A PERFORMANCE-BASED STUDY OF THE EFFECTS OF SCHOOLING ON STUDENTS' CREATIVITY AND CREATIVE SELF-EFFICACY

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Dedication

To Mom:

who taught me to cherish my own creativity and the creativity of others

whose dedication to students and the educational system continues to inspire me every

single day

whose unwavering belief in me made me trust that I can accomplish anything

Abstract

Creativity continues to be a prevalent topic amongst educators; there remain questions about what it encompasses, and how to foster it amongst systemic pressures. Consideration has also been given to how self-efficacy affects creative achievement, and the impacts of schooling on creative self-efficacy. My thesis holistically explores the question: how do educational practices affect students' creativity and creative self-efficacy? Based on a review of the literature, I present a definition and model of creativity, which illustrate the interaction between environment, skills/dispositions, domain areas, product, and self-efficacy. In my research, I engaged five recent graduates in a process of questionnaires, interviews, and dramatization/playbuilding. The results revealed areas of strength and areas for growth in our educational system. Particularly, participants indicated that safe, positive, and encouraging teachers and environments help to develop students with high creative self-efficacies, which make them more willing to engage creatively, and more resilient to educational pressures.

Acknowledgement

I would like to start by thanking my five participants, who have challenged me (and any educator who reads this) to "make it better". Their insight, honesty, and willingness to participate in anything and everything I threw at them made this thesis possible. They are truly spectacular young people; the world will be vastly improved by their brilliance and their creativity, whether through drama, engineering or teaching.

I am incredibly grateful to have had the support, guidance, and thoughtfulness of my supervisor, Dr. David Slomp, throughout this entire process. Thank you for getting me to ask more questions, do more research, and make more connections. Thank you for your patience and understanding, and thank you for teaching me to trust my instincts. I would also like to acknowledge the hard work of my other committee members. To Dr. John Poulsen, I would not be the teacher I am today without your continued encouragement and your infectious passion for drama education. Thank you for continuing to challenge and inspire me. To Dr. Robin Bright, thank you for sharing your positivity, enthusiasm, and expertise with me. To Darlene St. Georges, thank you for sharing your insights and knowledge, and your devotion to the arts and arts education.

Lastly, I would like to thank my family. To my dad, thank you for being a rock of support through everything, and for showing me that creativity exists in engineering and in endless home renovation projects. To my big brother, Jason, thank you for your wisdom and your guidance—you have never failed to coach me through the roadblocks and celebrate with me through the achievements. To my niece, Eleanor, and my nephew, Huxley, thank you for inspiring me with your limitless creativity and potential—from crafting to LEGO, you two exemplify that creativity is part of the human soul.

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Introduction

I recently had the opportunity to sort through boxes of my childhood mementos. Preserved for decades in cardboard bankers' boxes were dozens of short stories, poems, and pictures—a clear indication that my family and I found value and pride in my creative achievements. There were no tests or worksheets saved, despite my haunting memories of math mad minutes and spelling tests. Among the relics were years of report cards with hand written comments from dedicated teachers: "[Stephanie] seems to particularly enjoy dramatic play as she gets highly involved and is most imaginative" – kindergarten. "Stephanie has a great imagination and writes many stories" – grade four. "[She] is creative and imaginative" – grade nine Drama. One comment though, stuck out as notably different: "Stephanie continues to have great success. Test results show that Stephanie is at the top of the class. I have noticed that Stephanie is not as enthusiastic about her creative writing as she was in the past" – grade two. This was from one of my most fondly remembered teachers, and her insightful comment stands out for two reasons: (1) she commented on my attitude rather than my production, and (2) she (probably unintentionally) drew a link between testing and creative self-image. I am left wondering what happened to make a little girl who always took pride in her creativity feel "less enthusiastic". Is it a result of the aforementioned tests, or is that just a coincidence? Why do the test results take precedence over enthusiasm in determining "great success"? Or maybe I am just reading too much into one statement.

Fast-forward to the 21st century, where creativity has once again gained attention and popularity in the educational system. In a 2006 TED Talk, Sir Ken Robinson

famously asked "do schools kill creativity?" and a widespread dialogue began[1]. 2006 was also the year that I became a teacher of high school Drama and English Language Arts. I was drawn to these subjects because of their opportunities for promoting and developing creative thought. Theatre and literature are both art forms that have the power to express the deepest parts of humanity, the beauty to connect us, and the wisdom to inspire change. As a teacher, it has been my passion to share these crafts with young people, and to give students meaningful opportunities to become creators. To me, creativity is not just another initiative, but a way of thinking and expressing that is at the very core of human nature.[2]

However, the realities of the educational system have frequently hampered my attempts at inspiring passion and creativity. I feel a constant tension in English Language Arts between encouraging creative thought and preparing students to write a high-stakes, standardized exam. I feel like I am continually defending the need for quality arts education in public schools, or justifying why arts classes are just as important as academic ones. I feel like I am battling for my students' time and energy, as they are torn between pursuing their passions and studying for tests. And most significantly, I feel disheartened when I see student after student complain about hating school, because school to them equals desks in rows, worksheets with blanks to fill in, tests with right and wrong answers, and feelings of unending stress and pressure.

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[1] Began again, that is. The 21st century is widely considered to be the second-wave of creativity focus in education, the first having occurred in the 1970s.

[2] It is worth noting here that while my personal experiences with creativity (and those of many of my students) are very linked to artistic endeavours, the two are not synonymous. My thesis will present a definition of creativity that acknowledges this distinction, and actually highlights some of the problems with conflating art and creativity.

And while I know that this is not true for all of my students (many of them do leave feeling happy and confident and creative, and some even leave to become teachers themselves), I also know that our system can do a better job of supporting the creativity of our students. We need to begin asking questions and seeking answers:

- What happens in students' educational experiences to turn imaginative and playful children into young adults who feel burdened by conformity and finding right answers?

- Why do bright and creative young students feel disengaged and frustrated by traditional educational structures?

- What happens in school to limit students' creative dispositions, such as their willingness to take risks and be open-minded?

In my preliminary research of these questions, I spoke with several former students about their experiences with creativity in our educational system. Three students particularly stand out in their answers. The first is Jane. Jane was a high-achieving student in school. She is enthusiastic about learning and confident in her abilities, both academic and creative; in fact, she is currently studying to be a Drama teacher. In her spare time during her K-12 years, she danced, and performed in drama productions, and she was often praised for her artistic-creative talents. Jane expressed that this praise probably contributed to more creative success for her: "people who are told they are creative do more creative stuff, then are told they are creative for doing it. It's a cycle." Doug is a stark contrast to Jane, expressing a strong dislike of school and a feeling like he always did poorly in everything except physical education. Despite pursuing many creative endeavors in his spare time, such as writing rap songs and developing

skateboarding tricks, Doug adamantly maintained that he is not creative. When asked how he arrived at this conclusion, he said that it was because of negative feedback from teachers, particularly in the form of low grades on his writing. I believe that it is not a coincidence that the creative self-perceptions of these two individuals were reflected in their academic achievements and attitudes. Finally, Gwen presented a different dynamic all together. Coded as "gifted and talented", Gwen was always an extremely high achieving student, earning top marks in Advanced Placement courses and often winning academic awards. Gwen described herself as very creative, pursuing graphic design as a career path. Unlike Jane though, Gwen hated school. She felt limited, unappreciated, undervalued, and drained. She said that she approached school like a game: how could she earn high marks without really caring? What went wrong in their education to make both Doug and Gwen dislike school?

Creative self-efficacy has been linked to creative productivity, with a particular impact on creative dispositions, such as risk-taking, motivation, and open-mindedness (Tierney & Farmer, 2002; Mathisen & Bronnick, 2009; Beghetto, 2006; Beghetto, Kaufman & Baxter, 2011). It is my hypothesis that creative self-efficacy is the missing answer to the questions of how our educational systems affect students' creativity. I predict that many of our current educational and assessment practices can do damage to students' creative self-efficacy, and that this in turn has negative repercussions on their creative and academic achievement, as well as their perceptions about the institution of schooling. In my research, I sought to gain a deeper understanding of the relationship between creative self-efficacy and the process of creativity, as well as the effects that our current educational system has on students' creative self-efficacy.

In my thesis, I will begin by defining creativity, based on a review of the literature, which I have developed into a construct model illustrating the creative process. My construct model (which will later be explained and defended in greater detail) demonstrates an understanding that creativity is a complex process that (a) exists within a conducive environment, (b) requires set of unique skills and dispositions, and (c) results in a product that is novel, valuable and useful. It also considers that creativity can be both domain-general and domain-specific. Finally, it highlights the idea that creative self-efficacy is linked to creative productivity, as it affects creative dispositions and skills.

I will then outline and defend my research process, which includes arts-based and case study methods, under a qualitative research framework. For my research, I engaged five recent graduates in questionnaires, interviews, and a playbuilding process, which allowed them to express their ideas and experiences through dramatizations and discussions. It should be noted here that while I use the arts to explore creativity, I have made a distinction between being creative and being artistic. This distinction is presented in my creativity construct model, explored in my research, and discussed in my findings and implications.

Lastly, I will present my findings through participant profiles, and descriptions of their dramatizations and playbuilding. These findings are then discussed and analyzed, connecting back to my construct model, and exploring emerging themes and implications for practice.

The Importance of Creativity in Education

The call for creativity in schools is not new. Over a century ago, Dewey (1897, 1934, 1938) argued that education should stem from the creation of students'

experiences. He stated that "true education comes through the stimulation of the child's powers (Dewey, 1897, p. 1). Similarly, in 1929, Whitehead contended that:

> Culture is activity of thought, and receptiveness to beauty and humane feeling. Scraps of information have nothing to do with it…What [education] should aim at producing is men who possess both culture and expert knowledge in some special direction. Their expert knowledge will give them the ground to start from, and their culture will lead them as deep as philosophy and as high as art. (p. 1)

These authors both highlight the belief that profound learning occurs when students' creativity is engaged, and that creativity should be an essential component of the educational system. Current educational reforms also highlight the pressing need for creativity in schools: "Three great aims for 21st century education appear in policy statements worldwide: cooperation, critical thinking, and creativity" (Noddings, 2013, p. 210). Currently in Alberta, "creativity and innovation" is one of eight mandated competencies, which are defined by Alberta Education (2016) as "combinations of knowledge, skills and attitudes that students develop and apply for successful learning, living and working. They emphasize aspects of learning that apply within and across all subject areas". In my review of the literature on creativity, I found that "creativity is increasingly recognised as a valuable asset for individuals in their daily problem solving and their professional careers, that contributes to personal and societal development" (Barbot, Besançon, and Lubart, 2015, p. 371). I have synthesized the rationales for the importance of creativity in education into three primary benefits: (1) personal and individual development, (2) social and economic progress, and (3) increased academic skills and knowledge.

