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Deliberate Use of Creative Problem Solving in Art Making

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ABSTRACT OF PROJECT

This project explores the productivity of the Creative Problem Solving (CPS) tools in the visual art making process. The project offered the opportunity for high school student volunteer’s to participate in an after school program called Creative Art Group Experience (CAGE). Volunteers learned and made use of CPS tools to guide their art making. The project researched the effectiveness of using CPS tools in art making documenting volunteer progress and feedback. As an art educator, I had the opportunity to evaluate the impact of using CPS tools with the art-making process. The results of CAGE will benefit how CPS tools are used in future art classes.

Key Words: Creativity, art, problem solving tools, high school, classroom

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Rebecca Sue Dame-Seidler

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Date
Deliberate Use of Creative Problem Solving Tools in Art Making

A Project in
Creative Studies

by

Rebecca Sue Dame-Seidler

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Table of Contents

Section One: Background to the Project.................................................................1
Section Two: Literature and Resources..............................................................3
Section Three: Process Plan..............................................................................20
Section Four: Outcomes..................................................................................22
Section Five: Key Learnings...........................................................................70
Section Six: Conclusion..................................................................................74
Appendix A: Becca’s Sketches.................................................................78
Appendix B: Sabrina’s Sketches.................................................................80
Appendix C: Taesha’s Sketches.................................................................83
Appendix D: Kristin’s Sketches.................................................................85
Appendix E: Emma’s Sketches.................................................................87
Appendix F: Matt’s Sketches.................................................................90
Appendix G: Alana’s Sketches.................................................................92
Appendix H: Taesha’s Final Product.........................................................94
Appendix I: Becca’s Final Product.................................................................97
Appendix J: Sabrina’s Final Product..............................................................99
Appendix K: Matt’s Final Product...............................................................102
Appendix L: Alana’s Final Product...............................................................104
Appendix M: Emma’s Final Product..............................................................106
Appendix N: Kristin’s Final Product..............................................................108
Appendix O: Visual Incubation.................................................................110
Table 1: Four C Model..................................................................................112
Section 1: Introduction

Project Background

My beliefs and decisions I’ve made in my professional life have led me to study Creativity as an art teacher. These beliefs and decisions are the basis of my project. After two years of teaching high school level art, I realized, my students struggled in two areas, technique and creativity. I felt, although I could move students forward technically, I struggled to help them reach their full potential as creative thinkers. I found when I provided an opportunity for students to come up with their own ideas, many felt inept and intimidated. Early on, I would assign a small requirement of five or more ideas when brainstorming for a project. The students struggled with thinking of ideas or simply wanted to take their first idea and start the project. I realized then that ideation is challenging for them. Is it lack of motivation? Is it because not many teachers ask them to think and create something new? Do schools kill creativity? Do schools set a standard for extrinsic an environment? Are students afraid to take risks because of being wrong? Some students would easily say, “I’m not creative”. It was challenging to prove to them that they could “tap” into their creative side. I acknowledged that in order to teach more effectively, I must help students sharpen their creative thinking skills. I was accustomed to thinking imaginatively about ways to incorporate themes into my own art compositions. However, I am now faced with the challenge of guiding students in this process. It was then I decided to switch from a Masters in Arts Education and take on the world of understanding creativity in studying as a Masters student in the International Center of Creative Studies.

How might I transform creative problem solving with art education? How do I educate others that creativity can be taught and learned? My annual struggle is convincing my students that they can learn how to draw, with practice they can improve. Now, I have the challenge of
also convincing them that they can too be creative. With the tools that I have learned as a student of creativity, I am now on the path of exploration in solving my problem of how to use creative problem solving tools to aid art making.

The purpose of this project is to explore the effectiveness of creative problem solving (CPS) tools in the visual art making process. The exploration of uniting CPS with art making involves student volunteers to participate in an afterschool art experience, what I’m calling the Creative Art Group Experience (CAGE). Through facilitation, I provided volunteers with an abbreviated version of the creativity fields past and present. Volunteers were exposed to brainstorming sessions in order to practice Divergent and Convergent guidelines. Divergent and Convergent tools were used to aid art making. With creative problem solving tools student volunteers produced artworks they themselves did not at first, imagined. The hope was to research the effectiveness in using creativity tools, positive encouragement and motivation to create art. A future goal of this project is to later produce a formal presentation geared for fellow art educators sharing the CAGE experience, documenting an approach on “What might be all the ways to use creative problem solving tools in the art room”.

Rationale for Selection

Developing my project idea required me to think about what grants me energy. For me, creating, viewing and watching the formation of art is exciting. I am fortunate to be in a career that I love. My rational for establishing an after school creative art experience is because I enjoy sharing my passion for art making. I love sharing my excitement and exciting others with the act of creating. Art provides time from the hustle of the 21st century world. It provides the innate ability to create, explore and problem solve. I have the opportunity to share this with over one hundred students a year. This is a huge responsibility. For some of my students, this may be the
last deliberate art making experience of their life, for others it is just the beginning. My hope for
the CAGE after school program is an opportunity to see what works and what could be improved
upon while combining creative problem solving tools with the visual art making experience.

Section 2: Literature & Resources

Creativity as the Success and Responsibility of Humans

What is creativity, exactly? May (1975) defines creativity as “the process of bringing
something new into being” (p.39). “New” meaning novel and “being” meaning the actuality of
existence.

In The Courage to Create (1975) May discusses three essential components in regards to
a human’s responsibility to its society involving creativity, courage and anti-conformity. Why
would creativity be considered a human responsibility? Each generation of human existence has
evolved, developed and surpassed its previous generation by bringing about change, new ideas
and processes. I believe creativity in and of itself bring about change.

Why must courage be related to creativity? May (1975) defines courage as “the capacity
to move ahead in spite of despair (p.12). It takes courage to create and to bring about change.
Without courage and the ability to embrace change can hinder the act of creating. He also
mentions types of courage such as physical, social, moral and what he considers most important,
creative courage. May (1975) explains, creative courage is the ability to discover new ideas that
will help societies evolve. He is ultimately discussing how creative courage can bring about
change.

How does anti-conformism relate to creativity and courage? According to May, anti-
conformity is important for creativity and self-worth relating to values. “May espoused rebellion
against the status quo when it conflicted with one’s deeply held convictions and values”
(deCarvalho, 1996, p. 9). May strongly believed in affirming beliefs and values no matter the overall view in order to be true to oneself. In this view, the act of being creative and believing strongly in an idea is important for the person to honor and respect their ideas. Furthermore, to be creative, may require the ability to push against the status quo in order to solve a problem or present an idea. May believed, without this anti-conformist idea advancements would stop, in turn, supporting the correlation of creativity, courage and anti-conformism. May also discusses the reciprocity of a creative act or an idea. May (1975) explains the act of a new idea is not only creative but also takes a level of creativity for others to fully understand the new idea.

Comparing 20th century scholar, Rollo May’s beliefs on human potential to three 21st century scholars, Gerard Puccio, Mary Murdock and Marie Mance (2007), provides a common belief that creativity is an important component of human success. Puccio, Murdock and Mance (2007), believe in three essential components in reference to a person’s success within a lifetime as being, change, leadership and creativity. May discussed courage as a vital component to creativity. I discussed change as being related to courage and creativity. Change requires the ability to influence. The type of change discussed by Puccio, Murdock and Mance (2007) is described as, “intentionally engaging in creative thought to develop yourself and positively influence others” (p.4). The point is to have the courage to bring about create positive change. Courage can relate to the ability to lead. Puccio, Murdock and Mance (2007) discuss how creative leaders can bring about positive change. A deliberate thinking process can assist in developing positive change. Positive change ensures change for the good of not only those who are directly involved. In this way, I believe creative change leadership geared with positivity to be a moral responsibility of human beings.
Creativity and the Creative Process

What is creativity in terms of behavior? To whom is it attainable? Creativity involves two constructs, innate behavior and learned behavior. Overall, creativity is attainable for all. A question may be arising, can something be both innate and have the potential to be learned? Yes it can. Innate behavior can be defined as inborn, instinctual or fixed. The dictionary defines innate as “originating in or derived from the mind or the constitution of the intellect rather than from experience” (Merriam-Webster’s online dictionary, 2012). Creativity is innate: something people are born with. For example, a friend of mine went on a family vacation with her husband and two children. Her son, who was four at the time, wanted to play with his trains but she explained that they didn’t bring the trains on vacation; they only brought the toy-cars for play. He contemplated this and later asked if he could have some band-aides. Curious, she asked her son why he needed band-aides. He explained that band-aides would allow him to connect his toy-cars together to form a train. What a creative solution to his problem of not having his train set. He used prior knowledge of understanding how a train worked through past experience but originated the idea of how to adapt the toy cars he had to emulate a train. That was innately creative and he solved his problem by himself. Basic human nature involves thinking to achieve goals of all kinds. If humans didn’t take on the same way of thinking generation after generation, there would be no change. As humans evolve, creativity and ideas do too. Nevertheless, creativity is not simply innate.

In addition to creativity being innate, it also can be learned. In the 1950’s Sidney Parnes and E. Paul Torrance believed creativity could be taught (Sawyer, 2006). To learn is defined as “to acquire knowledge of or skill in by study, instruction, or experience” (Dictionary.com, 2012). A person has the opportunity to potentially increase their creative ability through learning and
practicing targeted processes. The Thinking Skills Model (TSM) is a process model that evolved from what was originally known as the Creative Problem Solving (CPS) Process first begun by Alex Osborn around the 1940’s (Puccio, Murdock, & Mance, 2007). The CPS process provides the opportunity of increasing creative potential by following certain guidelines and processes. The TSM is a 21st century refinement of the CPS process. In this way, the TSM supports creativity as both inborn and also as the opportunity to be refined as a skill. Creativity, as a skill, categorizes the field of creativity as process-oriented – specifically a scientific thinking process.

If learning effects creativity, environment can either stimulate or deter the brain’s thinking process. If there are little interaction and play, there isn’t much room for brain stimulation. Therefore, it must also be mentioned that creativity can be hindered or nurtured depending on the environment. As creative thinking is thought of as a skill, it has the potential to be re-fostered and even increased. Training the brain to think creatively takes practice and commitment, but is possible. The Thinking Skills Model allows for creativity to be taught as a skill. It allows for greater creative human potential in using divergent and convergent creativity tools.

Creative problem solving with the TSM first assesses the situation, known as the executive step. This first step “helps you to stand above the other steps to determine where to go in the process and how to progress through it” (Puccio, Murdock, Mance, 2007, p. 38). After the executive step, the natural flow of the TSM pursues for Clarification of the problem through Exploring the vision and Formulating Challenges; then pursues Transformation on the problem by Exploring Ideas and Formulating Solutions; and in closing begins Implementation by Formulating a Plan and finishes by Exploring Acceptance. Puccio, Murdock and Mance (2007) mention that although these six steps appear to have a particular order, that after assessing the situation, you can start or go back wherever necessary to best solve the problem.
What also makes the TSM successful requires the understanding and use of the Divergent and Convergent Principles. Puccio, Murdock, Mance (2007) affirm that these principles make the creative problem solving process work. The TSM uses four Divergent principles required for a successful creative problem solving session. The four Divergent guidelines are (1) Defer Judgment, (2) Strive for Quantity, (3) Build off Others Ideas and (4) Seek Wild and Unusual Ideas. The four Convergent guidelines are (1) Use Affirmative Judgment, (2) Consider Wild and Unusual Ideas, (3) Check Your Objectives and (4) Improve Ideas. There is an additional principle for both Divergent and Convergent guidelines, known as the Wild Card principle, Allow for Incubation (Puccio, Murdock, Mance, 2007).

Overall, understanding the act of creativity is innate and the process of creativity as a learned skill allows for the possibility of increasing the potential for more creative acts.

For more information on the Thinking Skills Model and its creative problem solving tools read Creative leadership: Skills that drive change (Puccio, Murdock, Mance, 2007).

**Levels of Creativity**

Given that creativity is an innate and learned behavior, there are also multiple levels of creativity. Creativity is demonstrated when a person brings something new into his/her or the world’s existence. Newness depends on the level of creativity the person has reached at a particular point of their life. For example, a developing child may solve a problem in a way that adults may believe to be obvious but the solution was new to the child. It was still a creative act for that child in that instance, on their level. One’s level of creativity has the potential to increase. Enhancing understanding the creative process and continuous thinking practices can assist in the potential increase of creativity. So, it’s not as though a person is creative; the productive question is, “What is my creativity level and how can I improve it?” Those who may
not fully understand creativity are fearful with the subjectivity and ambiguity creativity encompasses. Creativity can be represented within particular levels. Through understanding the Four C Model (2009) developed by Ronald Beghetto and James Kaufmann, offers those people who may not fully understand creativity a fresh look at the attainable levels of creativity for all. The model presents the possible levels of creativity within stages in life through the production of creativity. Beghetto and Kaufmann explain creativity within four levels; Big-C, eminent creativity; Pro-C, professional creativity; Little-c, everyday creativity and Mini-c, creativity involving learning (see Table 1 for further clarification). A Big-C creative person would be Pablo Picasso or Mozart; they have highly influenced art and music. Pro-C creative people are in the beginning stages of influencing. The reason many people believe they’re not creative is because they compare themselves to the popular Big-C creative people.

