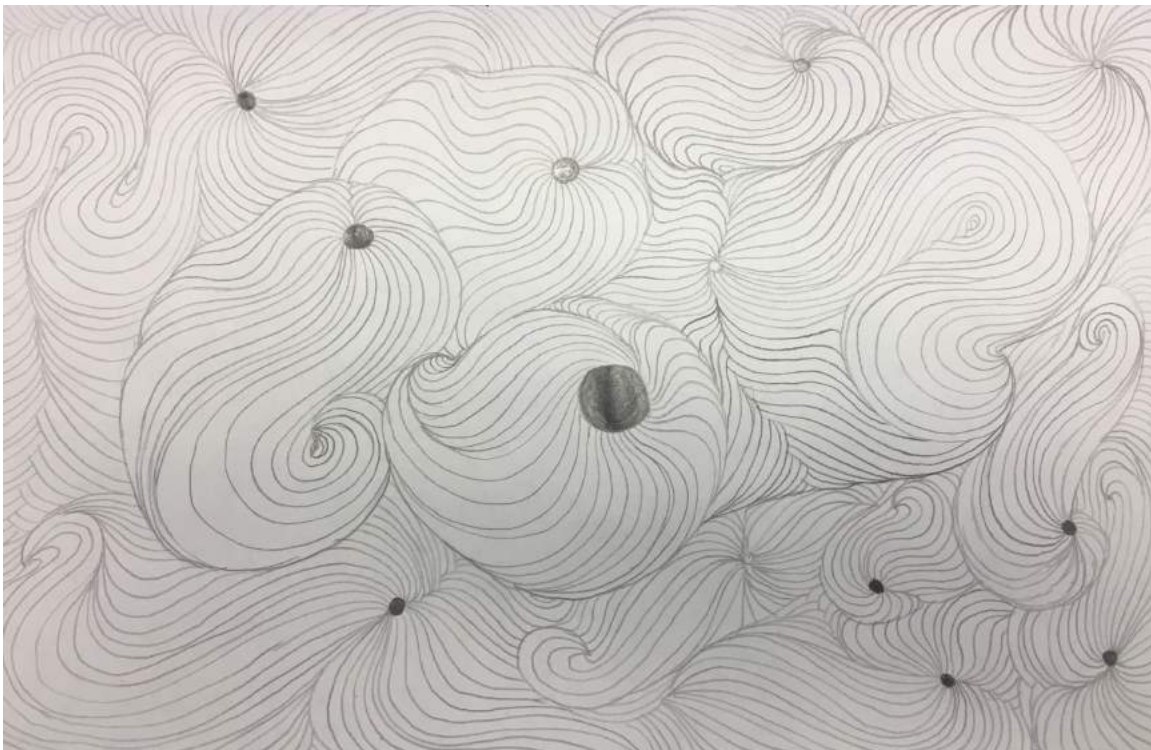
**Prompt:** Make a list of contrasting emotions. What colors and shapes do you associate with those emotions? Create a mandala inspired by contrasting emotions. Consider the colors and shapes associated with those emotions.

**Jenny**



February 1, 2018

**Prompt:** Create a drawing using only straight lines.



February 6, 2018

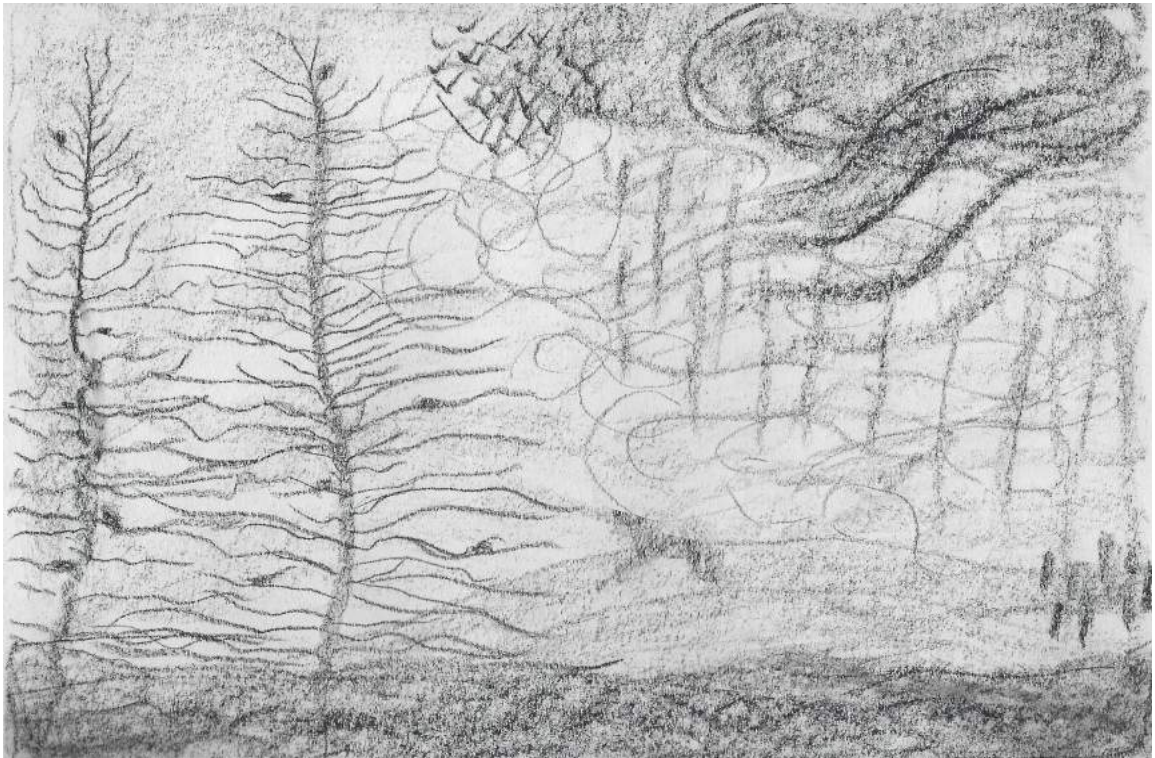
**Prompt:** Create a zentangle® using the material of your choice.