Creativity as Human Development

One significant rationale for the importance of creativity in education is the profound impact that it has on the development of the individual and on humanity. "One of the defining characteristics of human beings is that we create…We have a need to make sense of the world and our experience, and we shape our understanding into culturally significant forms" (Bailin, 2015, p.2). In his "A Call to Action: The Challenges of Creative Teaching and Learning", Sawyer (2015) outlined creativity's history with education. He articulated "the importance of creativity to individual fulfillment and to society—not only in childhood, but also throughout the lifespan. Humanist psychologists argued that creativity was the fullest realization of the human spirit, a fulfilling peak experience" (Sawyer, 2015, p. 2). Henriksen and Mishra (2015) also explained the significance of creativity to the individual: "As a trait, it is associated with social, emotional, cognitive, and professional advantages in life, and is considered to be one of the most highly coveted qualities of thinking" (p. 2). This creative thinking and expression is therefore important to foster and develop in our students. Creative experiences allow students to explore themselves and their world in personally meaningful and significant ways. In two recent articles, Kaufman explored the lasting benefits of creativity on the individual: "everyday creative people are less stressed, happier, more successful, and more satisfied with their jobs" (2018b, p. 734). He explained that creative endeavours can affect how an individual finds meaning in their life by connecting them to their past, present and future:

> The past pathway of creativity helps someone make sense of one's past. It
> encourages a deeper understanding of one's life. The present pathway of

creativity engages one in life, offering reminders of enjoyment and connections

with others. The future pathway of creativity speaks to people's desire to live on

after death, suggesting ways to connect with future generations. (Kaufman,

2018b, p. 743-744)

Kaufman also explained that these benefits carry through to adulthood. He articulated that

"if creativity is not nurtured in school at the K-12 and collegiate level, then it will be

much less prevalent in adults" (2018a, p. 3).

Creativity as a 21st Century Skill

Another justification given for the need for creativity in schools is its potential for

future relevancy, both for the individual, and for the greater world. Sir Ken Robinson

continues to "[make] the case for creativity as *the* crucial 21st century skill we'll need to

solve today's pressing problems" (Azzam, 2009, p. 22). Bailin (2015) elaborated that "We

are facing new challenges in virtually every area of human endeavor…The problems and

challenges are diverse and pressing. What do we believe is required in order to address

them? Creativity" (p. 1-2). The argument here is that as the world becomes increasingly

complex, content knowledge will not be enough for individuals to find answers—they

will need to think creatively to generate ideas and complex solutions. Additionally,

creativity is considered to be essential for individuals to thrive in a rapidly changing

world and economy. Sawyer (2015) summarized several international and American

reports:

These reports emphasize the economic demand for creativity, particularly in

STEM disciplines, and argue that schools must play an essential role in building a

more creative and innovative economy. Schools today should prepare students to

go beyond what they have learned and to think creatively with the knowledge they

have acquired. (p. 3-4)

Sawyer went on to conclude: "We have today a historically unique alignment across a

broad spectrum of society, and across a broad range of ideological stances…We need

more creative graduates—for the economy, for a functioning democracy, and for human

fulfillment" (p. 4).

Creativity as an Academic Skill

Lastly, the importance of creativity in education is reasoned through its impact on

student achievement. Creative engagement with content knowledge has the power to

deepen students' understandings and make the material more relevant. Jeffrey (2006)

reported that for his participants, "the main characteristics of creative learning were the

grasping of opportunities to engage in intellectual enquiry, the possibility to engage

productively with their work or activity and the appreciation shown for reviewing both

product construction and processes" (p. 407). Additionally, teaching for and with

creativity helps students to develop skills and attributes that facilitate learning. "Not only

can teaching for creativity improve student understanding of course content, but it also

prepares students for the application of learning objectives across domains" (Luria,

Sriraman and Kaufman, 2017, p. 1033). Sawyer (2015), echoed that in his assertion that

creative opportunities in school "result in enhanced cognitive skills (including enhanced

creativity) that then transfer to other content areas, resulting in enhanced learning in all

content areas" (p. 5). Therefore, it is clear that creativity should be fostered and nurtured

in school, across all grade levels and subject areas.

Defining Creativity

Creativity is difficult to define, and doing so can be problematic. This is largely because it is a topic that is personal, broad, and (at least partly) domain-specific.

Personal and Societal Context

Firstly, the word creativity brings with it much personal significance and weight. As illustrated in the examples of the students above, most people have had some experience being labelled as creative or not, which can have a profound impact on their self-perceptions. The word creative alone can cause flashbacks to the D you got in art, or the "most creative" award you got in the science fair. Further, when it is misinterpreted in a societal context, creative can actually be seen as an undesirable trait because it implies different: "Creativity often is viewed as simply as that which is unique, out of the ordinary, bizarre, or deviant…[it] can become a euphemism for negative, undesirable traits" (Beghetto, 2005, p. 256). In education, creativity can be misinterpreted as fluff or non-essential, and creativity criteria can include putting glitter on a poster or tea-staining a piece of paper to make it look old. These perceptions often arise from an incomplete understanding of creativity, such as an over-emphasis on product or a misunderstanding of domain-specificity. These concerns will be addressed as I further explain my construct of creativity.

Broadness

Another hindrance in defining creativity is how much it can encompass. One can be creative in their artistry, or creative in their ability to make money. The word creative can be applied to a person, a product, an idea, a place, or even a process. My answer to this problem is simply "yes". Creativity does encompass all of these factors, and is in fact

an interaction of many of these. Plucker and Beghetto define creativity as "the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context" (J. Plucker, 2004 as cited in Beghetto, 2005). In order to understand creativity, one must have a robust definition that includes all of these components. To leave any of them out, as people so often do when making self-judgements, can cause deeply negative repercussions on individuals' creative self-efficacy.

Domain-General or Domain-Specific or Both?

Historically, creativity was considered to be its own distinct skill or set of skills. A person was either more creative or less creative. This approach led researchers to believe it could be measured isolated from content or context. One predominant example of this was the Torrance Tests for Creative Thinking: "For much of the twentieth Century, creativity was assumed to be domain-general. For example, the most widely used test of creativity, the Torrance Tests of Creative Thinking, with its verbal and figural forms, assumes that divergent thinking ability is domain-general" (Plucker & Zabelina, 2009, p. 6).

More recently, research has been focused on creativity as domain-specific. This research argues that a person can be creative in one subject area and less creative in another. Baer (2016) summarized that "research looking at actual creative performance has consistently shown that creativity in one domain does not predict creativity in other domains" (p. 11). Each of these creative areas, then, comes with its own set of knowledge, skills and dispositions. Ignoring or misunderstanding this possibility can actually have consequences in how an individual sees himself (or others) as creative. For

example, one of my classmates has had a difficult time seeing himself as creative because he is not artistically inclined. What he had not considered was that he could be creative in other ways (such as problem-solving or communication), and that one domain was not indicative of an overall ability.

Recent work done by Baer, Beghetto, Kaufman, Plucker and others has suggested that this distinction is not so clear. They assert that there are some factors, skills and dispositions that are universal to creativity *and* there are some that are domain-specific, and that, when discussing creativity, we must consider both. Baer and Kaufman (2005) acknowledged this possibility:

> Certainly some kind of middle ground must be possible. Even those who argue for the existence of domain-general creative-thinking skills recognize that domain-specific thinking skills also play an important role in creative thinking… and domain theorists acknowledge that there are some general skills that play a role in all creative endeavors. (p. 159)

They presented the Amusement Park Theoretical model of creativity to "[bring] together domain-general and domain-specific components of creativity in a way that demonstrates how those factors overlap to varying degrees in a kind of nested hierarchy" (p. 159). They compare creativity to amusement parks in that there are some elements that are universal, and some that are more specific:

> First there are *initial requirements* (intelligence, motivation, and environment) that must be present at some level for all creative work - much as you need certain basic requirements in order to go to an amusement park (e.g., transportation, a ticket). Next, there are *general thematic areas* in which someone could be

creative (e.g., the arts, science); this level is the equivalent of deciding which type of amusement park to visit (e.g., a water park or a zoo). The next level focuses on more specific *domains* — within the general thematic area of "the arts," for example, could be such varied domains as dance, music, art, and so forth. Similarly, once you have selected the type of amusement park you want to visit, you must then choose a particular park. Finally, once you have settled on a domain, there are *micro-domains* that represent specific tasks associated with each domain - much as there are many individual rides to select from once you are at an amusement park. (p. 159)

In summary, they suggest that there are universal initial requirements (skills or dispositions) that relate to all creative thinking, then it breaks down into domains, each with their own differing skills. These levels can break down even further, into more precise areas.

The value of this approach to creativity is that it not only acknowledges both sides of the debate, but it unifies them. Creativity is both general and specific. This has excellent implications for our educational system, which itself attempts to first educate students generally (elementary school) and then in more depth with specific subject areas (high school and university). Applying this model to teaching would help us realize that creativity education should occur at all levels and in all areas. Further, this understanding can help us to support our students' creative self-efficacy by realizing specific strengths and then applying them backwards to a more general level. As such, this theoretical model has formed the basis of my working definition of creativity, as outlined in my construct model.

Creativity Construct Model

In order to develop what a clear understanding of creativity is, I engaged in a review of approximately fifty articles and four books on creativity, creativity in education, teaching creativity, assessing creativity, and creative self-efficacy. As I read, I recorded the environmental factors, skills, dispositions and related concepts that each source articulated as being a component of creativity. I then identified the most prevalent ones, as well as their relationships with each other. I have synthesized these into a model that illustrates the relationships between the different components (see Figure 1).
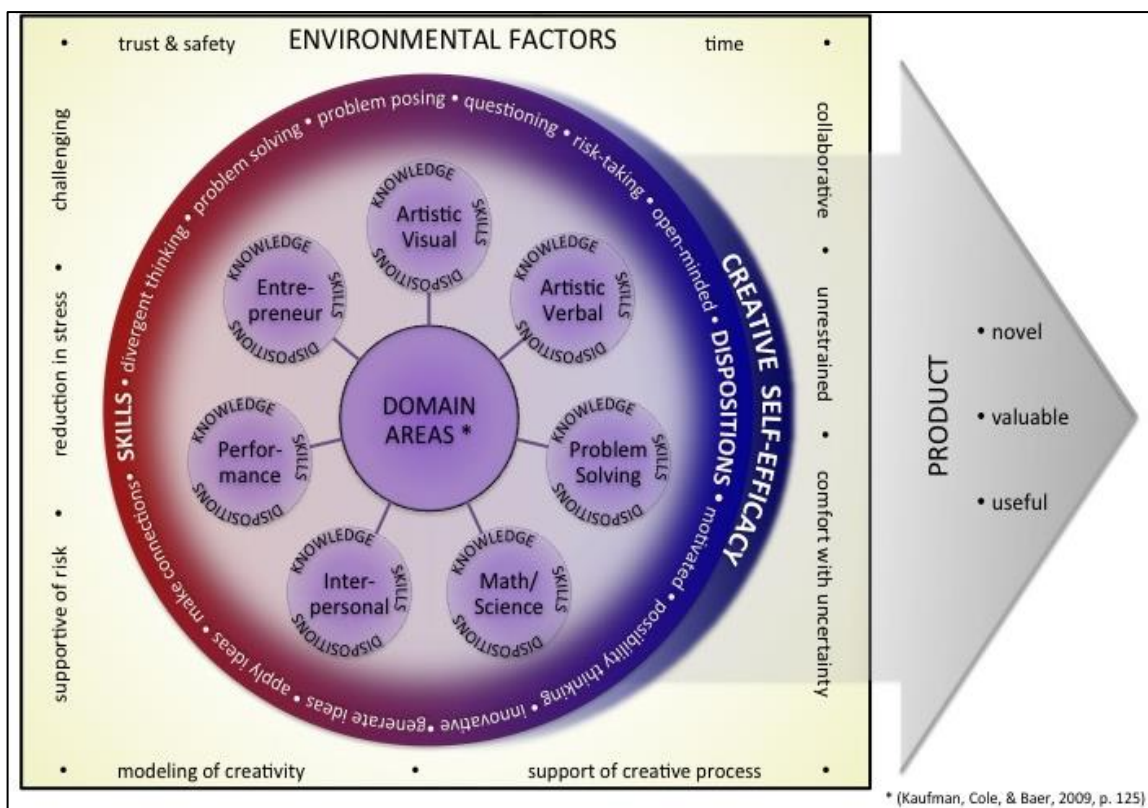
Figure 1. Creativity construct. This construct illustrates the relationships between the components of creativity.