If creativity is fully understood as first innate, but second, a possibility to be learned in order increase creative thoughts or actions through the Four C Model, education, business and world would be different in a positive way.

**Opportunity for Creativity**

The United States believes in the opportunity and freedom for all. The Pledge of Allegiance, as established in 1892, specifically states “liberty and justice for all” (“Historic Documents: The Pledge of Allegiance,” 2012). This statement offers rights and opportunities to American citizens. Opportunity is one of the key elements that built the foundation of the United States of America. Public Education provides an opportunity for all citizens to learn Math, Science, History, English, Art, Music, Physical Education; why not creativity? Why not creative thinking? It’s not surprising that some people consider themselves to be uncreative because either they haven’t been given the opportunity or learned the skills necessary to enhance
creative potential. Most 21st century careers require an element of applying creative ideas. Is it justified to not teach creativity and yet to expect creative ideas and actions from citizens? What creative learning opportunities should be available to the 21st Century citizen?

Ken Robinson (2011) mentioned an important thought on how “New technologies are transforming how we think, work, play and relate to each other” (p. 19). These “new” technologies could also be known as “creative” technologies. Creativities goal is to bring about something novel and useful. Creative technologies in the 20th and 21st centuries have generated opportunities to live a life worldwide rather than statewide. These novel advancements, such as the home telephone, cell phones, and computers affect the way people live and learn in today’s society. Rapidly changing technology and opportunities require new approaches as to how people will survive in such a fast-paced and evolving world. Understanding creativity will offer a way of successful survival. This begs the question, “what are the needs that a 21st century thinker in order to become an effective inhabitant of the world?”

The IBM Corporation released a study in 2010 explicitly searching for the answers to this question. They established three necessities for the survival of the 21st century business-person, creativity (creative leadership), flexibility and speed (IBM, 2010). These three items will not only aid a business person, but also assist anyone who is functioning in our change-oriented world. These three items the two options that best fit the answer to this question are creativity and leadership skills. Creativity and leadership skills naturally provide the skills of flexibility and speed. Creativity allows for the flexibility to consider multiple options. Creative leadership provides a group a positive system to work within that can be more efficient than a group that lacks strong leadership guidelines. “Trying to do well allows people to work together, sharing ideas, talent and other resources to produce the best result” (Lipman-Blumen, 1996, p. 155). A
group that does not value creativity or leadership may have low morale, and less empowerment than those that do. Groups that embrace creativity and leadership reinforce the involvement and importance of all group members. When all group members feel included and heard within the group’s objective, they feel empowered. Empowerment promotes efficiency and speed.

The Four P’s of Creativity & its Connection to the Classroom

Mel Rhodes discusses the effects of creativity by way of the 4-P Model, press, person, process, and product. Press defines the environment within creativity can be fostered or hindered. Person relates to who exactly is in the group. People in the group can positively or negatively affect the press, process and product. Process indicates a person’s approach used to foster creativity. Process can also affect the other three P’s. Product is the result of the press, person and the process used within the group dynamic.

Rhodes four P’s can easily be implemented in a classroom setting. Effective teachers already take in consideration the press, the classroom environment, the person, the students within the classroom, the process, in this case, the learning process and product, the work whether an essay, an artwork, a poster, a team presentation describing what each student had learned. Although teachers take environment, their students, the learning process and learning products into consideration’ creativity and the 4P’s model could very well enhance the classroom press, the students, the learning process and products. A reflective teacher could use the 4P’s as a measure to reflect on a specific lesson or overall day. Mel Rhodes (1961) commented that the creativity has an interdisciplinary appeal and “the unification of knowledge lies in the continuance of studies of creativity. There are adventures ahead in researching the four P’s of creativity…and ultimately there will be a new perspective of education with a backdrop of unified knowledge” (p. 310).
Importance of Leadership

As a teacher, I have the opportunity to lead students through art making. As the facilitator in the classroom involves understanding and honoring the leadership abilities within myself and the students I teach. As with creativity, leadership is in everyone. Leadership, similar to creativity is both innate and learned. People naturally have the ability to lead and can also learn to lead. Some leadership qualities come naturally to people, for example, flexibility, risk taking or being a good listener, to name a few. These three qualities can also potentially be learned. The potential for learning to lead is possible and “there is always hope for a leader who wants to grow” (Maxwell, 2007, p. 84). The question is not if you have it or you don’t, but what level is your leadership ability? Writers, researchers and leaders themselves have an opinion on what qualities a person must possess to be an effective leader. For example, Maxwell (2007) explicitly exclaims his views through his book, *The 21 Irrefutable Laws of Leadership*. Twenty-one sounds complex, but people are complex; to perform a specific role requires a multitude of skills, abilities and characteristics. Similarly to creativity, there are levels or leadership. Not everyone, even strong leaders, is great at everything. For example, some people are strong at relationship building and others have better intuition. However, if I had to choose four components that I believe to be necessary for successful leadership, I would highlight the abilities of positive influence, authentic relationship ability, awareness and creativity.

First, leadership requires influence. More specifically, positively influence. Leading with positive influence requires a person to be authentically aware of the group members and the goal. Leaders who exhibit positive influence genuinely will empower their group members through honoring their position within the group. Meaningful involvement for everyone allows for empowerment. Empowering group members by embracing their voice can also provide
positive influence. Notice, I didn’t say, the leader “gave” the group members a voice. “Giving” applies the ability to also take that voice away. A positive leader will genuinely explain that the group members already have a voice and share that they appreciate and want to listen to their ideas and concerns. Maxwell (2007) quotes psychologist Harry A. Overstreet stating, “The very essence of all power of all influence lies in getting the other person to participate” (p.19). I would change one word in that statement, “power”. Influencing shouldn’t dictate a person having power over others. I prefer to use the term “ability”. Influence means the ability to provide meaningful ways for all to participate. The ability to influence is important for leadership success.

Second, leadership also involves authentic relationship building ability. To be a successful leader, a person should have the ability to build relationships with others. Relationship building requires authenticity, trust, and high interpersonal skills. Authenticity requires a person to be genuinely aware of themselves and others. To be genuine is emulated through listening and caring. Trust is important to foster positive relationships. Trust is the simplest form of relationships, because without trust, can two people, or can a group, have positive authentic interactions? Finally, in order to have authentic relationships, a leader should have a high level of interpersonal skills. Good interpersonal skills such as positive interaction and communication help foster relationships. When there is a strong relationship, a leader has a greater potential to positively influence group members.

Third, a good leader has the ability of awareness. A leader should be constantly aware of themselves and others. Awareness can be explored through continual reflection. Personal reflection can help focus the mind by clearing out thoughts or actions that may have interrupted a person’s day or week. Through reflection leaders can also frequently check on the authenticity
of relationships within the group. Leaders should definitely be aware of both their strengths and weaknesses. Personally knowing strengths can benefit the group. When leaders understand their weaknesses, offers opportunities for them to find group members to help fill that gap. Maxwell (2007) willingly shares, “I’ve often staffed my weaknesses and hired good navigating leaders to help my organizations” (p.42). Being aware and admitting a weakness requires reflection.

When leaders share a personal weakness with group members, they demonstrate authenticity and trust. Allowing a group member to provide their area of strength in order to fill a leader’s weak area creates empowerment for the group member. It lets them know they are leaders too. A leader should also have insight and awareness into seeing others areas of strengths. This ability can be beneficial in providing group members a particular position within the group. Honoring group member’s strengths as a part of group goals provides meaningful involvement.

The fourth component for successful leadership is creativity. Creativity can provide the ability to aid a leader. Creativity can positively influence a leader, therefor; creativity can also positively influence group members.

Creativity skills can benefit leaders in that they offer the opportunity to solve complex problems through specific processes. A good leader models how to overcome obstacles and supports the group through this transition. Creativity allows willing group members to reach for the impossible. Creativity allows for openness and flexibility. Openness can benefit group members in that it provides a safe space for sharing and discussing ideas and thoughts. As previously stated, flexibility allows for multiple options, especially options that may seem impossible. Leaders who are aware of and foster creativity are also cognizant of the group environment. For creativity to thrive, the environment should be positive, open, flexible, supportive, playful, and goal-oriented for all those involved. Also, understanding creativity
allows for embracing ambiguity and faith in the process. Ideas, at first, may not be clear, and that may bring uncertainty. The leaders should show faith within the creative process to help group members through the process. Leaders who possess creativity see new opportunities and act on them, so, what makes up a creative leader?

**Creative Leadership**

I consider creative leaders to also have the four components discussed above, influence, high relationship ability, awareness and creativity. Creativity and leadership whether, separate or together, require a high level bravery. Most may consider this to be risk taking but I prefer the term brave. To be a leader already requires a level of bravery. The act of involving an entire group under a specific goal, moving through the goal together, facing problems that may require mediating, dealing with the possibilities of the unknown, yet still moving forward towards the goal. A creative person also requires bravery in that it involves embracing ambiguity, ideating for novel ideas, considering the possibilities of the unknown, to create what could be and to trust the creative process. Merging the two skills produces a process of leadership known as creative leadership. Creative leadership involves a high level of bravery because both require the foresight, the determination and ability to influence change. Positive change connects creativity and leadership. Creativity brings about new change. Good Leadership assists in the acceptance of change. Creative leadership brings about positive change. Change requires creative thinking to revolutionize ideas and processes, and a creative leader acts as a facilitator within the process. A leader is not to be above the group but a part of the group. A creative leader’s goal is to bring about positive change using a creative process such as the Thinking Skills Model. Puccio, Murdock, & Mance (2007) provide insight of the creative problem solving using the TSM offers:
Intuitive responses to open-ended problems and moves them from trial and error to targeted strategies. In accomplishing this, CPS (a) influences how people think about themselves and the world around them in relation to change, and (b) improves individual and team performance for problems that appear to have no immediate solution. (p.29)

The authors also indicate the natural overlap of thinking creatively and thinking as a leader. Similarly to creativity, creative leadership is also a process. Creative leadership is the implementation of something new that brings positive change. Positivity is important because creative leaders have the influence to bring about change. Positive change ensures change for the greater good, and not only for those who are directly involved. In this way, creative leadership is positive change as moral responsibility to the group members, the organization, the town, the city, the state, the country and ultimately the world. Our world today is connected through innovative technology such as the internet which allows us to communicate with a person on the other side of the world within seconds.

The concept of creating positive change for the world is a Transcendent Leadership requirement. The impact of this leadership style shared by Dr. Zacko-Smith (2010) states that “transcendent leadership allows us to lead the most ethically, and assists us in manifesting social change” (p. 4). Creative leadership that falls underneath the umbrella of transcendent leadership brings about positive social change. To make change, takes a level of courage. Courage is related to both creativity and leadership. May (1975) defines courage as “the capacity to move ahead in spite of despair (p.12). It takes courage to create and lead therefore without courage there are no creative leadership acts. May (1975) explains, creative courage is the ability to discover new ideas that will help societies evolve. I hope to positively influence my students as a creative leader to foster the ability of positive social change. This starts within my classroom,
the school, the district, the city and hopefully my students will pass this on to others to positively influence others.

**Literature and Research Relating to my Beliefs**

When I applied to the Creative Studies Department, I hoped to gain an understanding of how to cultivate creativity in my students. Now, being so close to the end of my degree, I realize the potential for much more than cultivating student creativity. As explained above, my view on creativity and leadership has certainly expanded within the past two years. Both, the field of creative studies and the professors at Buffalo State College have empowered me as a creative change leader. This is something I certainly did not expect. I realize now as a creative change leader I have the responsibility to share my knowledge and passion within the tremendous possibilities of positive influence.