February 5, 2018

**Prompt:** Create a mandala using the material of your choice.



February 15, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of nature sounds.





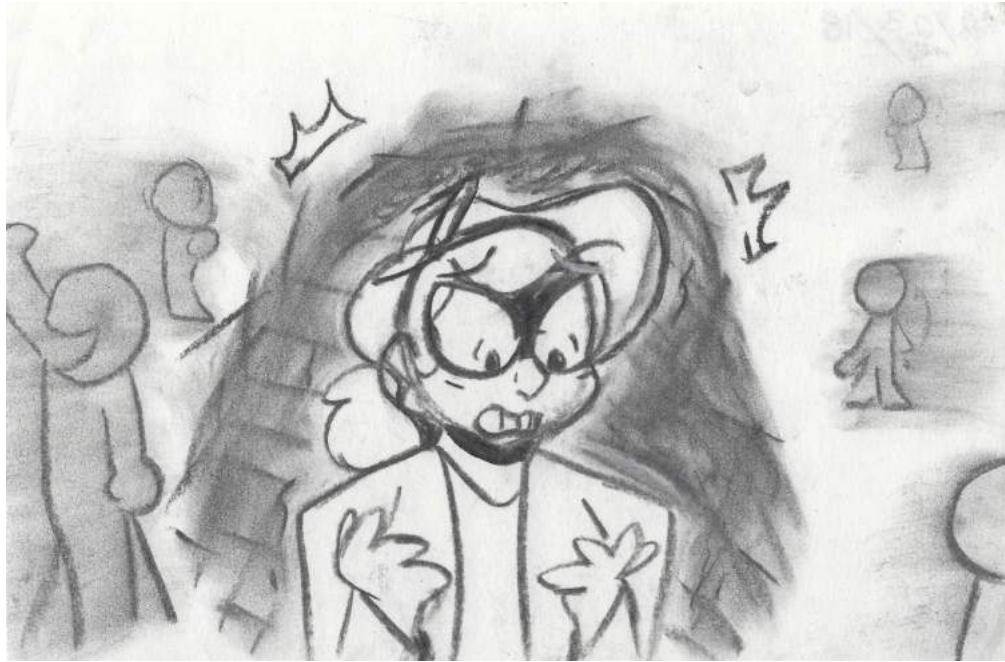
March 13, 2018

**Prompt:** Think about a place you have always wanted to go. Why do you want to go there? How might you get to that place? Create a drawing that illustrates a place or types of place that you would like to visit.



March 14, 2018

**Prompt:** If you could live anywhere, where would you live? What would your home look like? Create a drawing designing your future home. Jenny finished this drawing on March 20, 2018.

**Sophia**

**February 23, 2018**

**Prompt:** Create a drawing that illustrated how you feel right now, using the material of your choice, or create a drawing illustrating what it feels like to be stressed or anxious.



**March 15, 2018**

**Prompt:** List three goals you have for your future. These goals can be short-term or long-term. Choose one goal to inspire your drawing. Create a drawing inspired by that goal. As you are drawing, consider how you might achieve this goal, how you feel about this goal, or how you feel about the future.



**Osewald**



February 21, 2018

**Prompt:** Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.





**March 14, 2018**

**Prompt:** If you could live anywhere, where would you live? What would your home look like? Create a drawing designing your future home.