I found a general consensus that creativity is a process that occurs within a conducive environment, by an individual (or group of individuals) who possesses an

interrelated set of skills and dispositions. These skills and dispositions first exist in the general, and then are broken down into specific, independent domain areas. Further, these dispositions are impacted either positively or negatively by their relationship with the individual's creative self-efficacy. All of these factors together contribute to the creation of a product that is novel, valuable, and useful.

Environmental Factors

A positive and supportive environment, though not an absolute predictor of success or failure, is an important component of the creative process:

> A person who grows up in a culture or in a family in which creative thoughts or actions are not encouraged (or are even punished) will have a harder time being creative. Similarly, a person living or working in an environment that is supportive of original thought is more likely to be creative than a person in an environment that discourages such thought. (Baer & Kaufman, 2005, p. 160)

With regards to education, both the classroom atmosphere and the teacher's attitudes and dispositions have a profound effect on students' creativity: "True creativity requires specific classroom designs and teacher behaviors; the teacher's role is a facilitator and fellow collaborator, joining the students in a process of knowledge building" (Sawyer, 2015, p. 10). I have compiled a list of the ten most commonly articulated factors that support and develop creativity. These come primarily from the reviews of Sawyer (2015), Davies et al. (2013), and Barbot, Besançon, and Lubart, (2015). These are indicated in the yellow box on my construct, indicating that they surround the creative process.

The role of the teacher. The first five factors relate to the teacher's role in fostering creativity: the tone that she creates in her relationships with students, and her dispositions and values that she makes clear in her daily actions. These factors are:

- establishment of trust and safety,

- supportiveness of risk,

- supportiveness of process,

- comfort with uncertainty, and

- modeling of creativity.

The establishment of an environment where students can trust their teacher and peers, and feel physically, emotionally, and psychologically safe is imperative to their willingness to take risks: "The provision of 'safe' structure appears to be particularly important to enable pupils to take risks, to think creatively and critically, and to question" (Davies et al., 2013, p. 85). Participating in the creative process requires vulnerability, as emotions and ideas are exposed. Further, some element of failure is often part of the process, allowing for learning and growth; if this failure is ridiculed or judged, it can hinder the student's willingness to take future risks.

A focus on process is equally important, as it validates the idea that creativity takes time and effort. Davies et al. recommended that teachers "focus upon the processes of creative skills development rather than outcomes, as review evidence suggests that external pressures in terms of achievement or exhibition deadlines can tend to distort creative relationships in the classroom and hence disturb creative learning environments" (2013, p. 89). A judgement (either external or self-imposed) of a students' creativity based only on product, disaffirms the significant and often fragile process that has gone

into creating that product. Part of this process is the willingness for both the teacher and students to live in a place of uncertainty, as creativity often stems from the attempt to problem-solve or meet a complex task. This means that the answers are not always known in advance, and that the process cannot always follow a prescribed or predetermined pathway. This can be intimidating for teachers in particular, who may need to give up control and absolute knowledge.

Finally, the modelling of creativity by the teacher communicates to the students that creativity is valuable, and that the risk and effort is worthwhile. Henriksen and Mishra (2015) highlighted the importance of modeling: "The teachers who motivate creativity in their students also modeled creative or divergent thinking themselves" (p. 3). This creative teaching allows students the space to be creative, as well as the inspiration to challenge their thinking and take creative risks.

Classroom designs. The remaining five environmental factors relate to the overall structure of the classroom. Places and situations that encourage creativity typically:

- allow for enough time,
- are unrestrained,
- are challenging,
- reduce stress, and
- encourage collaboration.

In order for the creative process to function at its best, it must be allowed the time and space for the 'incubation' of ideas (Davies et al., 2013; Sawyer, 2015). Students must be offered enough time to think in a complex way, to explore possibilities, and to revise and

polish their ideas and products. Additionally, they must be allowed to do so in an environment that is as unrestrained as possible, allowing for divergent thinking. and opportunities to explore. Creating environments that are both challenging and stress-reduced is somewhat of a paradox. Challenge is essential to the creative process because it forces problem solving and effort. Where the reduction in stress needs to occur is in the security in the process discussed above, and the allocation of time and support. Lastly, an environment that is collaborative can help to nurture students' creativity by exposing them to different viewpoints, challenging preconceptions, and encouraging greater questioning as part of the process. Sawyer's work (2006; 2015) has stressed the importance of collaboration in the creative process, going so far as to argue that "all creativity is an emergent process that involves a social group of individuals engaged in complex, unpredictable interactions" (2015, p. 18).

Skills and Dispositions

On a general level, creativity requires the use of a number of skills and dispositions of the individual or group engaged in the process. In my construct model, I have identified the twelve most predominant skills and dispositions discussed in the literature. These are indicated in the blue and red
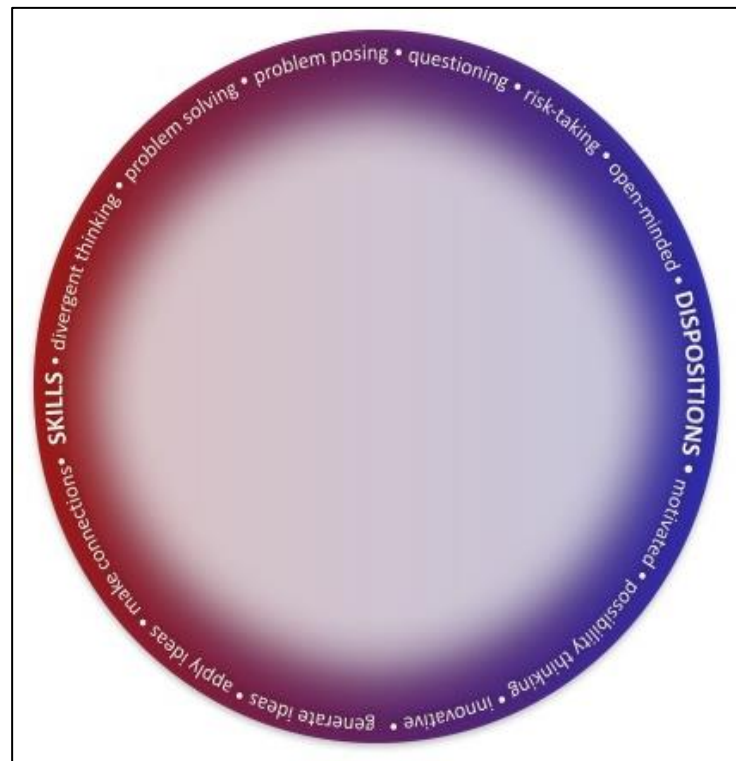
Figure 2: Creative Skills and Dispositions

circle. These skills and dispositions are the ones that exist across domains, though in an individual, they may be stronger in one area or another.

Dispositions. Creative people tend to think and act in a particular way. The thinking dispositions associated with creativity are being innovative and open-minded, as well as possessing the ability to think in possibilities. Often used synonymously with creativity, innovativeness centers around being new and different; an individual who is innovative would be adept at coming up with original ideas and thinking in unique ways. Being open-minded is an important disposition for creativity because it encourages multiple approaches or answers, drives the thinking process and progress, and facilitates collaboration with others. Possibility thinking, a term coined by Craft and Jeffrey, "encompasses an attitude, which refuses to be stumped by circumstances, but uses imagination, with intention, to find a way around a problem" (Jeffrey, 2006, p. 407). This is a significant component of creativity, because it encourages perseverance and divergent thinking, and can lead to novel products or ideas.

The behavioral dispositions of creative individuals include taking risks, questioning, and being motivated. A highly creative individual must be willing to take risks, as creativity demands vulnerability, and involves probable failure as part of the process. Further, creativity requires a questioning disposition; one cannot seek to find answers without first acknowledging that there are many questions. Lastly, the creative process functions best when an individual is highly motivated. The time, effort and risk required to create something new can be challenging and frustrating, and intrinsic motivation helps individuals to overcome these obstacles.

Skills. In addition to personal dispositions, creativity demands a particular set of related skills. These can be divided into those relating to ideas and those related to problems. The creative skills of ideas include being able to generate ideas, apply ideas, and make connections between ideas. Being able to come up with many ideas is clearly a skill helpful in creating; however, creativity also requires the ability to draw links between original and learned ideas, and to apply these ideas to tangible production. The skills relating to problems include problem posing, problem solving, and divergent thinking. Problem posing is similar to the disposition of questioning, but goes further to include the skill of being able to turn those questions into real and solvable problems. Problem solving would then be the skills used to come up with complex answers. Finally, divergent thinking "is essential for creativity because generating numerous ideas and considering alternative pathways of research increase the probability of finding an original and adapted idea" (Barbot, Besançon & Lubart. 2015, p. 375).

Domain Areas

As previously discussed, it is largely agreed upon that at least some aspects of creativity are domain-dependent, and that the specific knowledge, skills, and dispositions of a particular creative domain are not necessarily transferrable to or indicative of another domain (Baer & Kaufman, 2005; Kaufman, Cole & Baer, 2009).