My vision as a creative change leader of art will create positive change within my classroom by focusing on providing opportunities to foster creativity and leadership qualities. I will identify individual strengths, create a safe environment to explore new concepts and ideas while providing choices and projects that allow students to explore personal meaning. I hope this will bring student empowerment. I hope to build on the environment in which I create to allow for more empathy, critical thinking and flexibility that creative leadership naturally brings forward. My goal is to provide students with a positive experience through art while giving them 21st century skills of creativity and leadership that will ultimately help them later in life in the workforce. The 21st century work environment requires “adults to be able to empathize, see big pictures, and conceptualize possibilities” (Patterson, 2011, p. 29). I believe creativity, leadership and art making offers the opportunity to practice the requirements.
I have seen the fear and anxiety art making can bear on students. My goal is to overcome this challenge by providing a positive art making environment. I also have to earn students’ trust. Trust is one of many great responsibilities creative change leaders should encompass including but not limited to other “multi-dimensional characteristics that might include empathy, enthusiasm, vision, knowledge, leadership, approachability, a high emotional quotient, organization, patience, and a positive attitude” (Patterson, 2011, p. 50). This list represents my own beliefs, not only for teacher responsibility, but leaders as well.

As a creative change leader I hope increase my and my student’s potential. Hoffman (2009) explains, “That he shared Maslow’s emphasis on the creative process as central to understanding and amplifying human potential” (p. 485). Human potential for the creative process does require understanding of courage. Before my master’s studies, I had some understanding of the courage to create and even less about the ability to lead but I feel more confident understanding the qualities of a creative leader. This leads to the final question, how might I convince others that teaching to foster creativity and leadership is relevant and necessary?

I realize now that creativity is not simply an act that should be expressed in a class or an office, but, if I truly want to share the opportunity of understanding in practicing creativity, I must lead through practice of expressing my passion for creativity within my daily lifestyle. I’ve expressed creativity within my artwork and problems that life brings. I’ve always found enjoyment finding solutions to problems. I live by the belief, there is always another way. I’m beginning to explore, the concept of “The Creative Lifestyle”, applying creativity through how a person can live life. Consider something as simple as keeping an open mind or phrasing problems or concerns as questions. A question offers more possibility than a statement. The
creative lifestyle requires a reflective and a self-aware individual. Possibilities should be considered daily. Now, I hope to be more deliberate in consciously including creativity practices in my daily life. My journey in studying creativity made me aware that I not only chose teaching art because I want to share my love for art making with others and I enjoy watching those who create but also, I enjoy the process of showing people who think that “can’t”, CAN! Teaching students provide me with this challenge in proving to them,” yes, you can”. I believe with hard work and support, that people can tackle any challenge. Everyone can learn how to draw, play an instrument, understand mitosis, be creative, and be a leader. Just like everyone can learn how to think and use their brain more efficiently, whether it’s logically or creatively. This takes practice. Practice is my challenge now. My goal is to practice living life creatively, leading others with positivity and influence. It’s definitely not as simple as just do it, this takes time to develop. Overall, I want to show that creativity and leadership potential can open doors people couldn’t have imagined.

I’m now faced with the opportunity to share my knowledge and passion about the benefits in leading a creative life both in my professional and personal life. I’ve heard the phrase, “we are one drop of water in a big pool”. As that drop of water, what will I do to live life well? What does this mean to me?

I hope that in whatever I do, I make a positive impact on others. If I am able to express my creative beliefs, cultivate creative thinking through creative leadership in myself and my students this will lead to personal happiness and empowerment. I believe happiness, positivity and empowerment can lead to a fulfilling lifestyle. This may seem simple, but it’s what I have begun to embrace and live by. Creativity, leadership and art bring beauty, passion, questions and controversy. Can you imagine life without creativity? A life without leadership? A life without
happiness, positivity and personal empowerment? Without creativity and leadership life would be mundane and never advancing. Without it would we have evolved? Creative leadership is an approach to life, and is one that I see myself already taking. As of now, I’m a conscious creative leader. The hope is to imbed this style and positive empowering life approach so that it is an unconscious effort. As a first year student of creativity, according to Puccio, Murdock, & Mance, (2007) I was consciously unskilled within creativity. I now am transitioning from student to an “effective practitioner” who is consciously skilled with the understanding that I am refining and purposefully planning the use of my knowledge and beliefs of creative change leadership (Puccio, Murdock, & Mance, 2007). The hope is to fully integrate my knowledge and beliefs of creative change leadership in order to attain the unconsciously skilled creative change leader (Puccio, Murdock, & Mance, 2007). The reason for setting the high goal of becoming an unconsciously skilled creative change leader is because I strongly believe in embedding the knowledge, beliefs and philosophies of leading a creative life is to act without consciously thinking of applying these ideals. The goal is to have it to be done naturally.

I say, live for creativity, embrace the empowerment of inner leadership, question, explore and create. Since I hold the belief that creativity and leadership qualities are in us all and they can be honed with proper practice, I hope that my approach in teaching and fostering creative change leadership can make a positive impact on others’ lives. Although I am just one drop of water, I have the opportunity and duty to impact thousands of other drops of water.

I believe creativity is driven by curiosity, courage and leadership ability. These three components are requisites to create and learn from the past to generate something new. To attain the courage to develop something new along with sharing the new idea or product with others takes a level of anti-conformity.
### Section 3: Process Plan

Below is my Action Plan for the planned procedure of my project specifically detailing the CAGE sessions and writing goals.

<table>
<thead>
<tr>
<th>Date</th>
<th>CAGE Session Details</th>
<th>Preparation &amp; Writing Goals</th>
<th>Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/17</td>
<td><strong>Session One</strong></td>
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<tr>
<td></td>
<td>• Meet with potential volunteers after classes in the Art Room</td>
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<tr>
<td></td>
<td>• Introduction: Share my background and Master’s project plan</td>
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<tr>
<td></td>
<td>• Requirement: Full participation in each session (12 total)</td>
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<tr>
<td></td>
<td>• My Participant Goal: Two – three groups of three students</td>
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<tr>
<td></td>
<td>• Project: Visual Theme Handmade Accordion Books</td>
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<tr>
<td></td>
<td>• Process: Creative Problem Solving Tools</td>
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<tr>
<td></td>
<td>• Time Line: Four weeks (meeting twice a week)</td>
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<tr>
<td></td>
<td>• Prep for next session</td>
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<tr>
<td></td>
<td>• Type parent letter, permission to participate and photograph forms</td>
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<tr>
<td></td>
<td>• Finalize session schedule</td>
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<tr>
<td></td>
<td>• Prep for next session</td>
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<tr>
<td>9/20</td>
<td><strong>Session Two</strong></td>
<td></td>
<td>Start creating an outline for final paper</td>
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<tr>
<td>9/25</td>
<td><strong>Session Two</strong></td>
<td></td>
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<tr>
<td></td>
<td>• Project Information &amp; Forms</td>
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<tr>
<td></td>
<td>• Introduction: Participants will be given a brief history of Creative Problem Solving and its Divergent and Convergent Guidelines</td>
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<td></td>
<td>• Warm Up: Participants will practice using Stick ‘em Up Brainstorming ideating the question, what might be all the ways to improve student desks?</td>
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<tr>
<td></td>
<td>• Goal: Participants will experience the Creative Problem Solving Process through participating in a Brainstorming session ideating the question, what might be all the themes for an artwork?</td>
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<tr>
<td></td>
<td>• Exposure to Divergent tools: Stick ‘em up Brainstorming and Forced Connections</td>
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<td></td>
<td>• After brainstorming the students will then converge the ideas through Highlighting (Hits, cluster, restate)</td>
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<td></td>
<td>• Next, each participant will choose a different theme of their choice from</td>
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<td></td>
<td>• Pass out forms</td>
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<tr>
<td></td>
<td>• Collect questionnaire’s</td>
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<td></td>
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<tr>
<td></td>
<td>• Prep for next session</td>
<td></td>
<td></td>
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</tbody>
</table>


<table>
<thead>
<tr>
<th>Date</th>
<th>Sessions</th>
<th>Activities</th>
<th>Activities</th>
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</thead>
</table>
| 9/27 – 9/28| Three - Four | Share incubation moments, if any.  
Use CPS Tool, Visual Connections brainstorm ideas for your artwork  
Use Scamper to create a Visual Mind Map to record ideas of what their artwork might look like  
Complete Questionnaire about first session  
Homework: Use highlighting tool to converge ideas | Pass out forms  
Photograph session  
Collect questionnaire’s  
Prep for next session |
| 9/29       |           | Write, section one, project background |                                                                                  |
| 10/4 – 10/5| Five - Six | Demonstration of possible mediums  
Participants experiment with possible mediums  
Participants will conduct a PPCo of their Visual Mind Map  
Participants will fill out an Action Plan  
Complete Questionnaire about second week | Pass out forms  
Photograph session  
Collect questionnaire’s  
Prep for next session  
Write, section two, literature and resources  |
| 10/11 – 10/12| Seven - Eight | Participants start action plan and create artwork  
Complete Questionnaire about third week | Photograph session  
Collect questionnaire’s  
Prep for last session  
Write, section three, process plan |
| 10/15      |           | Start writing, section four, project outcomes |                                                                                  |
| 10/18 – 10/19| Nine      | Finish artwork and matte artwork  
Photograph artwork  
Complete questionnaire about fourth week | Photograph session  
Collect questionnaire’s |
| 10/20      |           | Finish writing, section four, project outcomes  
Begin designing presentation |                                                                                  |
| 10/24      |           | Write, section five, key learnings  
Continue working on presentation |                                                                                  |
| 10/28      |           | Write, section five, |                                                                                  |
Personal Learning Goals

- I hope to gain experience and understanding in utilizing Creative Problem Solving Tools (CPS) with the art making process
- Through observation and student feedback I hope gain insight about the experience of creating artwork using CPS Tools
- After student participation in using the CPS tools with art making, I hope to gain insight on how I might further use CPS tools in the art classroom
- In the future, preparing a presentation on how I used CPS tools in the art making process

Section 4: Outcomes

My Workplace

The purpose of this project was to deliberately examine the use of CPS tools with the visual art making process. In order to get a clear vision of how I could use CPS tools in the classroom involves calling for student volunteers to participate in a four week after school Creative Art Group Experience (CAGE). My hope was to gain insight on this process with student volunteers through observation, discussion and written analysis to record their reactions in using CPS tools and guidelines in the art making process.

I teach at a high school in the city of Buffalo. It’s a smaller city high school housing around four hundred students in the freshman through senior classes. Student attendance rate is one of the highest within the Buffalo city district. The student population participates in many after school activities such as sports, tutoring, debate, Model United Nations etc. The most interesting part of attending and teaching at this school is that students are given the opportunity to take lower level college courses after school depending on their academic standing. In some cases, students gain between three - twelve credit hours towards a degree for free. Due to after
school college course and other after school activities, raised concern for the number of participants willing to work around their schedule.

**Creative Art Group Experience: Unleashing Student Creativity**

The following pages details the outcomes of the Creative Art Group Experience (CAGE) sessions providing the date, planned schedule, volunteers who were present or absent, timeframe and the results of each session. Note that the names of the volunteers have been changed to protect their identity.

I extended the invitation for those students who may be interested in an after school creative art experience on a on the morning announcements. The announcement specified for students to participation in an afterschool art making experience using creative problem solving tools. Many students in and out of my courses expressed interest but prior commitments in other after school activities hindered the total number of volunteers.

**Press and Person**

All of the Creative Art Group Experience (CAGE) sessions occurred afterschool in the art room. This environment was familiar to all of the volunteers. The room is filled with endless supplies, imagery and large work spaces. The goal was to stimulate art making, this room was the best option available.

All volunteers were either previous or current students of mine. The number of volunteers increased from three to seven. The number of participants increased for two reasons. Some volunteers encouraged other friends to join and one volunteer became intrigued when she overheard the first brainstorming session as she passed the art room and decided to join.
Informational Session

<table>
<thead>
<tr>
<th>Date</th>
<th>Contact Time</th>
<th>CAGE Schedule</th>
<th>Present</th>
<th>Absent</th>
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</thead>
<tbody>
<tr>
<td>9/20</td>
<td>2:30 – 3:00</td>
<td>Informational Session&lt;br&gt;• Welcome&lt;br&gt;• Introductions&lt;br&gt;• My Master’s Project &amp; Where you fit in&lt;br&gt;• Availability&lt;br&gt;• Closing Comments or Questions</td>
<td>Becca, Grade 11&lt;br&gt;Sabrina, Grade 12&lt;br&gt;Emma, Grade 11</td>
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</tr>
</tbody>
</table>

Informational Session Results

Knowing that there were many interested students for the Creative Art Group Experience (CAGE), I was disappointed to find that only three attended the informational session. On the Brightside, I was excited to see the three student volunteers had taken my class the year prior. I extended their welcome on this journey and thanked them for taking time out of their schedule to attend the first meeting. Everyone introduced themselves and shared something about them. The three volunteers were familiar with each other in passing but not good friends. I was intrigued by this notion because CAGE could be an activity where students can meet other people and gain new perspectives through this interaction. After the introductions, I provided the student’s with an explanation as to why I called for student volunteers. They previously knew I was working toward my degree but I updated status by explaining my last requirement as a Masters student. I shared my hopes in exploring how CPS tools can fit into the art making process in a classroom setting. I explained, in order to gain more insight on how I might unite CPS tools with art making, I needed their help which required an afterschool commitment. I stressed that I needed full commitment in this experience. I explained my competence both in the arts and implementing creativity sessions but deliberately combing the two will be uncharted
territory. More importantly, CPS tools would definitely be uncharted territory for them.