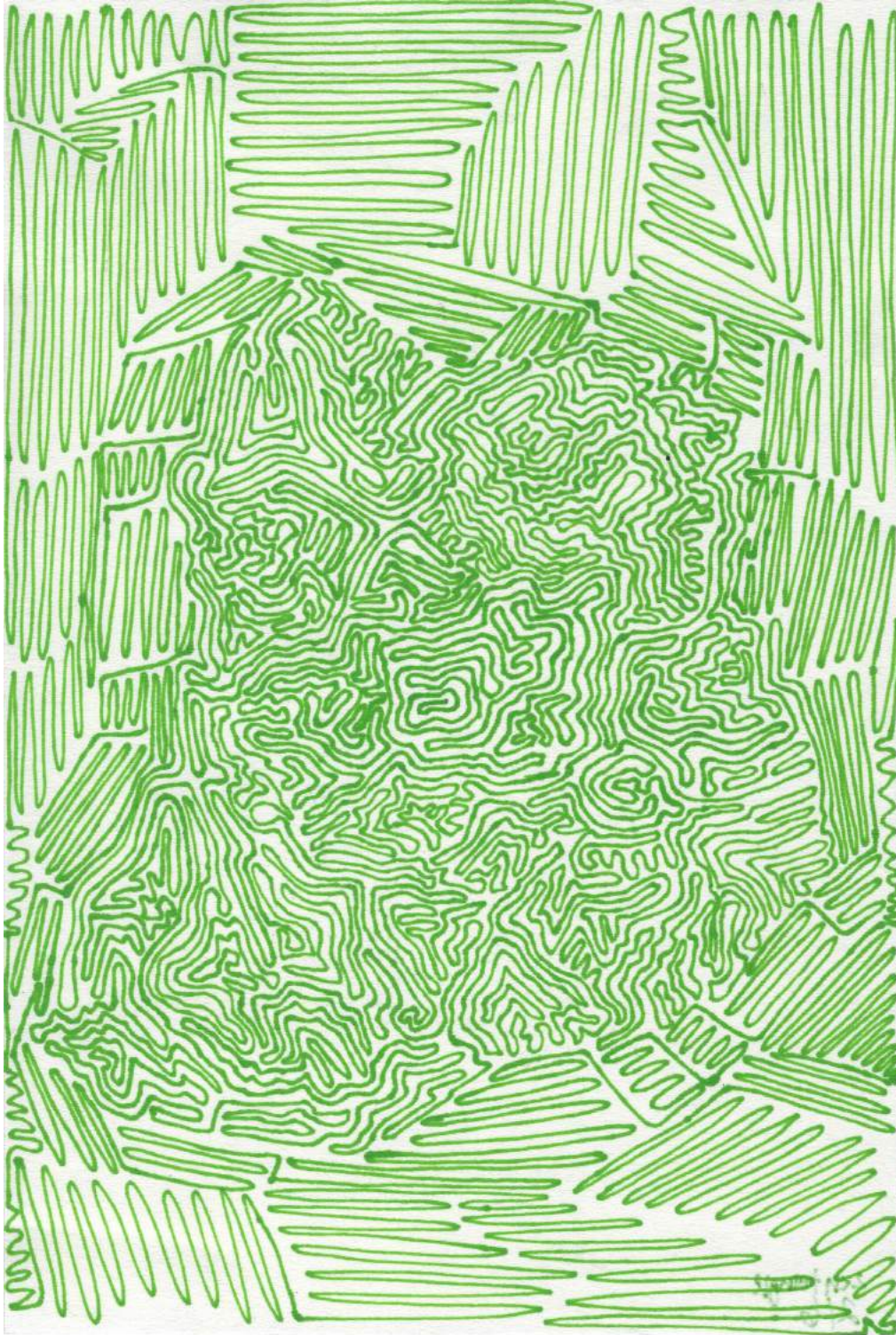


**March 15, 2018**

**Prompt:** List three goals you have for your future. These goals can be short-term or long-term. Choose one goal to inspire your drawing. Create a drawing inspired by that goal. As you are drawing, consider how you might achieve this goal, how you feel about this goal, or how you feel about the future.



**Sofia**



February 6, 2018

**Prompt:** Create a zentangle® using the material of your choice.





February 15, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of nature sounds.



February 21, 2018

**Prompt:** Fold a piece of paper in half. Choose a positive emotion and illustrate it on one half of your paper. On the other side, draw an opposite emotion.

**Olive**



February 1, 2018

**Prompt:** Create a drawing using only straight lines.



February 14, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of classical music.





February 15, 2018

**Prompt:** Create a drawing while listening to a pre-made playlist of nature sounds.



March 19, 2018

**Prompt:** Create a drawing of your alter ego.