* (Kaufman, Cole, & Baer, 2009, p. 125)
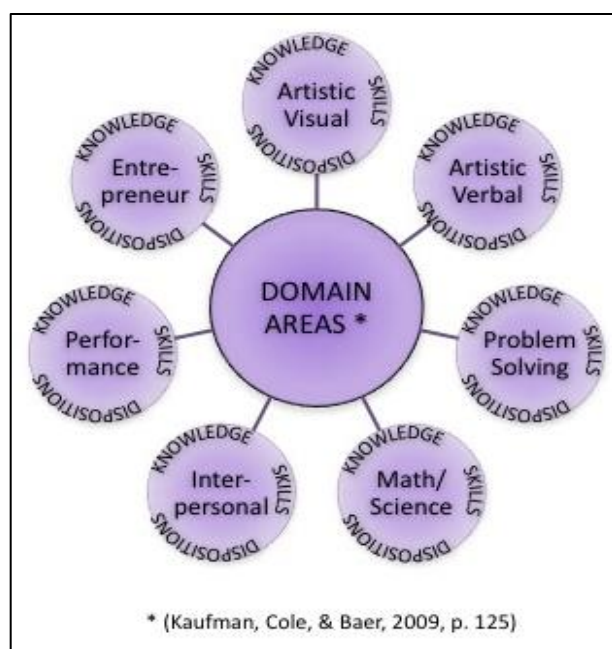
Figure 3: Creative Domain Areas

The seven domains that appear in my construct (indicated in purple) come from the work of Kaufman, Cole, and Baer in "The Construct of Creativity: Structural Model for Self-Reported Creativity Ratings (2009). Their "results and analyses…lend support to a model with seven General Thematic Area factors: Artistic-Verbal, Artistic-Visual, Entrepreneur, Interpersonal, Math/Science, Performance, and Problem-Solving" (p. 128). The placement of these domain areas in my construct model is intended to illustrate (a) that they exist *within* a common set of skills and dispositions, and a similar conducive environment; and (b) that, at this level, each domain occurs separately from one another. Acknowledging this placement and division of the specific domains is important in understanding creativity; however, for the purposes of this research, I will be refraining from elaborating on the details of specific areas. Rather, I will focus generally on how the existence of the separation affects an individual's creative self-efficacy. That is, do individuals take into account the different domain areas when determining their creative self-perceptions, or is their creative self-efficacy more domain-general? Do certain domain areas affect creative self-efficacy more than others?

Product

It is widely agreed upon that the creative process must result in the creation of a product, whether it is either a tangible object or something more abstract, like an idea or an experience. I have synthesized creative research to describe this product as something that is novel, useful, and valuable. The creation of something new or different is perhaps the most obvious definition of creativity, but many researchers have pointed out
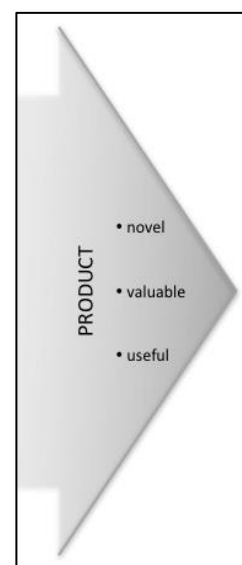
Figure 4: Creative Product

that this alone is not enough. Plucker and Beghetto articulated "that which is novel but has no use, merit, or significance is simply novel, not creative. Likewise, that which is useful but is not novel, unique, or original is simply useful, not creative" (as cited in Beghetto, 2005, p. 256). I have also added the criteria of valuable, because:

> A creative innovation also has to be significant or valuable in some respect. Something that is merely new but is not of value will be either trivial or bizarre…The challenge is to come up with something that is both new and of value in terms of meeting a need, solving a problem, or making a contribution to the context. (Bailin, 2015, p. 7-8)

It is important to qualify that the assessment of the criteria of value is not based on economic or monetary factors, but is rather context-dependent, meaning that the value and worth of a creative product should be measured in terms of its intended use, and within its own field. For example, the value of an entrepreneurial creative product might be measured in terms of its contribution to economic progress, but an artistic creative product might be measured in terms of its contributions to the aesthetic experience of the individual. Both of these measures are equally valuable, and their context-dependent worth must be respected and judged for its own merits. Further, the uniqueness, value and worth is also dependent on the creator and social context, especially in an educational setting. An idea or product might not be new to the greater world, but still be new to the student, and should be considered in that way. Beghetto (2005) gives the example that "an eighth-grader's poem, though not demonstrating the same level of creativity as Emily Dickinson's poems, certainly can be considered creative, i.e., novel and appropriate within the context of her language arts class, her school, state, and even beyond" (p. 255).

This attention to context is especially important when judgements are being made about an individual based on his final product.

The placement of product in my construct, indicated in the grey arrow, is an important consideration in a classroom setting. Many teachers focus their assessment and evaluation practices on product only, which occurs at the end of or after the creative process. For example, the teacher asks the students to create a project, piece of writing, or answer to a complex problem; they then assess the product and arrive at a grade. This practice can be problematic because it de-emphasizes and de-values the learning and creative processes, which can lead to a cyclical, self-fulfilling prophecy, and a decline in creative self-efficacy. If a student bases her beliefs about her creativity based on a judgment of a final product only, she can mistakenly extend these beliefs to the process, feeling like she is incapable of taking risks, solving problems, innovating, being motivated, etc. This can then lead to an actual decrease in creative productivity. As teachers, we must be careful not to undermine essential learning skills by over-emphasizing the summative product, instead including formative assessment practices to honor and foster the creative process.

Creative Self-Efficacy

Self-efficacy centres around the beliefs that an individual has about himself, and how much this belief predicts success or failure in a particular area. "Among the mechanisms of human agency, none is more central or pervasive than beliefs of personal efficacy. Whatever other factors serve as guides and motivators, they are rooted in the core belief that one has the power to produce desired effects" (Bandura & Locke, 2003, p. 87). High creative self-efficacy has been linked to a willingness to take risks, as well as

has significant ties to motivation.
This is why my model places
creative self-efficacy surrounding
the creative dispositions: the
dispositions are most directly
affected by the individual's self-
perceptions.

      Motivation and
determination. One of the
primary ways that creative self-

Figure 5: Creative Self-Efficacy

efficacy can improve creative productivity is in its ties to motivation and determination.

Creative endeavours demand the individual to take significant personal risk, be

motivated, and persevere through challenges and set-backs. "Innovativeness requires an

unshakable sense of efficacy to persist…when they demand prolonged investment of time

and effort, progress is discouragingly slow, the outcome is highly uncertain, and creations

are socially devalued when they are too incongruent with pre-existing way" (Bandura,

1997 as cited in Mathisen & Bronnick, 2009, p. 21). Individuals with a strong belief in

their own creative abilities are more willing to accept these challenges initially, and to

continue on, even when the task is difficult. In their study on the effects of creativity

training on creative self-efficacy, Mathisen and Bronnick (2009) found that "after

participants have become convinced that they have the necessary skills and knowledge to

be creative, they persevere when meeting difficulties. In addition, they may quickly

recover from setbacks, a behavior that is at the core of the self-efficacy concept" (p. 27).

They went on to elaborate that "students' belief about their ability to act creatively influences whether they even attempt to behave creatively, how much effort they are willing to use, and how long they persevere in the face of difficulty" (p. 28). These positive motivational implications reinforce the cyclical and self-perpetuating influence of creative self-efficacy on creative achievement. The stronger one's beliefs about their creativity, the more they will attempt and persist in creative experiences, which should, in turn, build their creative self-perception.

Growth mindset. Another area where creative self-efficacy seems to have an influence is with regards to the individual's mindset, and whether or not he believes that creativity can be learned or developed. "The myth that one has to be born creative (a fixed mindset) is one of the most detrimental and harmful beliefs if one wishes to enhance creative performance" (Puente-Díaz & Cavazos-Arroyo, 2017, p.2). Essentially, if an individual believes that he can improve his creative abilities (a growth mindset), he will be more inclined to engage in creative pursuits; however, if he believes that creativity is determined or fixed, he will be less willing to participate in the creative process. In their study on creative mindsets of college business students, Puente-Díaz and Cavazos-Arroyo (2017) found that "believing that creative skills can be developed is positively related to students' efficacious beliefs about their ability to produce novel and useful ideas" (p.9). Therefore, it can be seen that creative output is not only influenced by an individual's beliefs about his current level of creativity, but by his beliefs about his potential growth and improvement in creative skills.

Classroom implications of creative self-efficacy. Because of its potential to affect students' creative achievement, the relationship between schooling and creative

self-efficacy is important. In their study "Answering the Unexpected Questions: Exploring the Relationship Between Students' Creative Self-Efficacy and Teacher Ratings of Creativity" (2011), Beghetto, Kaufman and Baxter looked at some of these relationships, and found two primary areas of concern, both with deep educational implications. Firstly, they found that students' creative self-efficacy declines as they age. "Declines in self-perceptions of creative ability can have important implications for the development of creative potential and provide additional empirical support for long standing concerns about the potential for school to have a suppressing influence on student creativity" (p. 347). Secondly, they found that students underestimated their creativity in both math and science: "Self-judgments that underestimate ability can be particularly problematic… regardless of actual ability, when people don't believe they have the capacity to perform a particular behavior they will be less likely to try, sustain effort, and, ultimately, fulfill their potential" (p. 347). Both of these findings highlight the potentially fragile nature of students' creativity in the face of systemic educational pressures, and the need for educators to understand how to foster and develop students' creative self-efficacy as a way to improve creative output.

Studies have also indicated that teachers have the ability to foster and develop creative self-efficacy, both in their teaching and assessment practices. Mathisen and Bronnick (2009) suggested that teachers "can boost students' creative self-efficacy when providing enactive mastery experiences, vicarious experience observing the educator or other participants using creative tools successfully, and verbal persuasion where students are convinced that they possess the capabilities needed in order to act creatively" (p. 28). Beghetto (2006) reported that "teachers can boost students' creative self-efficacy by

providing supportive feedback. This finding offers additional substantiation for the assertion that efficacy beliefs are related to ability-related feedback from authority figures" (p. 454). Overall, my review of the literature indicated that educators can best support students' creative self-efficacy by setting up classroom environments that encourage and model creativity, allowing for growth and mastery learning experiences, and providing rich and specific feedback.

Fundamentally, individuals who believe that they are creative are more likely to engage in creative processes, and they are more likely to find success in these processes because they utilize the relevant dispositions. This success then further increases their creative self-efficacy, and drives a positive cycle of creative growth. Unfortunately, the opposite is also true: an individual with a poor creative self-efficacy will be less open to the skills and dispositions required for creative engagement, less motivated to participate in creative processes, and consequently less successful in creative achievement. This highly influential component of the creative process is one that we in the education system must be careful to protect in our teaching and assessment practices, as damage to a student's creative self-efficacy can unintentionally affect his or her process and product, both in the short and long terms.

Research Rationale

Creative self-efficacy has been shown to have an impact on creative productivity, particularly on the dispositions of risk-taking, motivation, and open-mindedness (Tierney & Farmer, 2002; Mathisen & Bronnick, 2009; Beghetto, 2006; Beghetto, Kaufman & Baxter, 2011). However, in my research, I wanted to move beyond a causal link to deepen my understandings of how this relates to what is happening in our K-12

schooling. This led me to the following research questions: What instructional and assessment practices are we teachers doing that might be damaging to students' creative self-efficacy? Conversely, what are we actively doing to *promote* it? And finally, how are these practices manifesting themselves in students' attitudes, behaviours, and productivity, especially where creativity is vital? What I intended to research was students' educational experiences, with regards to the impact of schooling on their creative self-efficacy. I aimed to identify environmental factors that contribute to creative self-efficacy, whether positively or negatively, and to determine the impacts of commonplace educational practices (such as standardized testing) on creative self-efficacy. Finally, I sought to explore the short and long term effects of these experiences on students' actual creative output.

Many of the studies that I looked at regarding creative self-efficacy focused on large-scale findings, intended to prove the link between creative self-efficacy and product. They primarily used surveys as a method to determine students' attitudes and behaviours. While these were effective in determining causality, what they lacked, in my opinion, was a holistic and comprehensive picture of the relationship and its effects on the individual. Further, they did not fully address the experiences and the *whys* of the findings. Instead, I looked at a much smaller sample size in order to develop a deeper and richer understanding of the issues at hand. Under the qualitative research framework, I used a qualitative-oriented mixed-methods approach, blending case study and arts-based methods. My specific methods are explained in the next section, "Research methods and Procedures".