Availability was tricky because each volunteer had another after school commitment. We agreed to meet twice a week and understood that some weeks may be different days due to prior commitments. The plan was to discuss the schedule a week ahead to adjust for flexibility.

In order to make this experience official, their participation required a parent or guardians signature of approval. Forms were handed out during the next session. In closing, I asked them if any of their friends may be interested in joining and if so, bring them to the next session.

1st Session Results

<table>
<thead>
<tr>
<th>Date</th>
<th>Contact Time</th>
<th>CAGE Schedule</th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/25</td>
<td>2:30 – 3:15</td>
<td>1st Meeting</td>
<td>Becca, Grade 11</td>
<td>Sabrina, Grade 12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Welcome &amp; Forms</td>
<td>Emma, Grade 11</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Meet &amp; Greet</td>
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<tr>
<td></td>
<td></td>
<td>• A bit about Creativity</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Warm up</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Group Brainstorm on Project ideas</td>
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<tr>
<td></td>
<td></td>
<td>• Questionnaire 1</td>
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</tbody>
</table>

Process and Person

During the welcome and explanation of volunteer forms, they saw the toys in the center of their tables. Some were quick to grab a toy and others were hesitant. I assured that the toys were there for them to use even during a discussion. While fidgeting with the toys, we did a quick “meet and greet”. Each volunteer stated there name and shared one thing about them. Alana was the only one not to share something. I was sure to say that was okay, not everyone feels comfortable sharing with a group on the first day.

Through a PowerPoint I shared the key points of creativity and the CPS process. I described the method of brainstorming with post – its and the importance of following the
divergent and convergent guidelines. All participants had experienced a brainstorming session the year previous except for one. Being that it had been a year since they had participated in a CPS session, they too needed clarification of the brainstorming process and guidelines.

After the presentation, they began their first warm up, brainstorming on the question what might be all the ways to improve student desks? They recorded ideas on post-its with the color of their choosing. The process was a bit slow to start. Since it was their first experience brainstorming they needed a few reminders of the process of writing ideas and saying them aloud. Some student volunteers said their ideas aloud, while others simply wrote it. Some were thinking and speaking faster than they could write (which was mentioned in the Creativity and CPS PowerPoint), I had to remind them one at a time and write them all down. Ideas began flowing at a faster rate, the process seemed to be working, and they were laughing and building off each other’s ideas. Sometimes there were duplicate ideas but I didn’t have to remind the group not to judge by saying that was already mentioned. Emma and Matt were quite animated and excited. They were caught up explaining an idea in detail before writing it down. I realized they needed verbally to describe the idea before writing it down. I cautioned them not to judge the idea during their explanation because the point of divergent brainstorming was quantity first, quality could be developed later.

I introduced them to the process of Forced Connections. I explained the process before showing the image and again when the image was up. Emma, Alana and Becca seemed a little timid in using this approach. I modeled the process and shared an idea for the problem based on the forced connection shown, one volunteer followed up with an idea of their own. By the second forced connection, they began ideating regularly.

During the process, I was sure to pay attention to each person and their approach in
ideating. Also, I was looking for how the group reacted to others ideas or approach in sharing ideas. First I needed to remind them of the divergent guidelines after they had begun reminding each other. They seemed to enjoy ideating but did hesitate at times.

The volunteers brainstormed twenty minutes total with a short debrief afterward. All volunteers shared their thoughts on the experience. They made use of the toys and the flexible open opportunity group brainstorming offers. I saw the student volunteers laughing and conversing during the warm up. Sometimes they were a bit timid and laughed because I’d stop and photograph the process. For their first brainstorming session they did well. The total numbers of ideas on the question what might be all the ways to improve student desks was fifty-one.

Lastly, I gave them heads up that next session involved brainstorming on the real CAGE problem. Due to time constraints I asked them to take the questionnaire provided home with them.

**Questionnaire 1 Results**

*Question 1: How was your experience brainstorming?*

**Individual Comments**

- I enjoyed thinking of ideas – It was fun to just spill out ideas
- I really enjoyed being able to play with toys during the session – Cause usually I would be doodling or something else while listening.
- I felt comfortable sharing ideas because not too many people were around
- I came up with more ideas than expected
- I enjoyed working with a group and using the post it’s – it produces many ideas

**Collective Comments**

- Many added they learned something new about creativity
- All reported feeling comfortable
- Laughed during brainstorming session – somewhat 1
Question 2: How did you feel about the brainstorming process?

Individual Comments
- I’ve never brainstormed this way but I always come up with random ideas at random times
- I think the brainstorming process is useful

Collective Comments
- Most reported not being confused during this process, two volunteers commented on at first being confused but it was resolved through the practice
- All reported they would try this approach again

Question 3: Do you have an overall comment you may want to share?

Individual Comments
- I think that this way of producing ideas is itself something creative

2nd Session Results

<table>
<thead>
<tr>
<th>Date</th>
<th>Contact Time</th>
<th>CAGE Schedule</th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/27</td>
<td>2:30 – 3:30</td>
<td>2nd Meeting</td>
<td>Becca,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Welcome &amp; Name Game</td>
<td>Grade 11</td>
<td>Grade 12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Review Tuesday’s brainstorming warm up and guidelines</td>
<td>Emma, Grade 11</td>
<td>Taesha, Grade 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Group Brainstorm on Project</td>
<td>Matt, Grade 11</td>
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<tr>
<td></td>
<td></td>
<td>• Debrief</td>
<td>Alana, Grade 11</td>
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<tr>
<td></td>
<td></td>
<td>• Next meeting</td>
<td>Sabrina, Grade 11</td>
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</tbody>
</table>

Press

I shared my concern privately with Sabrina discussing having missed the first session however, she reminded me of experiencing this group brainstorming process in class a year ago. This made the review process easier than expected. I certainly didn’t want Sabrina to feel lost.

There were five volunteers present. After welcoming everyone and participating in a warm up
energized the group. We reviewed of Tuesday’s brainstorming warm up. They remembered some of the divergent and convergent rules but of course needed to reference the guideline posters for full clarity.

Process

They were excited and prepared with toys, post its and markers in hand. The problem statement was what might be all the ways possible themes for an artwork/s?

The process flowed better than I expected. The students began ideating with more ease than the first warm up brainstorming session. There were signs of high energy, laughter and ideation. Overall, the flow of ideas had improved since their first experience. A current student of mine, Taesha, wandered into the art room curious about what was happening. I summed up the process and she asked if she could join. Taesha began ideating comfortably with the other volunteers. Besides Taesha, the group was more comfortable in applying forced connections. They followed the divergent guidelines with little reminders. The divergent process lasted about thirty minutes and the group totaled 220 ideas, spread out on eight large sheets of paper with the problem statement written at the top. During the process of ideation, Emma referred to the group brainstorming process as a “fun game”.

After a short break, I reviewed the convergent guidelines and explained that each member of the group was to choose five ideas that they were attracted to and one idea that they liked but were unsure how to implement and would have normally not chosen that idea. After the student volunteers identified their hits, they each clustered their hits into categories if necessary. After clustering each student discussed their converged choices and shared how they may create an artwork.
Lastly, we debriefed the session. As I observed, they too reported easier idea generation from their first experience just two days prior. All volunteers reported having fun and enjoyed ideating. Sabrina mentioned that occasionally she was overwhelmed with others saying ideas out loud. To conclude the debrief, each student volunteer wrote down one comment on their experience during the second meeting. I asked them to keep their comment anonymous. I received the following statements:

- “It was the ‘bestest’ game ever, we should do this every day.”
- “I felt productive + imaginative to come up with tons of ideas as a group.”
- “I had too many ideas. I enjoyed it. So many ideas + possibilities.”
- “It was interactive, it was overwhelming, but I did feed off of others ideas.”
- “Fun, creative, nice, weird.”
- “INTERACTIVE AND FUN.”

**Person**

During the process, I was sure to pay attention to each person and their approach in ideating. Also, I was looking for how the group reacted to others ideas or approach in sharing ideas. Below details my findings of how they operated during the process.

**Becca**

Although Becca has an introverted preference, she seemed to have the ability to transition from an introvert to an extrovert approach depending on the situation. She ideates with good flow but is comfortable with silence. However, she didn’t seem to be overwhelmed by others ideas. Overall, she seemed comfortable with the group brainstorming process. Her convergent choices were beach, paradise, rain, construction, faces and future.

**Emma**
Emma is hands down an extroverted individual. She thrives on ideas and becomes increasingly excited with each idea she generates. Sometimes she got lost by describing the idea aloud. She sometimes would describe all the potentials of the idea instead of writing it down and moving onto others. A few times, her ideas were flowing so fast that the other members of the group may have been overwhelmed with her high ideation ability. She seemed prideful and happy about ideating. She mentioned not being able to write as fast as she was thinking.

Upon entering the classroom, Emma told me that she already had some ideas for what she wanted to create in CAGE. During the convergent stage, she chose six of her ideas bring solace, desperation, re-birth/resurrection, connectedness and reasoning.

Matt

Matt similar to Becca has the ability to morph between introvert and extrovert. He has even shared with me it depends on who is around him. His idea generation was consistent and was comfortable sharing ideas with the group. He too became wrapped up in expanding upon ideas. Later I realized this was because Matt prefers to talk threw his ideas and options during problem solving. Matt’s convergent choices were faces, neon, splat, brightness, affection and emotionalism.

Alana

Alana is definitely tends toward the introvert preference. I’ve seen Alana in the classroom sitting with others she doesn’t know and becomes shy. I learned as her lunch monitor, when she was with her friends, she is outwardly expressive, laughing and not afraid to state an opinion. In CAGE, Alana is friends with Matt and Emma. She is less familiar with Becca and Taesha. Alana did open up more with each session. She possibly would have benefited from a quieter version of brainstorming, such as Brain Writing. She didn’t consistently say her ideas
out loud at first. I learned later that Alana prefers to complete her work at home rather than with the group. She doesn’t mind working with the group but is more productive by herself. She needs time to let ideas set in before sharing them. Her convergent choices were peace, life, happiness, emotions, different textures and state of mind.

Sabrina

Sabrina is the only senior level student in the group. However, she is somewhat familiar with most members of the group. Like Alana, Sabrina has an introverted preference. She too would benefit from Brain Writing. She showed a few signs of being slightly overwhelmed with some of the extrinsic group members. However, although introverted, she is comfortable speaking and sharing opinions in front of the group. Sabrina is an animal lover. She came in with an idea of creating an artwork based on an animal. Her convergent choices were cats, fur, childhood, nature, joy and Greek.

Taesha

Taesha is a current studio in art student of mine. She strolled in the classroom half way through the divergent process. She was intrigued by the laughter and what seemed to be random words yelled out loud. I shared the rules and invited her to join us. Being an extrovert, she felt comfortable jumping into the process. She showed signs enjoying the group brainstorming process. She asked to join CAGE at the end of the session. Her convergent choices were flowers, eyes, love, laughter, smile and fantasy.

Product

The outcome of the CAGE afterschool program is to have one artwork or a series of art work by each participant using the CPS tools to guide their art making. Their ideas for their final product were in the beginning stages of ideation.
### 3rd Session Results

<table>
<thead>
<tr>
<th>Date</th>
<th>Contact Time</th>
<th>CAGE Schedule</th>
<th>Present</th>
<th>Absent</th>
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<tbody>
<tr>
<td>9/28</td>
<td>2:30 – 3:15</td>
<td>3rd Meeting</td>
<td>Becca,</td>
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<td>Emma,</td>
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<td>Grade 11</td>
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<td>Matt,</td>
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<td>Grade 11</td>
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<td>Alana,</td>
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<td>Grade 11</td>
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<td>Sabrina</td>
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<td>Grade 12</td>
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<td>Taesha,</td>
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<td>Grade 11</td>
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<td>Kristin</td>
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<td>Grade 11</td>
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**Unexpected Addition**

Another past student of mine and friend of Matt’s came to the third session. Kristin was interested in joining CAGE. At this point, I was conflicted. I was excited she was interested but worried because she missed the brainstorming session but I couldn’t turn and interested student away.

**Process**

The group was becoming familiar with each other even through Kristin was the new addition. All participants were ready for the task for session three. They goal today was to have everyone respect others preferences. I wanted all participants to feel comfortable and to understand options when it comes to brainstorming and thinking in general. This required a group different warm up that lead to learning others preferences.

The last session went well but I picked up on how some student volunteers were at times overwhelmed during the group brainstorm with post-its. This sessions warm up involved each group member writing their name on a post it with their dominate hand. We discussed how it
felt doing this first task. All reported normal and easy. Next, they all wrote their name with the non-dominant hand on the new post-it. After, discussing how it felt, they explained it felt shaky, slower process to write and one said it was no different. Kristin specifically said, “I really had to think about what I was doing” when she wrote with her less dominant hand. The group had a good time with this warm up. They felt the first task was simple and the second more challenging with laughable visual results. I explained how there are feelings or preferences tied to brainstorming and if life. Some people may feel like they’re writing with their less dominant hand if they are involved in a group brainstorming session when their preference may be a quieter version. Or vice versa, a person who prefers more stimulation, louder and fast passed thinking could feel uncomfortable with a quieter version of brainstorming. I explained that in this session we were going to try a quiet version of brainstorming simply compare and contrast the experience.

After the warm up, before moving onto the next task, I asked if anyone experiences any incubation moments. Emma reported having an idea yesterday evening but didn’t write it down. I explained the importance of documenting ideas and how their sketchbook can help with this. Every idea should be recorded. The point is to honor ideas as they come because if and when you want to work further on an idea, the original thought has been documented. This offers more opportunity for ideas to become possibilities.

Each participant received a Visual Connections Worksheet and the directions were explained. The group individually recorded observations on each stimulant. The room was quiet and they were focusing on the task. After each stimulant had observations recorded, they wrote the challenge specific to their idea for a potential artwork/s on their sheet. I explained the last step, taking each of the observations and making a connection to the challenge. I provided an
example to ensure understanding. They individually brainstormed on their challenge using their observations as a forced connection. Due to time constraints, I had to interrupt the brainstorming session. I informally asked how it felt to brainstorming in this way, what was different and if they had a preference. Preferences are discussed below for each person participating. Next session, students will finish the Visual Connections worksheet. The majority of students needed to brainstorm connections for their last stimulus. Again due to time constraints, I asked the students to fill out a questionnaire at home over the weekend.

Person

During the process, I observed each volunteer and their approach in the quieter version of ideating. The room was calm and had less laughter. All volunteers were focused on the task.

Becca

During the debrief of the Visual Connections experience, Becca shared that she sees the importance of both group and individual brainstorming. She found it more difficult to think alone but enjoyed a bit of the quiet. She wrote that with “group brainstorming, ideas usually came faster”. In this way, she thinks she would benefit more from group brainstorming sessions. She specifically, liked the way she was able to feed off of others ideas during the group brainstorm.

Emma

Emma was certainly for group brainstorming. She explained although she was able to participate in the individual brainstorming session, she didn’t prefer it. She said she needs more space to explain her ideas; the handout was not enough for her. She found more stimulation, energy and ideas with the group brainstorm. She specifically said, group stick em’ up brainstorming allowed for “so many ideas flowing freely”.

Matt

Matt enjoyed the amount of ideas that came out of stick ‘em up brainstorming. Therefore, explained his preference for group vs. individual. Although he prefers stick ‘em up brainstorming, he did enjoy using images to stimulate others ideas.

Alana

Alana prefers the group brainstorm because she said more of her ideas come from hearing others.

Sabrina

Sabrina reported liking the ideas that came from Stick ‘em up brainstorming but prefers individual quiet brainstorming. She did mention her understanding of the benefits of both group and individual.

Taesha

Taesha enjoyed group stick ‘em up brainstorming, she mentioned it being more fun than the individual approach.

Kristin

Although Kristin did not participate in the CAGE stick ‘em up brainstorming session, she recalled this divergent tool in art class two years ago. During the debrief, she explained that Visual connections built up ideas specifically one item at a time which stemmed more ideas. She prefers group brainstorming because she was inspired with more ideas in comparison to the individual brainstorming tool.

Product

The idea development is on its way to becoming a product. This session helped individually work on ideas for each participant’s potential artwork/s.
Questionnaire 2 Results

Question: If you could do this again, what would you do more of?
- More ideas
- Showing more pictures to stimulate ideas
- Inside voices
- Words…
- Brainstorming
- More thinking, concentrate
- Showing pictures to help think of ideas

Question: If you could do this again, what would you do less of?
- Quieter talking
- Being quiet
- Loud voices
- Quiet
- I wouldn’t change anything
- Less talking
- I don’t know

Question: If you could do this again, what would you do differently?
- Individual thinking
- I would participate more
- Try not to second guess my ideas
- Online, wastes less paper
- I wouldn’t change anything
- Communicate more, to get more ideas from others
- More time

Question: What help do you need from me?
- Making my picture and how I would start it
- Left blank
• Choosing my media
• Left blank
• To draw better
• Left blank
• Ideas for mediums

**Question:** What motivated you to sign up for this afterschool project?

• The fact that it was just art
• Friends who joined
• I love creating art
• ART! Also I like Mrs. Dame
• I like to draw and the teacher is awesome
• I like to do art and it could be possible to understand more about it
• I loved studio in art

**Question:** What do you hope to get from the Creative Art Group Experience?

• A better understanding of creativity
• Fun
• More art to hang up 😊
• Experience…also joy
• To be more creative
• More information on art and its forms
• A good artwork to add to my portfolio
### 4<sup>th</sup> and 5<sup>th</sup> Session Results

<table>
<thead>
<tr>
<th>Date</th>
<th>Contact Time</th>
<th>CAGE Schedule</th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
</table>
| 10/4 | 2:30 – 4:00 | 4<sup>th</sup> Meeting  
- Welcome  
- Warm Up  
- Converge using Highlighting and Visual Connection results by completing a project plan  
- Begin Sketching ideas, the goal is two sketches  
- If possible, work on sketches outside of sessions | Becca, Grade 11  
Emma, Grade 11  
Taesha, Grade 11  
Kristin, Grade 11 | Sabrina, Grade 12  
Matt, Grade 11  
Alana, Grade 11 |
| 10/5 | 2:30 – 3:15 | 5<sup>th</sup> Meeting  
- Welcome  
- Sketch & SCAMPER  
- Questionnaire 3 | Becca, Grade 11  
Emma, Grade 11  
Matt, Grade 11  
Alana, Grade 11  
Sabrina, Grade 12  
Taesha, Grade 11  
Kristin, Grade 11 | |

**Process**

Due to a few unexpected absences session four’s schedule spilled over to session five and six. However, with the lower attendance, I was able to spend more time one-on-one with those present. I found that discussion together helped sprout more ideas.

In session 4, each group member began working toward converging ideas from their original “hits” and their additional ideas from the Visual Connections tool. The goal for the next two sessions were to decide on a final theme, medium, artwork size and anything else needed to
bring their idea to life through art making. Session four they filled out the project plan and then began sketching. I did stress that the project plan may change and that’s okay. I didn’t want them to feel trapped in whatever they wrote. I explained that change is always an option. I explained that sketching may involve images or words or both. I explained a sketch as a mind map. Most of all, I reminded them to honor incubation during the sketching process. Session 5 involved applying SCAMPER to one or two of their sketches. I worked with SCAMPER with the students individually. I did ask, if they had time, to continue sketching and use SCAMPER as a guide over the weekend.

Without question, the group members provided feedback about CAGE, informally in session four. They all agreed that they enjoyed making art better than in a classroom environment because it was more relaxed, there were choices and this artwork wasn’t being graded. I appreciated this insight. Session five, they completed a questionnaire further explaining their thoughts.

Person

At this point, each participant was at a different point within the convergent process, deciding what course of action was going to take place. Some volunteers took longer and others identifying how they wanted to solve their individual art challenge. I also noticed that some group members work outside of the sessions on idea, which was a delightful finding. They seem truly interested in creating.

Becca

Becca’s original convergent ideas chosen were beach, paradise, rain, construction, faces and future. Becca identified her final chosen theme as paradise. Her visual definition of paradise involved creating an artwork showing nature, branches, flowers and birds. She
imagined her artwork to be completed in color pencil on a long narrow sheet of white drawing paper. She worked on sketching ideas for her final artwork.

Becca produced two sketches. Both were attractively simple with sketchy pencil lines flowing on the page. Sketch one had two birds asymmetrically placed on elegant branches with much negative space on the page. Sketch two also had two birds, however, drawn smaller on branches. She extended the branches and applied more curve to them. She also added a few flowers toward the bottom of the composition. For her third sketch, Becca decided to utilize “C” and “M” from the SCAMPER tool; what can be combined and how can you increase the weight? She combined both sketch one and two utilizing the birds on the branches. Overhearing Taesha and I discussing other artwork, Becca had an idea flash in her mind. She envisioned flowers, tree branches with many birds interacting with one another. So, she modified sketch 3 by increasing the visual weight of her composition by doing two things; one, drawing the flowers larger and two, adding more birds in her composition. Some were flying, others seated on branches together. She still maintained the asymmetrical balance in terms of composition. See Appendix A to view sketches.

*Emma*

As mentioned above, Emma came in with her idea for her artwork solid. Her idea involves representing multiple figures on a page, specifically, women. Each woman has the possibility to represent the six ideas Emma chose during the convergent process. She chose six words, solace, desperation, re-birth/resurrection, connectedness and reasoning. She had begun sketching some of the women but mostly had more words than visuals describing each figure. She planned to use oil pastel on white paper for her final artwork. Her artwork is wide and long because her idea was to split the artwork in thirds to show multiple scenes.
Emma didn’t seem interested in using SCAMPER to develop the idea further. It’s not as though she refused to use it but she said she didn’t feel the need to develop it more because she was already set on an idea.

**Matt**

Matt’s initial idea has changed since his convergent choices of faces, neon, splat, brightness, affection and emotionalism. Matt’s passion is architecture. He loves cityscapes and skyline. He began converging toward creating three artworks in which the subject matter would be buildings. He did include one idea from his first convergent choices, splat. His first idea for an artwork involves painting a building without a paintbrush but instead using cardboard to ‘splat’ the paint on the paper. Splat was an idea to hit on the first convergent session. He just was unsure which cityscape he would execute using this method. One insight I had when talking to Matt came back to one of his convergent choices, emotionalism. By him choosing buildings, subject matter that he is attracted to, shows a level of emotional connection to the artworks themselves. At this point, he had not chosen the paper size for his three artworks. He did mention that each artwork may be completed in a different medium.

**Alana**

The only thing Alana knew for certain, in terms of her final project, was shading in pencil first and applying color pencil over the shaded areas to represent color values. She was unsure what to draw from her convergent choices. She seemed to be distracted from working and simply enjoyed being with the group. Maybe she needed some incubation time. I checked in with her to be sure and she explained she was still thinking. She also said she planned to work a bit at home. Maybe she needed a less distracting environment to think. Or maybe she just wasn’t ready to decide. Either way she assured me she was okay and on track. The ideas she
was still deciding on were darkness, peace, life, diversity, world and city lights. When she was ready, we would be sure to use the SCAMPER tool.

*Sabrina*

Sabrina’s convergent choices were cats, fur, childhood, nature, joy and Greek. Her final decision came to her through incubation. She was in calculus class taking notes and doodling. The idea came to her, emotions of geometric cats. The cats would not be drawn realistically but instead using hard angles. Maybe being in a math environment influenced this idea. Now that she had her idea, she was debating on what medium to use and how many artworks she would create. Her ideas for a medium are oil pastels, ink or marker done on heavy paper. Although she wasn’t sure how many artworks she would create, she was sure that each artwork would involve a cat drawn geometrically simplified with a distinct border around the edges of each artwork.

Sabrina completed three sketches of nine geometrically drawn cats, each in a different pose. She benefited from applying “E” and “C” of the SCAMPER tool. She felt the need to eliminate a couple of cat drawings because of time constraints. She decided that three artworks would be sufficient in the time frame given. She decided to combine her medium choices using both marker and oil pastel. Her plan was to apply color with oil pastel and have an distinct black line done in marker creating bold separation between colors.

Sabrina finalized her idea creating a goal of completing three artworks displaying the “Emotions of Geometric Cats”, one showing playful and the others sad and angry. See Appendix B to view sketches.
Taesha

Taesha original choices were flowers, eyes, love, laugh, smile and fantasy. She stuck with these ideas in deciding her main theme. She explained her theme as Life and love. She plans to represent life and love in an artwork on standard size paper, 8 ½ “x 11” inches. Her drawing may be done in either pencil or color pencil. She had begun sketching.

Taesha applied the “C” from the SCAMPER tool after completing two sketches. Sketch one she drew an eye in profile labeled with color. Below this main sketch, she roughly drew a pregnant woman with a tear falling down her cheek. Her second sketch she combined the close up image of an eye and added a reflection of a woman’s face in the pupil. Her third sketch showed a frontal close up view of a woman’s face with a tear falling down her right cheek.