Qualitative Research

"Qualitative inquiry seeks to discover and to describe narratively what particular people do in their everyday lives and what their actions mean to them" (Erickson, 2018, p. 88). The main purpose of my study was to find a deep understanding of the complex issue of creativity in schooling, and the genuine experiences of individuals with regards to their creative self-efficacy. Therefore, a qualitative research framework that seeks to "develop a detailed understanding of a central phenomenon" (Creswell, 2015, p. 16) was a natural fit. Furthermore, my research was based more on determining *whys* and effects of the issues, rather than causality: therefore, "qualitative research is best suited to address a research problem in which you do not know the variable and need to explore" (Creswell, p. 16). The qualitative framework guided my design model, from the question through to the data analysis.

Primarily what made qualitative inquiry appealing to this research topic is that it allowed for openness and flexibility in the questions posed, as well as in the direction of the research process. Using a qualitative approach, I was able to "best learn from participants" (Creswell, 2015, p. 17) about their experiences with creativity and schooling. Qualitative research also left room for the research to develop and change organically through the process. "Knowledge is generated through the work. It is not always initially clear to the researcher in what ways knowledge might be generated" (Savin-Baden & Major, 2013, p. 290). In my research, I had no preconceptions about what participants might express about their experiences with creativity; the qualitative methods I used accommodated the flexibility to "go with the flow" or follow-up with insights as they emerged.

I chose a qualitative mixed-methods approach for my research as a way to seek a more complete and holistic understanding of the individuals and their personal experiences. Because data was pulled from a variety of procedures, it helped to ensure accuracy of my interpretations, as well as the accuracy of the self-reported interpretations of participants. My primary motivation for choosing mixed methods was triangulation in order to consider the "issue" of creativity "from (at least) two points or perspectives" (Flick, 2018, p. 798). Stake (2005) defined triangulation as "a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or interpretation… Triangulation serves also to clarify meaning by identifying different ways the case is being seen" (p. 454). This triangulation itself also became a source of data. By comparing information that arose from different sources, I was able to look for areas of what Mathison (1988) described as "convergence: when data from different sources…agree" (p. 15), versus areas of "inconsistency" or even "contradiction" (p. 15). This was significant, because I was looking at how individuals view themselves. Comparing their self-perceptions (indicated in questionnaires and surveys) to their actual behaviours (demonstrated by engagement in a creative process) indicated outcomes and issues regarding the accuracy of their self-efficacy.

Qualitative case study. Qualitative case study is a method of research that "draws attention to the question of what specially can be learned about the single case" (Stake, 2005, p. 443). This process is "humane" and "holistic" (Stake, p. 443), and seeks to find a thorough understanding of a particular case or cases. A case study approach worked best for my research because of its focus on the whole and on the complexity:

Qualitative researchers sometimes are oriented toward causal explanation of

events, but more often tend to perceive events as…multiply sequenced, multiply

contextual, and coincidental more than causal. Many find the search for cause as

simplistic. They describe instead the sequence and coincidence of events,

interrelated and contextually bound, purposive but questionable determinative.

(Stake, p. 449)

My research went beyond the more straightforward look at a causal relationship between

creativity and creative self-efficacy to determine the factors that *affect* the relationship.

Similarly, case study puts an emphasis on the reflective and participatory nature

of the researcher, which was at the heart of my research process. "Perhaps the simplest

rule for method in qualitative casework is this: 'Place your best intellect into the think of

what is going on.' The brainwork ostensibly is observational, but more critically it is

reflective" (Stake, 2005, p. 449-450). As my research was multi-modal and multi-step, I

had to constantly be engaged and process what occurred at each stage, looking for

connections and data throughout.

Arts-Based Methods. Arts-based research "use arts, in the broadest sense, to

explore, understand and represent human action and experience" (Savin-Baden & Major,

2013, p. 289), so it seemed a logical match to help understand students' experiences with

creativity and creative self-efficacy. My core reasons for choosing arts-based methods

were that these methods have the possibility to access the complexities of an issue, as

well as allow for a richer and more authentic means for the participants to express their

experiences. "Research as performance serves several purposes. First, the modality is

chosen when the artistic presentation of social life offers readers or spectators the most

credible, vivid, and persuasive representation of the research endeavor" (Saldaña, 2018, p. 679). Arts-based research can be broken down into "three main types…arts-based inquiry…arts-informed inquiry…[and] arts-informing inquiry" (Savin-Baden & Major, 2013, p. 293). The distinction between arts-based and arts-informed is in how each uses the produced art for research. Arts-based inquiry uses the process itself as research, whereas arts-informed inquiry uses the art to either represent the findings or the responses (Savin-Baden & Major, p. 293-295). In my research, I used both approaches, using the artistic process and the work produced as sources of information about participants' views of creativity.

It is a core belief of mine that the arts can express the deepest parts of human knowledge and experiences. "The arts are legitimate epistemologies—ways of knowing—that can offer insightful meaning into lived experiences" (Saldaña, 2018, p. 680). It is not uncommon for artists to learn about themselves and their own perceptions and emotions through the creation of some form of art. Art has the potential to unearth the complexities of human experiences and attitudes, which I believe was beneficial to my exploration of such broad topics as creativity and creative self-efficacy. "Arts-based research offers the layered versus the linear, the cacophonous versus the discursive, and the ambiguous versus the aphoristic" (Siegesmund & Cahnmann-Taylor, 2008, p. 232). When researching creativity and how individuals define themselves as creative beings, it would have been ineffectual to focus on the straightforward or general; it is a topic that demanded exploration of its own "messy" complexities.

A further reason for choosing an art-based approach was to honour the creative voices of my participants and to use the medium itself to help participants to actually

discover more about themselves and their experiences. "The medium of performance showcases and prioritizes the participant's voice…theatre and media are democratic forums for people from all walks of life to share their unique experiences and perceptions" (Saldaña, 2018, p. 679-680). It is my hope that participants were not just able to express their ideas more clearly using an artistic medium with which they are comfortable, but that they were able to actually gain personal insight and appreciation of their own artistic-creativity, and develop their understanding of creativity as a whole. "Arts-based inquiry uses art for personal exploration to make sense of an issue, concern, or medium. In this kind of arts-based research learning, research and personal exploration are seen as overlapping media and part of the artistic process and the research" (Savin-Baden & Major, 2013, p. 293). Along the same lines, engaging participants in an artistic-creative process gave me a chance to observe their creativity at work, allowing further insight into how they view themselves as creative beings. In this way, the artistic process itself, not just what is said, could be considered data.

Challenges to arts-based research. Because of its complexity and subjectivity, arts-based research comes with numerous challenges. My primary concerns were the conflict between process and product, the interpretation of the findings, and the cross-domain applicability.

A primary challenge to arts-based approaches can be an over-emphasis on product rather than process. "When using an arts-based inquiry approach, there is often a tendency to try to do too much or to become lost in the process" (Savin-Baden & Major, 2013, p. 294). Further to this, because there are products being created, there can be pressure to create something of quality or that is aesthetically pleasing (Eisner, 2008, p.

21). As a researcher as well as an artist, I was careful not to become over-involved in the process or let it get too big. Additionally, it was important to remind myself and the participants that the most important data came from the process and not the final product.

One of the major critiques of qualitative research is its potential lack of generalizability. However, this critique can also be seen as one of the strengths of arts-based research. Instead of seeking to be applicable in a variety of contexts, arts-based research strives for a sense of verisimilitude. Eisner described its generalizability model as one that is:

> Much closer to literature than to statistical analysis. It culminates in an icon that…edifies or illuminates. Great works of literature teach their lessons that go well beyond the particular circumstances they address. Their lessons are general…Perhaps the function of educational research is not to generalize, but rather to secure technologies of mind that will enable us to peer more deeply into situations that might not be the same as the one we study. (Eisner, 2008, p. 21)

In this way, arts-based research can be more persuasive than other quantitative or qualitative approaches because it is accessible and enlightening.

Another concern that I had throughout the process was that both my methods and participants focused more on a few of the creative domain areas (artistic, performance, and interpersonal), and that "creativity in one domain does not predict creativity in other domains" (Baer, 2016, p. 11). I do acknowledge that the arts-based methods only demonstrated participants' creativity in those particular domains; therefore, I was cautious not to judge their overall creativity based on the playbuilding day. That being said, the participants were still able to discuss their creativity in other domains through

the questionnaires, interviews and playbuilding; in these domains, the data was collected based on *what* they say. Furthermore, my creativity construct model, based on the work of Baer and Kaufman (2005), acknowledges that there are some components of creativity that exist across domains, such as environmental influences, general creative skills and dispositions, and the creation of a product. As these aspects were the primary focus of my research, the domain-specificity of my methods was less impactful.

Data analysis. The qualitative research framework also helped guide my data analysis and presentation. "In qualitative research, statistics are not used to analyze the data; instead the inquirer analyzes words or images…[and] analyzes the words to group them into larger meanings of understanding, such as codes, categories, or themes" (Creswell, 2015, p. 19). I worked with the data in a cyclical and reflexive manner. This is typical to the methods in qualitative casework, where data is "precoded but continuously interpreted…Records and tabulations are perused not only for classification and pattern recognition but also for 'criss-crossed' reflection. An observation is interpreted against one issue, perspective, or utility, then interpreted against others" (Stake, 2005, p. 450). During analysis of my data, I looked for trends and patterns between the observation of participants' behaviours against what they said. I also looked for understandings between participants, and across several different activities. By focusing on *understanding* the participants and the issues, rather than looking for statistics, I gained a more in-depth and holistic picture.

Participants

To recruit participants, I sent an information letter to high school teachers across two large, urban school districts, asking them to forward my invitation to participate to

recent graduates who had taken courses in Drama. Ten recent graduates responded, and five were selected due to their availability to participate during my data collection period. My participants were five recent graduates between the ages of 17-19. They all graduated from high school within the last year (either 2017 or 2018 graduates). This helped to minimize any ethical or conflict-of-interest issues that might have been present with current students. The participants all had at least some background with theatre and performance, either having been involved in school productions, Drama classes, or both. This ensured that they had comfort with drama as a medium for expressing ideas, as well as experience in playbuilding and performance.

Potential limitations of participant selection. I acknowledge that there might be some limitations to my selection of participants. Firstly, using a restricted sample size might be seen as a liability, as the results of my research might not be as generalizable or transferrable. This critique is common in qualitative research, and was addressed in Stake's chapter (2005) on case study:

> Still, even intrinsic case study can be seen as a small step toward grand generalization…but generalization should not be emphasized in all research. Damage occurs when the commitment to generalize or to theorize runs so strong that the researcher's attention is drawn away from features important for understanding the case itself. The case study researcher faces a strategic decision in deciding how much and how long the complexities of the case should be studied. (p. 448)

I viewed the case study approach as an opportunity to focus on individual experiences in greater depth. I chose to focus on a small number of individuals to determine the causes

and effects that can be found in their stories. While my findings might not be reflective of an entire population, they are truer to the individual experiences that they are telling, and valuable information could be gathered in that depth.