Before starting her final artwork, she decided to re-approach the SCAMPER tool. Taesha first decided to combine pencil and color pencil in each artwork, again utilizing “C” in SCAMPER. Then she considered the “P” in the SCAMPER tool, Put to Other Uses. She decided she didn’t want to eliminate any of her sketches to create one final artwork, embracing the question, what might other uses be, if changed? She decided then she would create three artworks, each visually telling a story of a woman’s happiness, life and love during her pregnancy. See Appendix C to view sketches.

Kristin

Kristin’s convergent choices were death, darkness, moon, brightness and struggle. She had begun sketching. Sketch one, a tree with no leaves and a single rope hanging from one limb. Although she wasn’t exactly sure what the final artwork would look like, she knew it was going to be done in black pen. Pen is a medium that will allow for layering and detail work. Having known Kristin previously from Studio in Art, I knew she developed ideas and drawings slowly
and carefully. Pen will be comforting for her in this way. Kristin was not ready to use SCAMPER at this point. See Appendix D to view sketch.

**Product**

Each group member was on their way in creating individualized artworks based on their chosen ideas. I saw independence in thinking and decision making through use of CPS tools. Most of all CPS tools are allowing more time to think and develop ideas.

**6th Session Results**

<table>
<thead>
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<th>Contact Time</th>
<th>CAGE Schedule</th>
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<tr>
<td>10/10</td>
<td>2:30 – 4:30</td>
<td>6th Meeting</td>
<td>Emma, Grade 11</td>
<td>Becca, Grade 11</td>
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<tr>
<td></td>
<td></td>
<td>• Welcome</td>
<td>Matt, Grade 11</td>
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<tr>
<td></td>
<td></td>
<td>• Project Sketch Check In</td>
<td>Alana, Grade 11</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• Start final artwork</td>
<td>Sabrina, Grade 12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Taesha, Grade 11</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Kristin, Grade 11</td>
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**Process**

The goal was to have everyone working toward completing sketches. After completing two sketches the goal was to use SCAMPER as a guide to open more opportunity for ideas. I continued to work with those who were still sketching and was able to provide Sabrina, Emma and Taesha paper for their final artworks. It was nice to hear the volunteers interact with each other during the process. Although the goals projects were individual they often discussed ideas with each other.
Person

Due to thinking preferences, each volunteer involved was at a different point in the process.

Becca

Becca was not present but I knew she had a good start on sketches from the previous week.

Emma

Emma began drawing the women figures for her final artwork in pencil. Through discussion, I realized a more proper term for the women drawn was not figures but characters. Emma’s creative outlet was writing and story development. She had developed a background for each woman drawn. She explained as she drew them their story came to life. When she sketched the women, there was a storyline that came with the visual. See Appendix E to view sketches.

Matt

Matt was still sketching and developing visual ideas. He was also referencing images of buildings from his favorite cities he’s visited, Chicago and Philadelphia. He has yet to utilize the SCAMPER tool. See Appendix F to view sketches.

Alana

Alana was not moving toward an idea as quickly as the others. She seemed to need more time. During these sessions we discussed time, thinking preferences and places. She mentioned that she works better at home when it’s quiet. Her plan was to come to next session with some sketches complete.
Alana came to session six prepared with two sketches. Sketch one had two flowers in the bottom left and right corners, part of the sun in the top right corner and a stylized butterfly close to the upper left corner of the page. Sketch two had a house with flowers on the side and a spiral sun in the top left hand corner of the page. Of the two sketches Alana was drawn toward the spiral sun in the sketch two. Using the “R” SCAMPER, she considered rearranging something by asking the question, *what can you transpose?* For sketch three, she decided to focus on the sun, altering the original composition, by enlarging the spiral sun in the center of the page. See Appendix G to view sketches.

*Sabrina*

Sabrina began her final artwork. She chose her paper size, a square shape measure 8” x 8” inches. Her artwork started in pencil, in case she needed to erase. By the end of the session she had completed all three cat drawings.

*Taesha*

Taesha started her first artwork today. She had trouble re-drawing her sketch on the final paper. She tried twice but the drawing ended up looking slightly different and she was not satisfied. Luckily, her sketch was the same size as her final paper we decided she should trace what she had previously drawn onto the final paper. This helped her get over the struggle of re-drawing it completely. By the end of the session her first artwork was complete. See Appendix H to view finished product.

*Kristin*

Kristin was working on sketch two. Sketch two a girl on her hands and knees, hair covering her face with death looming over her. For her final artwork, she enforced the “C” from the SCAMPER tool, combine. Her goal was to combine both images into one artwork on white
paper 9” x 12”. This was a good size choice because if it were any larger, it would be difficult to complete. Pen work is slow. See Appendix D to view sketch.

Product

The products were developing. Three group members started their finals, Emma, Taesha and Sabrina.

7th Session Results

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<tr>
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<th>CAGE Schedule</th>
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<tr>
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<td>Emma, Grade 11</td>
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<tr>
<td></td>
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<td>• Welcome</td>
<td>Matt, Grade 11</td>
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<tr>
<td></td>
<td></td>
<td>• Final SCAMPER Uses</td>
<td>Sabrina, Grade 12</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>• Start final artwork</td>
<td>Taesha, Grade 11</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Tomorrow’s Meeting 2:30 – 3:00</td>
<td>Kristin, Grade 11</td>
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<td>Becca, Grade 11</td>
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Process

The goal was for everyone to be working on their final artwork. The environment was busy. I met with each individually to supply them with materials necessary for their final artworks. They were working diligently throughout this session. I found myself wondering if I should have joined them in creating an artwork but remembered I should be focusing on assisting them through the creative process. Watching them create certainly was exhilarating; it made me want to create too.

Person and Product
At this point, each person involved is either just starting or in the midst of their final artwork. It was interesting to see how each participant worked. Emma and Matt were much more vocal and comment during their art making, whereas Sabrina, Becca, Taesha and Kristin were much quieter while creating. The following explains where each participant was within their artwork.

**Becca**

Becca’s sketches were completed in pencil; she had planned to create her final artwork by using color pencil. While preparing her paper for her final, she decided to change her medium from color pencil to graphite pencil. She liked the way her sketches turned out and thought adding color would change them totally.

**Emma**

Emma decided to change her medium choice. She was planning to use oil pastel but decided to use color pencil instead. She started her final artwork. Her drawings were in pencil for now. Later she will add color pencil. Emma is vocal with her ideas and process. She would comment from time to time on having too much negative space or needing to make adjustments.

**Matt**

Matt prepped all three of his artworks. Because he planned to paint he tapped his paper to cardboard to prevent the paper from curling. He was able to begin working on his first artwork. His first artwork involved representing a rough painting of the Philadelphia skyline. He began painting the background using cardboard to spread the acrylic paint. While creating he seems to talk through the process. He would randomly comment on what he was finding. One time he commented to the group, “When I press the cardboard hard and push it like this, it looks more like a wave.”
Alana

Alana did not attend. She informed me ahead of time of her absence.

Sabrina

Sabrina had finished drawing each cat last session. Today her goal was to apply black marker over her pencil line drawings. She did this fairly quickly and was able to begin applying oil pastel on her first artwork. She had planned the colors accordingly; the “Happy Cat” would have orange and yellow, the “Sad Cat” would have blue and purple and was unsure of the colors for the “Angry Cat” at this point.

Taesha

Taesha began working on her second drawing, having finished her first in the last session. She continued to use tracing paper to copy her sketch on her final paper. Because of the tracing paper, she was able to work faster. She finished artwork two. See Appendix H to view finished product. She began working on her final of the three artworks in her series.

Kristin

Kristin began working on her final piece. She came in with a clearer vision of her final artwork. She explained that the girl that she created attempted suicide but failed. Although she failed, death still haunts her. The black pen will create a stark contrast with the white background, further emphasizing the intensity of the subject matter. She didn’t need any assistance today besides needing her final paper cut.

8th Session Results

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<thead>
<tr>
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</table>
| 10/12 | 2:30 – 3:00  | 8th Meeting
• Welcome       | Matt, Grade 11          | Taesha, Grade 11 |
The students came in quickly and began working. The short meeting time did not allow too much work to be completed but was better than not meeting at all. There is nothing substantial to report for this session.

**9th Session Results**

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<tbody>
<tr>
<td>10/16</td>
<td>2:30 – 4:00</td>
<td><strong>9th Meeting</strong>&lt;br&gt;• Welcome&lt;br&gt;• Individual PPC Critique on artwork so far&lt;br&gt;• Continue Working</td>
<td>Taesha, Grade 11&lt;br&gt;Emma, Grade 11&lt;br&gt;Alana, Grade 11&lt;br&gt;Sabrina, Grade 12&lt;br&gt;Kristin, Grade 11&lt;br&gt;Becca, Grade 11</td>
<td>Matt, Grade 11</td>
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</tbody>
</table>

**Process**

The goal today was to meet with each group member individually to complete a Praise First worksheet critique of their artwork so far. While I met with each group member, the others continued to work on their own. A PPCo, (Plusses, Potentials, Concerns and Overcoming concerns) was provided for them to evaluate their artwork thus far. A PPCo acts as a critique of
the artwork and idea so far. Volunteers completed the PPC and worked on overcoming concerns in the next session.

*Person and Product*

Below is an explanation detailing work completed with each participant.

**Becca**

*Plusses*

1. Variation in size of the birds
2. Flowers and leaves
3. Birds themselves

*Potentials*

1. *It might:* be cool if I decided to add color since I’m just using pencil
2. *It might:* be cool if I could make it look more 3D
3. *It might:* cool to create an extension

*Concerns*

1. *How to:* add color?
2. *How to:* make it look more 3D?
3. *How to:* create extensions?

**Emma**

*Plusses*

1. Likes eraser, needs it when drawing
2. Likes each character and their individual stories
3. Freedom to develop each character without the constraints of an outside force

*Potentials*

1. *It might:* nice to connect each characters stories
2. *It might:* be nice to create a visual drawing that acts as a play
3. *It might:* be nice to add a background
Concerns

1. How to: unify each characters story line? Theme for all is similar but how do they connect?
2. How to: add a background?
3. How to: use color to relate to the story?

Matt

The group members informed me that Matt would miss the next few sessions due to an unexpected death in the family.

Alana

Alana was not ready to do a PPC of her artwork so far because she had not started her final. Today she came in ready to start her final. She decided to create her final artwork based on sketch three, one large sun placed in the center of the page with wavy rays radiating outward. She chose a square shape paper and began drawing a large sun in the center. She did want to change one thing on her final that was different than her sketch. In sketch three, the sun’s center was a spiral. She wanted the sun’s center to be whole and more complete to create a bolder composition in her final artwork.

Sabrina

Plusses

1. Like that my idea is definite so I don’t stray off on new ideas
2. Having fun creating an artwork based on the animal I like
3. Likes the geometric drawing method

Potentials

1. It might: give me an idea to do different animals
2. It might: make me consider using other media
3. It might: be nice to mount them together

Concerns
1. *How to:* not smudge the oil pastel?

   No more concerns listed.

*Taesha*

**Plusses**

1. The faces
2. The colorful eyes
3. The dark outline with the black color pencil

**Potentials**

1. *It might:* be good to do at fourth artwork
2. *It might:* be cool to add the father in an artwork
3. *It might:* be good to re-do the third artwork by making the image vertical vs. horizontal

**Concerns**

1. *How to:* add a father into the mix?
2. *How to:* create a fourth artwork?
3. *How to:* adjust the third artwork so that it’s vertical?

*Kristin*

**Plusses**

1. The scratchy quality of the pen
2. The shape of the death figure
3. The idea behind the artwork, the girl attempted suicide but failed...yet, death still haunts her

**Potentials**

1. *It might:* be cool to have different forms of failed suicides haunted by the same form of death
2. *It might:* create a different mood for her suicide, to be successful, and death lingering by her body, pleased, as he shackles her soul
3. Left blank.

**Concerns**
1. *How to:* create the texture on the tree?
2. *How to:* create a night time background?

### 10th Session Results

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<th>Date</th>
<th>Contact Time</th>
<th>CAGE Schedule</th>
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<td>Emma, Grade 11</td>
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<td>• Overcoming Concerns</td>
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<td>Sabrina, Grade 12</td>
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<td>Kristin, Grade 11</td>
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<td>Becca, Grade 11</td>
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</tbody>
</table>
2. **How to:** make it look more 3D?
   - Have certain areas shaded more (more darks, mediums and lights)
   - Add gradation
   - Get a photograph of a bird and use it to draw from

3. **How to:** create extensions?
   - Extend the leave
   - Don’t make each paper the same size
   - No birds in extended drawings
   - Just do flowers
   - One or two additional extensions
   - Add additions to additional extensions

   See Appendix I to view Becca’s finished product.

*Emma*

**Concerns**

1. **How to:** unify each character’s story line? Theme for all is similar but how do they connect?
   - Through written story
   - Adding flashes

2. **How to:** add a background?
   - *Shade or color it in*

3. **How to:** use color to relate to the story?
   - *Color pencil*

Emma chose not to not complete ideas fully.

*Matt*

Absent from session.

*Alana*

**Plusses**

1. Happiness with sun
2. Life in form of sun
3. Brightness – something to make life better

**Potentials**

1. *It might:* be helpful to fix the gradation
2. *It might:* look better without so much negative space
3. *It might:* show forms of happiness with color

**Concerns**

1. *How to:* fix the gradation?
2. *How to:* add something to fill the negative space?
3. *How to:* add more colors?

Her first concern was a matter of technique. Her shading needed a few more layers of graphite pencil. By adding it slowly and smoothly would create a gradual transition from dark to light. She was struggling with this so I demonstrated how I solve this problem when I shade. The demonstration and practice helped Alana in creating smoother gradation.

Overcoming concerns two and three, Alana referenced her past sketches. By viewing her sketches she decided to fill the negative space by adding four suns in the corner of her work. The idea came from sketch one, she had drawn in all four corners of the artwork. She filled the negative space by drawing half suns in each corner of the artwork. Each sun would be a different color, adding more variety to her artwork.

**Sabrina**

**Concerns**

1. *How to:* not smudge the oil pastel?
   - use oil pastel first
   - choose a larger size paper
   - don’t use ink
   - think of a different way to fill in the background (sponge in a background)
   - don’t smooth out the oil pastel, add texture
- light and dark color values

No more concerns listed.

Taesha

Taesha finished her third artwork. She and I began working on overcoming her concerns referencing the PPC.

Concerns

1. *How to:* add a father into the mix?
2. *How to:* create a fourth artwork?
   - Horizontal
   - Add a father
   - Image of the father and mother together
   - Kiss
   - Father’s face covered with hair
   - Mother’s eye closed
   - First artwork is horizontal, second and third vertical and the fourth will be horizontal
3. *How to:* adjust the third artwork so that it’s vertical?
   - Did not work on first and third concerns because they were addressed in concern two.

Kristin

Concerns

1. *How to:* create a night time background?
   - Like the idea of wrapping dark around the tree
   - Tree can fade into darkness
   - Intense gradation
   - Possibly different ink in background – boulder black, or colored ink
   - Blue, black or purple background
2. *How to:* create the texture on the tree?
   - Examine real tree bark to get an idea of the texture
   - Heavy layering with pen strokes
- Perhaps a graveyard background
- Tombstones
- “Gothic” style gate
- Muddied ground with tracks from crawling
- Find a way to create a “foggy” look
- Different colored ink to fill in moons
- Color choice can be happier to appear a better place to live/be

11th Session Results

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<td>Alana, Grade 11</td>
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<td>• Welcome</td>
<td>Sabrina, Grade 12</td>
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<td>• Group PPC Questionnaire</td>
<td>Kristin, Grade 11</td>
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<td>Becca, Grade 11</td>
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<td>Taesha, Grade 11</td>
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<td>Emma, Grade 11</td>
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Questionnaire 3

Plusses

What are the strengths of the CAGE program?

- The freedom to create what is in my mind without shaping it to fit a grade
- The informal environment
- Toys
- I feel more creative
- I experience different social opportunities
- Learning the different techniques/methods of creativity
- You learn a creative process that can help with any project
- You think of ideas you normally wouldn’t think of
• It’s informational and takes a lot of thought
• Understanding of different aspects of life

What do you like about the Creativity tools (i.e. Stick em’ Up Brainstorming, Forced Connections and Scamper)?

• The amount of ideas that can be generated in a short period of time
• A picture is worth a thousand words (Forced Connections)
• Colors and shapes trigger ideas (Forced Connections)
• I like Stick em’ Up Brainstorming exercises because hearing others ideas helps me think faster
• I like Scamper but feel like I do it naturally
• The tools helped make choices easier

Potentials

Compare this afterschool experience to your classroom experiences, what are some possible future gains in using Creative Problem Solving Tools in the classroom?

• It might
  • Open people to create artworks they wouldn’t normally create
  • Help people create artworks they can better relate to
  • Help students to stop second guessing some of their ideas
  • Bring about a wider range of ideas
  • Bring about more ideas for projects
  • Be helpful for students to use stick em’ up brainstorming to decide what he or she wants to draw

Potentials

Consider how creativity tools have helped you create your artwork. How do you think these tools can be helpful in the classroom?

• It might
  • Help an English classroom, people could use brainstorming ideas on a writing piece
  • Scamper could be used for different essay options
Scamper helps in making an artwork because it allows for adjustments either adding or subtracting things
- Depend on the subject
- Help students working with other students to think of creative ideas
- Could change the way they think of art

Concerns

Do you have any concerns about using the creative problem solving approach in a classroom?
- How to start implementing CPS in classroom settings?
- What might be all the ways students may be able to use these different tools?

12th – 15th Meeting Session Results

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<th>CAGE Schedule</th>
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<td>Let me know if you have any roadblocks</td>
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Process

The CPS tools and strategies to stimulate creative thinking have been fully implemented.

The final work was now up to each individual volunteer to complete.

Person and Product

The finished products were coming to an end. Taesha, Becca and Sabrina finished their artworks this session. See Appendix H to view all Taesha’s finished product. See
Appendix I to view Becca’s finished product. See Appendix J to view Sabrina’s finished product. Kristin, Matt, Alana and Emma were still working. Emma, Matt and Kristin were concerned about finishing in time and both decided to take their artwork home to work on in their spare time.

**Matt**

Matt returned in good spirits. He did share a few things from his personal loss and came ready to get back to creating. He completed a PPC of his first artwork.

**Plusses**
1. The “fuzziness” of the silhouette
2. Like the asymmetrical balance
3. Like how the background flows into the skyline

**Potentials**
1. *It might:* be better to not use cardboard to paint silhouette
2. *It might:* help to use sharpie or pencil
3. *It might:* be nice to have more detail in skyline

**Concerns**
1. *How to:* not use cardboard to paint silhouette?
2. *How to:* place emphasis on the skyscrapers in the Philly skyline?
3. *How to:* allow the viewers to gaze at the artwork fast?

After completing the PPC, he chose to work on overcoming concern number one. He brainstormed a few ideas such as maker, charcoal pencil, paint brush, oil pastel, magazine cut outs etc. He ultimately decided to finish the skyline with a thin paint brush. It was easier to manipulate the paint brush for the angles of the buildings rather than with cardboard. He finished his first artwork today. See Appendix K to view Matt’s finished product.
## 16th – 17th Session Results

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<td>Grade 11</td>
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### Person and Product

Becca, Sabrina and Taesha matted their artwork in preparation for display. Alana finished artwork by the end of the sixteenth session and matted her artwork the next. See Appendix L to view Alana’s finished product. Emma had finished her artwork at home and came in prepared to matte on the seventeenth session. She immediately shared with me that she there was too much color in the background. She finished adding color to each figure in the artwork and decided she needed to fill in the background. Being done at home, she was unable to work out the idea with other CAGE volunteers. By adding color in and around the pre-drawn figures created an uneven quality of coloring that she didn’t care for. I offered time to brainstorm how to alter the background to her liking but she said she didn’t have the energy to change anything. See Appendix M to view Emma’s finished product. Kristin and Matt were close but needed a bit of guidance to finish their artwork.
Matt

Matt had made great progress at home focusing on one building using a mixed media approach. He drew two more buildings as separate artworks. In both he was able to add more detail because he drew rather than painted. These two artworks will be displayed to the left and right of his first artwork. His time outside class was necessary for him to finish three artworks. See Appendix K to view all three of Matt’s finished product.

Kristin

The last item Kristin needed to finish was filling in the background of her artwork. She explored making pen strokes with a green, black and purple pen. She shared a concern with me; she wanted the pen strokes to be different than the foreground. She solved it by choosing the purple ink pen to fill in the background. We then had a discussion on what type of line stroke she would use to differentiate it from the foreground strokes. She sketched different line strokes as we discussed our ideas. She explored using horizontal, vertical, diagonal, swirl, jagged and curved line strokes. She wanted the background line strokes to contrast the strokes made in the foreground. She decided using the curved line because it mimicked the two moons in her drawing while contrasting the vertical tree lines. She finished by the end of the seventeenth session. See Appendix N to view Kristin’s finished product.
18th Session Results

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<td>Emma, Grade 11</td>
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</table>

Process

The volunteers were happy to see all the finished products. There was time after the questionnaire to mingle and view the artwork. Kristin and Matt needed to stay after one more day to finish matting in preparation for display. I gave thanks to the group for their time, effort and laughter. I shared with them my plan for throwing a pizza party as a thank you for their hard work. At the party we will officially display their artworks for their peers and my co-workers to view and learn about the creative problem solving process.

Questionnaire 4 (Final)

Question 1: What did you like about CAGE?

- With more people, more ideas are creatively created
- I like doing the artwork, the activities, doing different creative exercises – Although they are things I usually do with my artwork
- I liked the toys 😊
- I like the name CAGE, the people I spent time with during the experience
- I liked the warm up’s and drawing what I wanted
It helped organize the thinking skills I use when I draw because it had me write down ideas in a way that I could improvise and branch new ideas – instead of all the ideas fluttering around in my head at once and forgetting them.

CAGE was a good way to do things on your own – being able to pick our own ideas was easier because we were not forced to do one that we may have not liked.

I like going through the brainstorming process and seeing how others chose their ideas when making art.

**Question 2: What did you like about creative problem solving?**

- Other peoples contributions opened my mind to other ideas
- I liked the different techniques/tools
- I like fixing things in ways that normally wouldn’t be thought of – like Apple
- I liked that we could use out imagination
- CPS helped me with new ideas on a piece that I probably would have gotten to stressed out or bored with or become uninterested and most likely not finishing
- CPS was simple but it did take a lot of thought
- Unlimited amount of ideas

**Question 3: Did any of the cps tools help guide you when thinking of art project ideas? If so, how?**

**Stick ‘em Up Brainstorming:** diverged on a great deal of ideas using post it’s and then converged

- Helped pick one idea for my final artwork
- I got many ideas by feeding off of others, it was fun but a little overwhelming
- I like ideas and I feel that stick em’ up brainstorming was a continuous stream of possibilities like each was a portal to a new dimension
- Stick em’ up brainstorming branched new ideas from the ones I had into ideas I liked even more and probably wouldn’t have thought of
- Liked the post it notes – it helped get my idea for the project

**Visual Connections:** viewing an image, recording observations and using observations to help stimulate ideas for your problem statement
• I was able to identify different art elements that I could use in my own artwork
• I didn’t grasp anything from this exercise to help me with my artwork
• Not as exciting as stick em’ up brainstorming
• Visual connections helped me think of how colors can set a mood in my artwork
• Visual connections helped in my project because I was able to write what I saw in an image and get an idea from what I wrote
• Helped with color

**Mind Mapping/Sketching out idea:** drawing and writing ideas

• I could create a rough draw for my artwork and was able to choose different ideas from each sketch to use for my final
• Doing different sketches helped big time because I used almost bits and pieces from each
• I liked seeing the different patterns and options that my pieces could take
• Yes, through mind mapping and incubation I evolved general cats into geometric cats

**Scamper:** Questions to help with sketches and/or creating final artwork (Substitute, Combine, Adapt, Modify, Put to Other Uses, Eliminate, Rearrange)

• It helped me create many sketches, these were the building blocks for each of my three final artworks
• It helped me figure out exactly how I wanted to my artwork to look like
• It helped me in more than one way – creating a story and adding another artwork
• Added new ideas into my piece
• I used scamper after my pro

**Question 4: How did any of cps tools help in making your final artwork?**

• I immediately knew what artwork I wanted to do after stick em’ up brainstorming
• Stick em’ up brainstorming helped me figure out what theme I wanted my artwork to fall under – without it, I would have had too many ideas and wouldn’t know how to organize them
• The Scamper tool helped me actually figure out what my artwork would look like – very helpful
• Scamper helped me create the story
• Stick em’ up helped me decide on the final theme I wanted – Visual connections gave me an idea for the color based on my theme – Scamper brought a few ideas together into one piece and helped me wrap it up
• CPS helped me in making decisions for my final artwork – All the information and problem solving skills helped me with my theme
• Scamper helped me eliminate and combine my sketches

Question 5: Did you like using a PPCo in the middle of creating your artwork? Why? Plusses, Potentials, Concerns and How to Overcome the Concerns

• I didn’t use this that much but it taught me to think more critically concerning detail
• Using PPCo was okay – it helped me figure out what was good about my artwork and what I needed to change
• I do PPCo without actually thinking about it
• Yes, it helped me make my artwork better
• Yes, I was stumped for a while about how I wanted to draw the scenery and sky – it helped me come up with something I probably wouldn’t have normally done
• Yes, because, as you are creating your artwork there may be some things that you would like to change
• Yes, it helped me reflect on what I could do differently before it was too late – I was constantly thinking of new ways I could improve my method

Question 6: What did you like about creating your artwork?