Secondly, that I only used students with a background in drama could be seen as a limitation. This, however, allowed me to find more concise connections in their responses. In this situation, I was less concerned with generalization and more with "cases that seem to offer *opportunity to learn"* (Stake, 2005, p. 451). Stake went on to state that:

> [His] choice would be choose that case from which we feel we can learn the most. That may mean taking the one most accessible or the one we can spend the most time with. Potential for learning is a different and sometimes superior criterion to representativeness. Sometimes it is better to learn a lot from an atypical case than a little from a seemingly typical case. (2005, p. 451)

Additionally, the importance of the need for comfort with the research format greatly outweighed the need for complete comprehensive representation.

Research Methods and Procedures

For my research, I engaged participants in a three-pronged, interconnected approach (see figure 6). The first phase of the research was focused on getting to know my participants. This started with each participant completing an introductory self-assessment questionnaire (see Appendix A), which was followed up with a one-on-one interview to seek clarification and detail. These two elements were used to gather a baseline of each participants' views of their own creativity, and how their creativity is

conveyed through the various skills, dispositions and domain areas. They also asked participants to reflect on environmental factors (physical, social, and emotional) that have affected their creativity during their schooling, as well as the importance of process and product to creativity. The
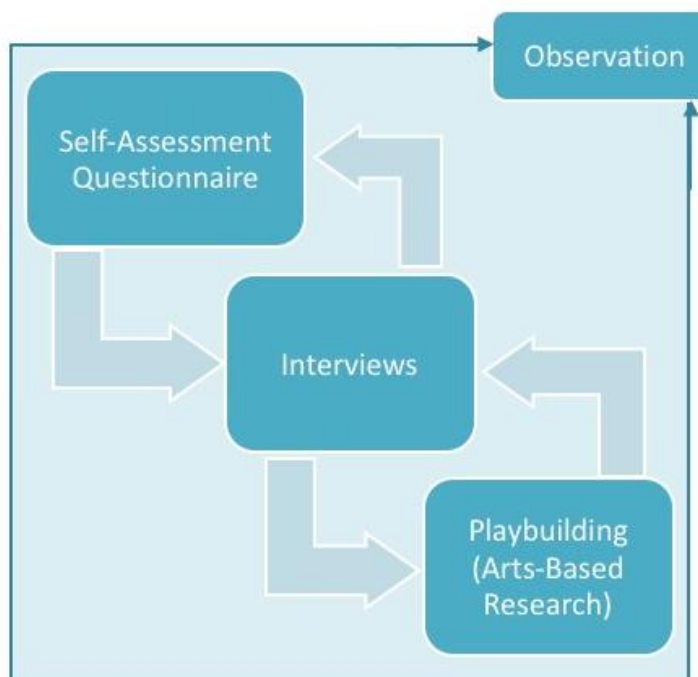
Figure 6. Research model: This model demonstrates my research process.

second phase was the playbuilding day, during which all participants came together to explore the themes and ideas of my thesis through the creation of scenes, and through group discussions. This culminated in the creation and rehearsal of a short play, which was performed and recorded. Following the performance, I conducted a group interview with the participants, reflecting on their experiences, and they individually completed an exit questionnaire (see Appendix B). Underscoring the entire process was my observation of the participants' behaviour while they engaged in a creative activity. This gave me the chance to see how environmental factors shaped their process, and how they utilized particular skills and dispositions. I was also able to identify any areas that made them uncomfortable or any areas where they demonstrated a natural strength and confidence. This contributed to my data by allowing me to cross-reference the participants' views of themselves as creative with actual evidence of them engaging in a creative process. These

methods were intended to triangulate how I collected data on each element of my

creativity construct. Table 1 shows how each element of my creativity construct was

explored in my research.

Table 1.

Map of Methods for Researching Creativity Construct

Construct Component	Intro Questionnaire & Interview	Playbuilding Day*	Observation*
Environmental Factors	Questions 4 & 5	Scenes Stories Play Planning Performance Group Discussions	Warm-ups Scenes Stories Play Planning Performance
Skills & Dispositions	Question 6	Group Discussions	Warm-ups Scenes Stories Play Planning Performance Group Discussions
Creative Self-Efficacy	Questions 2 & 3	Group Discussions Stories Play Planning Performance	Group Discussions Scenes Stories Play Planning Performance
Domain Areas • Artistic Verbal	Question 7	--	Interviews Scenes Stories Performance Group Discussions
• Artistic Visual	Question 7	--	--
• Problem Solving	Question 7	--	--

• Math/Science	Question 7	Scenes Group Discussions	--
• Interpersonal	Question 7	--	Warm-ups Scenes Group Discussions Play Planning
• Performance	Question 7	Play Planning Performance	Scenes Performance
• Entrepreneur	Question 7	--	--
Product	Question 1 Interviews	Group Interview	Play Planning Performance

Note: Dashes (--) indicate that no data was collected.
* The difference between Playbuilding Day and Observation is that Playbuilding is when the participants *explored* the component, whereas Observation is when the participants *demonstrated* the component.

Introductory Questionnaire and Interviews

The first step in my process was an introductory questionnaire, which participants completed via email, after participants consented to the research – see Appendix A for questions. This questionnaire, which was piloted by two different recent graduates, was designed to ask participants about their beliefs about creativity, their own creative abilities and aptitudes, and their educational experiences. The questions were linked to my creativity construct, asking them to consider environmental factors involved in their personal creative processes and education. I also had them rate themselves on key creative skills and dispositions, and their creativity in the specific domain areas, as identified in my construct. This questionnaire was important in determining participants' preconceptions about themselves and the topics being researched.

After reading their questionnaires, I met with each participant for a one-on-one interview, which I audio recorded. These were 45-60 minutes in length. During the interviews, I asked participants to elaborate on their answers to the questionnaire, and explain particular experiences and ideas. My goals with the interviews were to gain a deeper understanding of my participants, and to determine common *why*s and links between educational experiences and personal beliefs when it comes to creativity. The interviews were more conversational in format, and, rather than sticking to prescribed questions, I let the dialogue flow. Typically, my follow-up questions related to how certain experiences affected participants' views of their own creativity, and the effects this had on them personally. I also explored their views of the importance of the creative process versus product. Though I had initially asked participants to bring in an artifact from their K-12 schooling that represented their creativity, only one participant (Lucy) actually did.

The questionnaires and interviews gave me a deeper understanding of my participants, as well as the experiences and ideas they would be bringing with them to the playbuilding day. The information gathered is presented here in participant profiles.

Participant Profiles

In my research, I engaged five recent graduates, between the ages of 17 and 19. The participants all attended the same high school. The urban school they attended is quite large (a population of 1600+ students), and is known for its strong academic programming and success, balanced with competitive athletics and developed fine arts programs. Table 2 provides an overview of the participants' key demographics, as well as

their self-reported overall creativity (from question two of the introductory

questionnaire). All participants are referred to by pseudonyms.

Table 2.

Participants' Key Demographics

Participant	Age	Year Graduated	Extra-Curricular Activities	Overall Rating of own Creativity*
Ellie	17	2018	Acting, Directing, Improv	4
Zoe	17	2018	Acting, Directing, Costumes/Make-Up	4
Lucy	19	2017	Stage Management, Badminton, Peer Tutoring	1.5**
Anna	18	2017	Acting, Writing, Directing, Improv, Pole Vault	3**
Samantha	17	2018	Acting, Directing, Improv, Choir	4.5

Note:
* Rating is from the participants' introductory questionnaire. I translated this scale to a number point out of 5, with 1 being "not at all creative" and 5 being "extremely creative" (see Appendix A).
** Because Lucy and Anna graduated a year before this study was conducted, this score reflects what they said would have reported immediately following graduation.

The participants all knew each other beforehand, particularly through their shared

experiences in the theatre program. Additionally, Ellie, Zoe, and Samantha were in the

same class for Advanced Placement English for all three years; Lucy and Anna were in

the same Advanced Placement English class. Though the participants had much in

common, each brought with them a very unique set of experiences and perspectives.

These similarities and differences are explored in more detail, as I elaborate on each

participant individually.

Ellie. Ellie is a 17-year-old who just graduated from high school. During her time in high school Ellie was very involved in her school's theatre program: she acted in almost every play, and wrote and directed short plays in her grade 12 year. Ellie also did very well academically; she took Advanced Placement English and was her class valedictorian. In September, Ellie will be attending university, studying Drama and Education, pursuing her goal of eventually becoming a drama teacher.

In her questionnaire and interview, Ellie described herself as quite creative, and scored herself a four out of five on the overall creativity scale. She based this assessment on her successes in artistic pursuits, such as theatre, and her ability to express herself creatively. The factors that she felt made her less creative were that she does not see herself as "adventurous" and that she sometimes worries about other people's perceptions of her. Ellie scored herself quite high (fours and fives) on all of the creative skills and dispositions, with the exception of problems solving (three). However, when I asked her about that in the interview, she said she does feel more confident in her problem solving when she is doing something creative, such as theatre. In the domain areas, Ellie indicated a strength in verbal, interpersonal, and performance creativity. In her interview, I asked her why she only gave herself a four for performance creativity when she has been so involved in and successful in acting and theatre. She said that "it's not something that I think I'm perfect at". It is interesting to note that her initial assessment here was more based on the product (her acting ability), rather than the process. When I asked her to list the elements involved in the creative process of performance then rate herself on those, she gave herself a five.

One of her key factors in assessing her creativity has been her involvement in drama at school. She stated that in junior high school, she was lacking in confidence and was not comfortable expressing herself, but that doing drama in high school allowed her to develop those skills: "Before I started working on theatre productions, I was very shy and didn't feel comfortable expressing myself or displaying my individuality, and I think once I was introduced to theatre in school I allowed myself to grow creatively." She particularly commented that drama allowed her the freedom to take risks and to fail without judgement. Ellie also articulated a love of English Language Arts, because she was "able to provide [her] own insights and perspectives and also hear and see the creative minds and perspectives of others. Through this sharing of knowledge and opinion, [she] always felt that [she] learned more and grew more as a person." She also felt that she could be more creative in English and Drama because they were more open, and there was less fear of being wrong.

When asked about an environment that has fostered her creativity, Ellie talked about the theatre, as well as her experiences in drama and performing. One predominant way that she feels she has grown is in her ability to "step outside of [her] comfort zone". In addition to gaining confidence, she also noted that the space and encouragement pushed her to try different approaches and possibilities:

> I also have things that I think I'm good at, and I like to stick to just those things, but there's not a lot of room for growth if you're just doing the same things that you think you're already good at. So even with theatre and acting, I felt like, for awhile, that I was only good at doing one particular kind of role, and I think that in Drama classes that I took, there was a lot of encouragement from teachers to

not just do the same thing and to not just stick to the things you think you're good at.

Ellie explained that this was made possible by simultaneously feeling challenged and supported by her teachers and peers, and by the level of trust that she had in the environment and the people around her. She also explained that these experiences of being pushed "helped [her] to explore [her] creativity further."