• I liked that I could create three artworks and I like using many different mediums such as acrylic paint and watercolor
• I liked drawing the two birds that kissed and the third bird sitting next to them looking mad – that was fun
• I liked talking to others about their art and I liked getting to draw my ideas in addition to talking and writing about them
• I liked getting to choose what I wanted to draw
• Seeing a bunch of ideas come together and a new story being formed
- I liked being able to choose whatever I wanted to draw
- I liked creating something I wanted. I wasn’t confined to guidelines given in a classroom.

**Question 7: What do you like about your final artwork?**
- I like the color and balance – I like that I can use them for my architectural portfolio
- I definitely like how my artwork has extensions – I think that makes it look really good
- I like the stories behind each of my characters
- I like how the colors pop out in the drawings – also how it tells a story
- The sky – especially because I was stuck on what I wanted to do with it for a while
- My final artwork came out very creative and it also made me like coming up with my own ideas for drawing
- I love cats so I love having something I made with a modern twist

**Question 8: If you did this again, what would you do more of?**
- I would probably spend more time drawing to achieve more detail in the buildings and the background
- I would probably try to use more brainstorming techniques because that really helped me with my artwork
- I would do more planning
- I would add more color and make the story longer
- Venturing into new ideas that I normally wouldn’t draw – maybe something bright, maybe
- I would add more details into my drawing and make things stand out more
- I would add more details in my artwork – in my background or border

**Question 9: If you did this again, what would you do less of?**
- I would do less acrylic paint and less colored pencil – I find these take away subtlety
- I would do less second guessing of myself – that slowed me down
- I would use less color
- I would second guess myself less
- Take breaks from my piece – it helped me with new ideas but it was hard to get back into
- I would do less thinking about what I want to draw and do more drawing to see what I could put together
- No oil pastel – too messy

**Question 10: Is there anything else you would like to say?**

- I love my third artwork more than the other two because I had more experience by the time I got the this artwork
- Well, basically this was a fun experience – I had a good time and I would probably do it again if I had the opportunity
- I would love to do this again next year
- Good luck
- This was a fun way to be able to do things
- I think CAGE gives a better processing of reasoning. Most of the time I wouldn’t normally write down every PPCo, but since I did, I had a better understanding of how I could make an even better artwork than before

**Section 5: Key Learnings**

Gilda Radner summarizes how I felt midway through this project, “I wanted a perfect ending. Now I’ve learned, the hard way, that some poems don't rhyme, and some stories don't have a clear beginning, middle, and end. Life is about not knowing, having to change, taking the moment and making the best of it, without knowing what's going to happen next. Delicious Ambiguity.” (“Good Reads”, 2012). I came across this quote just when I needed it most because I began questioning, am I doing what I set out to do? Did I choose the right problem to work on? Should I have brought the Creative Art Group Experience (CAGE) in the classroom rather than after school? I felt this way because volunteer absences occurred. The absences and volunteers, who joined late, were out of my control but made it a challenge because
it did affect some of explanations and experiences of the tools used during sessions. Finding this quote reminded me of life’s hiccups and that a plan is rarely fulfilled without bumps along the way. Most of all it reminded me to embrace the ambiguity, hang on and see the results as they come.

The most important key learning is Creative Problem Solving (CPS) tools do benefit the art making process. The tools provided students the opportunity to stretch their thinking and organize thoughts. They experienced fulfillment being individually responsible working through a problem from start to finish.

Working with the student volunteers provided written and visual information on how I can implement CPS tools in the art making process and in the classroom. Making CPS work in a classroom, requires first, teaching the CPS guidelines at the beginning of the year, and second, introducing tools slowly throughout the school year. In the case of CAGE, I was able to fit many tools in a short amount of time in order to gain understanding of the volunteers’ opinions and reactions to what CPS offers. The volunteers agreed that introducing two tools within one project would be easier approaching an entire classroom. I agree. There were seven volunteers participating in CAGE; I had the time and flexibility to spend more one-on-one time with each person, whereas a class of twenty-five will be more challenging.

Volunteers did indeed find the tools helpful, but in Questionnaire 4, many reported liking CAGE also, because it allowed them to create an artwork without any criteria besides applying CPS tools. In a classroom setting, the goal is to teach a technique, process or style. I do my best in keeping projects open for subject matter, paper, size and when possible, materials. The purpose of a high school studio in art class is to teach a breadth of art making techniques. My next challenge is how might I teach a technique and offer a project with less strict guidelines?
Teachers differentiate instruction daily to ensure that all students are learning. People learn differently, and of course, approach problems differently. I’ve previously learned the importance of knowing my audience. This can take time. Throughout the year, I continuously learn student preferences in my classroom. During CAGE I learned that I can differentiate my delivery of tools in the CPS process by identifying a specific tool that may work better for a person’s preference. This is similar to how a facilitator knows which tools to use when the group may need energizing or a break. CPS tools can be differentiated depending on the needs of students. Preparation is crucial; all CPS tools will be readily available in my classroom.

There were three tools that volunteers reported as being the most helpful during the art making process, Stick em’ Up Brainstorming, Scamper and PPCo. Stick em’ brainstorming is an interactive energizing approach for ideation. Most volunteers gained energy from the process of ideating without judging, striving for quantity and seeking the wild and unusual. This tool will offer students an opportunity to use their minds in a constructive way. This is certainly a tool to be used in the art classroom when diverging on ideas. I’ll continue to be aware of individual and/or a group’s preferences, for example, one class may prefer stick em’ up while another may benefit from Brain Writing. Nevertheless, imagine the possibilities if deliberate thinking skills were taught in every classroom.

SCAMPER was tremendously helpful in expanding on ideas. This tool proved useful during multiple stages of creating. The volunteers enjoyed choosing which questions they wanted to focus on for their individual problems. The words substitute, combine, adapt, modify, put to other uses, eliminate and rearrange make up the acronym SCAMPER. The words themselves automatically offer new possibilities. The questions under each designated word assist in stretching thinking even more. The students in my first year of teaching had a difficult
time stretching their thinking. I realized it was because they weren’t given the correct tools to offer the opportunity. SCAMPER is definitely a tool for expanding on initial ideas and will benefit art-making in the classroom.

PPCo was beneficial in assisting mid-point project critiques. The volunteers made use of this tool by honoring what they liked about their creation, considering potential possibilities and addressing concerns. Volunteers overcame their concerns with a sense of pride. PPCo will provide a positive approach for critiquing artwork in a classroom setting.

CPS tools help tremendously in thinking during the art-making process, but matters of art technique also need to be mastered in order to carry out an idea. All of the volunteers in CAGE had previously taken Studio in Art, which provided them a solid foundation and confidence in implementing visual challenges. In the future, when using CPS in the Studio in Art classes, students will be given time to master the technique while offering individual creative opportunities for them to apply what they learned.

**Visual Incubation**

Sometimes during problem solving incubation is necessary. Deliberately not working toward solving a problem such as taking a break, doing the dishes, grocery shopping, running or doodling can help. During one CAGE session Kristin and Matt didn’t particularly have the energy to work on their ideas for their artworks. Although present for CAGE session, they did not work on anything pertaining to their artworks progress. This was most certainly acceptable. They instead filled time with doodling together in Matt’s sketchbook. They sat across one another with the sketchbook in between. Matt used pencil while Kristin used pen. They took a break from their work and filled a sketchbook page full of random doodles. I identified this as Visual Incubation. What a great way to break from the problem. They laughed and certainly
enjoyed creating a variety of odd imagery on one page. See Appendix O to view their visual incubation image.

**More Ideas and Possibilities**

Implementing CAGE transpired more ideas. The first idea that occurred was how might I share the CAGE results with other art teachers? The data and experience that resulted because of CAGE was positive and exciting for student art making. I could share the process, tools, results and potential plans for utilizing CPS in the classroom with current and future teachers.

More questions emerged. What would happen if I were to do the CAGE program over again? Would volunteers be more comfortable in using CPS tools to guide their art making? Would the process flow better? Would the volunteers create more wild and unusual artwork a second time around? Would more volunteers join the group after seeing the first CAGE results? Wouldn’t it be fun if I created alongside the volunteers? How might I make this work? The last few sessions of CAGE volunteers expressed interest in doing this again.

In the midst of watching the volunteers create artwork using the CPS tools, I thought, how might I use the CPS tools in my own art making? It would be entertaining to see what develops. This possibly could provide insight on how I might better share the CPS tools and processes with students. After I explore this challenge, how might I reach out to the art community to share the benefits of CPS in the art making process? A presentation on CPS tools for artist blocks, perhaps?

**Section 6: Conclusions**

The Creative Art Group Experience (CAGE) offered the opportunity for creating artwork using creative problem solving (CPS) tools. The volunteer’s hard work, time and feedback provided me with truths on how the CPS process can work in a classroom setting. CPS has a
place not only in the art classroom but in all classrooms. I encourage other educational professionals to research and implement ways CPS tool integrated lessons can benefit the learning environment.

CPS works in the art making process and students can benefit from its methods and tools. Now, I feel equipped to implement CPS guidelines, tools and processes in the art classroom. My next challenge is how might I organize the curriculum adding CPS tools in lessons? In this way, the CPS process starts over again. What a journey it will be. Creative possibilities are endless; we simply have to be willing to explore all the options.
References


Appendix A: Becca’s Sketches
Sketch 1, top

Sketch 2, bottom left

Sketch 3, bottom right
Appendix B: Sabrina’s Sketches
Sketch1, top

Sketch2, bottom right
Final Sketches
Appendix C: Taesha’s Sketches
Sketch 1, top left
Sketch 2, top right
Sketch 3, bottom left
Appendix D: Kristin’s Sketches
Sketch 1, top

Sketch 2, bottom
Appendix E: Emma’s Sketches
Sketch 1, top

Sketch 2, right

Sketch 3, bottom
Sketch 4, top

Sketch 5, bottom
Appendix F: Matt's Sketches
Sketch 1, top left

Sketch 2, bottom
Appendix G: Alana’s Sketches
Sketch 1, top left

Sketch 2, top right

Sketch 3, bottom
Appendix H: Taesha’s Final Product
Artwork 1, top

Artwork 2, bottom
Artwork 3, top

Artwork 4, bottom
Appendix I: Becca’s Final Product
Full Artwork 1, top

Close up Views, bottom
Appendix J: Sabrina’s Final Product
Artwork 1, top

Artwork 2, bottom
Artwork 3
Appendix K: Matt’s Final Product
Artwork 1, bottom
Artwork 2 top left
Artwork 3, top right
Appendix L: Alana’s Final Product
Artwork
Appendix M: Emma’s Final Product
Artwork
Appendix N: Kristin’s Final Product
Artwork
Appendix O: Visual Incubation
Matt and Kristin’s Visual Incubation

Full image, top

Close up views, bottom
### Table 1

**Four C Model**

<table>
<thead>
<tr>
<th>Four – C Model</th>
<th>Definition</th>
<th>Time</th>
<th>Measurement</th>
<th>Example</th>
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<td>Big – C</td>
<td>Eminent creativity through lifetime achievements that impacted a field</td>
<td>10 years or more in a particular field</td>
<td>Historically recognized</td>
<td>Business: Henry Ford</td>
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<td>Art: Pablo Picasso</td>
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<td>Music: Mozart</td>
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<td></td>
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<td>Poet: Maya Angelou</td>
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<td></td>
<td>Dance: Martha Graham</td>
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<td>Pro – C</td>
<td>Professional creativity, begun influencing a field</td>
<td>Below 10 years in a particular field</td>
<td>Published articles</td>
<td>Business: Mark Zuckerberg</td>
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<td>Art: Community Galleries</td>
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<td>Poet: Community publications</td>
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<td>Dance: Community productions</td>
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<tr>
<td>Little – c</td>
<td>Everyday creativity, creative expressions</td>
<td>Some level of education</td>
<td>Teacher, parent, or peer rated Consensual Assessment Technique, Amabile, 1982</td>
<td>Everyday persons</td>
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<tr>
<td>Mini – c</td>
<td>Creativity involving learning understanding a new concept by taking a creative approach through personal interpretations</td>
<td>Dependent on concept</td>
<td>Only needs to be new to the individual</td>
<td>Students (no age limit)</td>
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