However, Ellie's views on her education were not all positive, and she described her "relationship between [her] education and [her] creativity [as] complicated". She described some subjects, particularly Math, as stressful and not "leaving much room for individual thought". Ellie expressed frustration that the subjects she cared less about were also the ones that caused stress and pressure, taking time away from her artistic-creative pursuits. Her least favourite subject in school was Math, not because it was hard for her, but because she found it "painfully easy" and "just an hour and a half a day of mindlessly doing what [she] was told." She felt that the way that Math was taught to her discouraged creativity because students are either right or wrong, and that it does not offer opportunity for taking risks. Despite these feelings, these classes have not seemed to have a lasting impact on Ellie or her self-efficacy: "The things that are more memorable to me are the things like Drama and English where I enjoyed what I was doing and felt challenged by it, and then then the other stuff was just what I had to do." If anything, because of them she seemed to be more determined to find opportunities to be creative, and more passionate about pursuing a career that will allow her to be creative, and give those experiences back to future students.

Zoe. Zoe is also 17 and just graduated from high school. Like Ellie, Zoe was very involved in theatre; however, up until grade 12, she was mainly involved in the technical elements, especially costumes and make-up. In her grade 12 year, she acted in and directed school plays, and participated in a student writers' group at Alberta Theatre Projects. Additionally, Zoe was a part time teacher's assistant in a drama class for English language learning students. Academically, she was varied; she did well in Advanced Placement English, but struggled in Math and Science classes. In September, Zoe will be studying English and Education at university, and she hopes to teach high school English as a career.

In her questionnaire and interview, Zoe described herself as quite creative, rating herself a four on the overall creativity scale. In her interview, she qualified that she believes she is more creative during tasks that are exciting and when she is "more motivated". Zoe also stated that at times she feels "overly creative". She explained this with an experience she had where she had to write essays for a university application, choosing between three topics. She was inspired by all of the topics, and became "overly ambitious" in terms of what she could complete within the given restrictions. She said this feeling was common for her in terms of creative pursuits. Zoe scored herself very highly (fours and fives) on all of the creative skills and dispositions. On the creative domains, she was mixed, and scored herself the most highly (fours) on verbal, interpersonal, and performance creativity. She expressed a view of herself that was more domain-general: "I think that I'm very even on some levels, and I don't think I'm really, really great at learning in a specific way." When I asked if her performance creativity was more based on process or product, she said both.

In terms of her education, she expressed that projects were a main opportunity for her to use her creativity, and that she wished she was "able to have more free reign in how she learned, but [she] had a decent chance to be creative." She felt that Drama and AP English were the places where she was most creative, because she was surrounded by people who were as passionate as she was about the subject matter. She also described her English teacher as being very creative and engaging in his teaching methods, and that he "created a safe environment and allowed [the class] the freedom to choose how [they] learned." This was the opposite of a different teacher, who was "strict" and embarrassed her in front of the class. Zoe said that this teacher "made [her] not like [the subject area]" because "if you didn't know the answer, then you felt dumb. Or if you would ask for help, she wouldn't give you help." She did say that this teacher was probably creative "on some level, but [she] just didn't get a look at it personally."

The experience that Zoe chose to describe as allowing her to be completely or very creative was directing a play in Drama 30. This was an interesting choice, because she described it as both very positive and very challenging: "I think it was my favourite and least favourite thing to work on". What she enjoyed is that theatre "allows for anything to happen and anything is possible." The challenges came from a struggle to work with people who were less motivated and less engaged in the process. She also described the pressures of time restrictions and stress as both positive and negative: positive because it forced her to get work done, but negative because she wished she could have done more. Zoe elaborated on the effects of stress on creativity: "the more stressed I am, the less likely I am to do it...but if you have a little bit, it will make it so that you actually do things." Zoe also described the experience she had writing a play for

her writers' group at Alberta Theatre Projects. This endeavour was very positive for her, both in terms of the process of writing and on her final product. She described the process as one that had collaboration, encouragement, and feedback throughout, both from the instructor, and her peers. She also explained that they were given an opportunity for self-feedback when the scripts were "workshopped" (read out loud) by professional actors. Zoe also expressed a huge amount of pride in her final script because of the positive response that she received from audiences and her instructor.

Overall, Zoe reflected on the idea that "school kills creativity", and concluded that "not really, because when teachers give assignments, they know that students don't want to write essays all the time. They're trying to make learning more fun and they try to give kids a chance to have a more creative approach." She said that being given "opportunities to try new things" in school have really helped to foster her creativity, whereas being given assignments that mandate a specific method restricted her creativity. Zoe said that her views of herself and her creativity have improved significantly since junior high, particularly as a result of the encouragement of her teachers, and her work ethic on creative endeavours. She also talked about her experiences in elementary school, where she was enrolled in French Immersion. She said that she struggled quite a bit with reading comprehension and assignment completion, which caused her to not put as much effort into her work. I asked if she felt less creative when she struggled in school, and she said that it was more that she did not put any time into working or being creative. Currently she says she wants to be creative, so she has the motivation to work at it. Finally, Zoe expressed her views on creative self-efficacy: "I think that if I see myself as creative, then I would be creative."

Lucy. Lucy was a very different case from the rest. She is 19-years-old, and graduated from high school a year ago. During high school, Lucy took full Advanced Placement, and was primarily interested in math and science classes, though she expressed a strong enjoyment of AP English. She did not act in plays in high school, but she was involved in theatre in the role of stage manager. Since graduating, Lucy completed her first year of Engineering at university, a program she was drawn to because it was a practical and hands-on way to "apply her love of science and mathematics", as well as because of the "logic and problem-solving" involved.

On the introductory questionnaire, Lucy was the only participant to score herself less than halfway on the creative scale, giving herself a two out of five. She also stated that had she completed the questionnaire right after graduating that she would have given herself a one and a half. Her views of her own creativity were based on how she viewed and perceived the subjects and areas that she preferred: she was good at and enjoyed math and science, and, to her, those subjects were "less creative", ergo she is "less creative". Lucy contrasted herself with her best friend from high school, who was extremely talented in Art and English projects: "We are opposites in that I was more of a thinker and she was more of a feeler." She said that this friend was more apparently artistic, and so Lucy saw her as infinitely more creative: "her creativity is more of what a lot of people traditionally think creativity is, which is more of the artistic sense." Lucy's own creative self-efficacy seems to have suffered from an incomplete understanding of creativity, particularly in the domain areas. However, since taking Engineering at university and "a lot of thinking over the last 12 hours [between doing the questionnaire and the interview] about creativity", Lucy has come to realize that this application of math and science

requires a large amount of creativity, and that she is actually quite adept at this particular type of creativity. She describes her "type of creativity as more thoughtful, more innovative" and that her creativity is shown in her humour, "because in order to make people laugh, you have to pull from different experiences; you need to be creative in your jokes...and make it relatable to other people". Lucy also considered herself to be less creative because she "needs lines to colour in, whereas other people can be free". She expressed that she feels a need for structure and foundation in order to be creative.

When rating herself on the creative skills and dispositions, Lucy gave herself fours and fives for all of them except risk-taking, on which she gave herself a three. She was very confident about these assessments, particularly that she likes to work hard when she is personally invested. In the interview, I told her that the skills and dispositions on the list were based on how my research defined creativity—that they were attributes associated with creativity and creative people. She seemed surprised and said "I think that makes me view creativity differently and view how I rate myself differently…I'm going to have to think about that. Crazy." On the domain areas, she rated herself lower on the artistic and performance scales, and higher on problem solving, science, and interpersonal creativity. This reflected her work in Engineering and her sense of humour.

In terms of her K-12 education, Lucy preferred Math and Science "because there was a way to do things that was right". She said that overall, her high school experiences made her feel less creative, because she "didn't have to be creative". She said that not being required to be creative in Math and Science classes affected her beliefs about herself: "It made me think that the subjects that I was interested in were mostly not creative, …which gave me the sense that I am not creative." Lucy explained how Math

and Science classes were taught: "Someone writes it down on the board and says 'This is how it is. This is the method to get from point A to point B.' Then you can apply that same method to other things." She explained that most assessments were tests, and that science labs were the "closest to creative" in those types of classes, but that everyone was still following the same procedure set out by the teacher. I asked if, now that she is in engineering, she still sees Science and Math as not creative, and she said that she now sees Science as having a lot of potential for creativity. "[First year engineering classes] showed me that, not only can I be creative, but that the things that I like can be creative."

Lucy said that AP English was the only class in high school that required her to be creative. She described the environment of English class as "very open" and that there was an "expectation to be creative". She said because of the comfort she had with the teacher and her peers, that it was a time and place for "the crazy to thrive". Lucy said she would sometimes dread the creative projects in English, but that she ultimately really enjoyed doing them and felt proud of them. She said that while she did sometimes feel uncomfortable being creative, that English class was "the most comfortable [she has] been being uncomfortable" and exploring her creativity. Lucy also explained that her English teacher always put the focus on the students' personal ideas, rather than what she wanted them to think and do. Lucy also commented that the physical set-up of the English classroom was "less traditional" than most classrooms. She said that the classroom was set up so that the students were looking at each other and not just at the teacher, which allowed for discussion and learning from each other. She expressed a particular appreciation that she was "allowed to sit *on* a desk rather than *in* a desk", which made her feel "a lot more free and a lot more comfortable expressing [her] ideas."

Lucy was the only participant to bring in an artifact that exemplified her creativity, and this was her final project for Advanced Placement English 30. In this project, they had to represent the development of a character and theme in a novel (*The Poisonwood Bible* by Barbara Kingsolver) in a creative way. She chose to use cards from the game "Cards Against Humanity" arranged into a specific order to convey the development of Nathan Price and the themes of ethnocentrism and discrimination (see image 1). This was accompanied by a written and oral explanation of her choices. Lucy felt particularly proud of this project because she could "use [her] humour to analyze a book…and think outside of the box." She felt that this particularly utilized the creative skills of making connections and taking a risk. It was also a project in which she was relaxed about boundaries and "what she thought that [the teacher] or other people thought that a project *should* be". She felt that she was able to be herself, do things "in [her] own way", and have fun while completing the project. I asked Lucy if, while working on the project, she was more concerned with the process or product. She replied, "I had a lot of fun with the process…which made me be more proud of the end product. And I think the end product would not have been as good if the process had not been great." She said this

project was different from most work that she did in high school, because she was typically very anxious about doing everything perfectly, and was not as able to enjoy the processes.
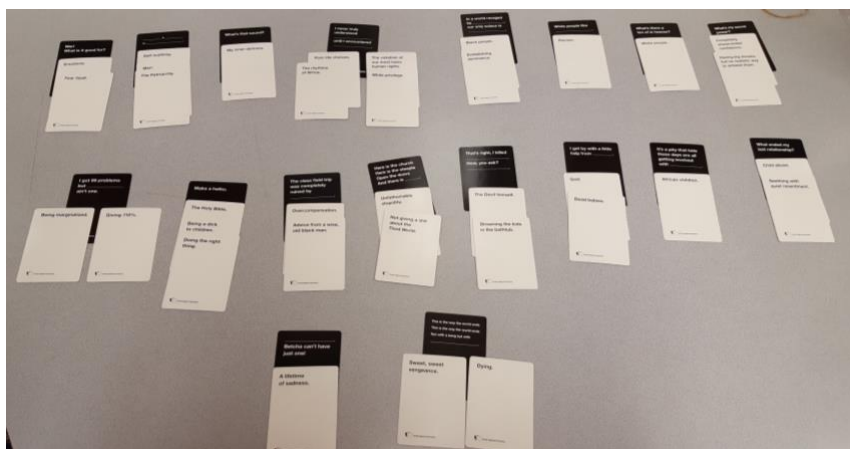
Figure 7: Lucy's creativity artifact – a project for English 30AP

Anna. Anna is 18 years old and graduated from high school a year ago. During high school, Anna was very involved in theatre: acting, directing, writing and participating on the school's improvisation team. She was less focused on her academics, but she took Advanced Placement English, Math, and Art. Since graduating, Anna took time off of school to pursue theatre. She improvised at the Loose Moose Theatre Company, acted in a play at Storybook Theatre, wrote several plays, and made movies with her friends. In September, she will be moving to Toronto to pursue acting even further and to study theatre at college.

On her introductory questionnaire, Anna rated her overall creativity as a three. On the questionnaire, she explained this as, "I feel like I have a creative spirit, but there is a good amount of work that I've done that has been directly inspired by other works." However, when I asked her about it in the interview, she acknowledged that "initially [she] saw the scale as a compliment" as so was reluctant to praise herself. I pushed her to be objective, and she changed her answer to closer a four. She added, though, that when she was in high school, she would have been slightly below a three. She explained this rating as being a result of "people, or expectations, or school", particularly not fitting into the standards of school. On the creative skills and dispositions, Anna gave herself mainly fours, with threes for risk-taking, questioning, and idea generating. She explained the risk-taking assessment: "I like being out there, but it's not really a risk because I'm not too worried about it…I'd be a lot more worried about sounding correct or sounding like I knew what I was talking about than going up and being a wack-job." In the creative domains, Anna's self-reported scores were all threes and fours, indicating a view of herself that is more domain-general; she seems to see her creativity as a way that she

approaches everything. She elaborated that she does not actually feel creative when acting or improvising, because she approaches it more thoughtfully or formulaically. Anna indicated the most creative she feels is when she is coming up with an idea for a play to write, but that she keeps many of those ideas private.

Anna expressed a lot of frustration with her educational experiences and its effects on her creativity. She said, "I think I started to think of myself as a creative person because I kind of sucked at school most of the time and in school you're usually praised for being right rather than original, so I thought I was an original kind of person because I was hardly ever right." Anna went on to say that when she was in high school, she did not actually see being creative and original as positive things; she felt that she was creative, but that was only because she was not good enough to be "right". She went on to say, "if [being creative in school] *was* considered a good thing, or it if it was more instilled in students, that would have benefitted me more…I would have felt good about it [her creativity] and done more creative things…and not felt bad about it." Anna articulated that in school, she thought that the reason she was unsuccessful was because there was something wrong with her, but now that she has some distance from school, she thinks that "school could have done better". I asked Anna what she wished her school could have been. She commented on the Swedish school system, which allows for more play and where students "want to learn". Overall, she wished there had been "less homework, less stress, less expectations, less focus on being right" in her education. The particular causes of stress for her were "due dates, tests, timed things, like in-class essays, and competition".

Anna said that she enjoyed Math in school because it "was one of the only core subjects that came somewhat naturally to [her]." She described a teacher she had in junior high Math, who gave her a creative math project, and then praised Anna for her unique approach to a math problem, even though she was not "right". Anna did add that this approach was not typical for most teachers, especially in Math, who are more focused on doing things one way. Anna expressed much more enjoyment in her option classes (Drama, Design Studies and Art), because she was allowed to "create stuff without being competitive or judgemental about it". Anna described one particular Design Studies project as a time when she was allowed to be completely creative. They had to design a 2x2 cube and make it "as personal or individual as possible". She made a robot. Anna enjoyed it because she could be herself, and have total freedom. She was also not concerned with grades, and "we weren't trying to please/impress anyone but ourselves." She said this was different from most of her high school classes because there was "a lot less pressure." The teacher Anna described as nurturing her creativity was her Drama teacher, who she viewed "more like a mentor than a teacher". She appreciated that he gave her opportunities to work on her craft, and that he gave clear and specific feedback. She also said that she knew he valued creativity because "there wasn't one right way of doing things" in his class.

Samantha. Samantha, 17, just graduated from high school. During high school, she was very involved in theatre, acting in every play and on the improv team. She was also involved in choir, and wrote and performed her own songs frequently. Samantha did very well academically, taking Advanced Placement English Language Arts and Social Studies.

Samantha described herself as very creative. She gave herself the highest overall rating of the participants on the creativity scale: a four and half out of five. She said that this was based on her participation in and enjoyment of "activities that require a creative outlook, such as theatre, music, and writing" as well as her ability to transfer her creativity to "many parts of [her] life - for example, in school during academic projects." On the ratings of creative skills and dispositions, Samantha gave herself all fours and fives, and articulated confidence in these abilities, especially when she is pursuing something that she is personally passionate about. In the domain areas, Samantha indicated strength in the artistic verbal, problem solving, interpersonal, and performance creativities. She acknowledged that she does not feel particularly creative in terms of math, science or visual representation (she scored herself a two in these domains). What this indicates is that Samantha looks to her strengths to define herself when it comes to her creative self-efficacy.

Samantha was incredibly positive when describing her experiences in school. She expressed that she had many teachers and classes that allowed her to be creative, and this positively affected her view of her own creativity:

> The teachers I had that promoted my creativity shaped the way I learn and my ability to process information in an artistic way. In high school, more freedom in regards to the ways I could express my learning kept my creativity stimulated and led me to the belief that I am a very creative person.

She also provided examples of role-playing in Science, and creative writing in Social Studies. Samantha did acknowledge, though, that she does not necessarily feel this was a typical schooling experience: "I think our education system can very easily work to

suppress creativity, and so I am fortunate that in my experience, that I have been exposed to educators and programs that encourage creativity to bloom."

Like the other participants, Samantha described AP English as a class that she loved and that she felt nurtured her creativity. She particularly enjoyed "projects and opportunities to expand [her] interpretations of texts". Samantha focused her discussion on the influence of her English teacher (whom she shared with Ellie and Zoe). She described him as being a personally creative teacher, as well as being a teacher who promoted and valued creativity amongst his students. She also commented that his classroom was filled with other students' creative projects, which inspired her own creativity, and visibly demonstrated to the class that creativity was valued in that environment. Samantha also expressed appreciation that many of his assignments allowed freedom in terms of formats.

Samantha also highlighted the importance of her involvement in drama to her confidence in her creative expression. She commented that this was a result of the support that she felt from the "close community of people with similar interests", and the positive environment of trust. She also added that drama "promoted skills such as team work" and pushed her to "grow as an individual and a performer". Samantha described writing a one-act play for her Drama 30 class as a time when she was allowed to be very creative. Though she was working alone, she said she felt a lot of support from her teacher and classmates. Samantha also appreciated that the freedom of the assignment "made [her] ideas feel supported and valued" and that, though challenging, "the completion of the project made [her] a better creator and artist."

Playbuilding Day

The bulk of my research occurred during the third phase: the playbuilding day. "The Playbuilding process is a collaborative venture with a variety of players acting as data sources, coresearchers, and actors" (Norris, 2009, p. 40). The playbuilding day took place from 9:15 am until 4:00 pm on Thursday, July 26, 2018. All five participants were engaged in all of the tasks, and the day went as planned based on the following schedule:

9:15 – 9:30	Welcome; review process; review confidentiality, ethics and consent; discuss emotional safety and trust
9:30 – 10:00	Warm-up games
10:00 – 12:00	Scenes based on prompts
12:00 – 12:30	Lunch break
12:30 – 1:00	Share individual stories
1:00 – 2:30	Plan and rehearse play
2:30 – 3:00	Perform play
3:00 – 3:45	Group interview and completion of exit questionnaires

Warm-ups. The playbuilding day started with half an hour of theatre warm-ups. The warm-ups that I chose were designed to prepare participants' creative skills and dispositions, as well as to get a quick sense of how willing participants were to use them. The warm-up games were also intended to build trust and emotional safety between the participants, and help to establish a safe, collaborative and supportive environment. All of the participants except Lucy had played these games before.

The first warm-up we did was a game called "What Are You Doing?", in which participants, going around a circle, asked the person to their right, "what are you doing?". The person answered with an activity that they were *not* doing, which the person who asked the question immediately started doing. This game was intended to warm up participants' ability to generate ideas and be open-minded to suggestions. During this warm-up, all five participants were very accepting of everyone's ideas; there was almost no hesitation in taking on the suggestions offered, and physically miming the activities. In terms of ideas generated, Anna and Samantha were quite quick, and their ideas tended to be the most original and specific (e.g. "playing with an alligator", "harvesting corn", "driving a carpool"). Ellie was very fast, but more conservative in her answers ("planting a tree", "writing a novel", "reading a book"). Lucy was more hesitant, especially at the beginning, and her ideas tended to be the most typical and general ("walking the dog", "jumping") and/or derivative (e.g. immediately after "flying on a space ship", she said "going on space mountain"). Zoe was the most hesitant and took the most pauses, but she also came up with some unique and effective ideas ("going down a fire pole", "flying on a space ship").

Our second warm-up game was "Yes, Let's!". In this game, the group was given a problem to solve. Going around the circle, they each offered a suggestion of an activity that they could do to solve the problem, building on what had already been offered. Then, everyone agreed with a "Yes, let's!" and began miming the activity. I chose this game to warm-up their problem-solving skills and divergent thinking, as well as to help build collaboration between the participants. We did three rounds of this, with the problems of diffusing a bomb, getting lost in a foreign country, and being stranded on a deserted

island. Participants again were very accepting of the process, and were quick to accept the ideas of everyone else. In their responses, Ellie, Zoe, and Samantha were all very focused on keeping the story going and staying on task (e.g. "Let's notice that there's a bomb", "Let's go outside and try to find a cab", "Let's ask someone for directions to our hotel", "Let's scour the island for resources and food", "Let's start a fire"). Lucy offered solutions that were particularly logical and practical: "Let's talk to the bank teller", "Let's go back into the airport and find someone who can help us who speaks English *and* Russian", "Let's make sure everyone is okay first". Anna offered solutions that were the most unique and complex; however, they sometimes distracted from the group's previous solution: "Let's look deeply into this person's eyes and realize that they're the love of our lives", "Let's pull [the fish] in, and he tells us his name is Fred".

Our third game was "Seven Things". In this game, participants asked the person to their left in the circle to name seven of a specific category (e.g. "name seven types of cereal", or "name seven things you're scared of"). The asked person then had to generate a list of seven things, while the remaining participants counted them out in support. This game was intended to spark questioning and divergent thinking, as well as to build emotional trust within the participants. Ellie struggled a bit to come up with seven answers, but she did ask interesting and thought-provoking questions (e.g. "What are seven things that make your heart smile?"). Anna, who was the most experienced in the game, had no hesitations in asking or answering the questions. Zoe and Lucy paused the most, and asked the most traditional questions ("movies", "types of cars"). Samantha's questions were a bit more straightforward ("What are seven pizza toppings?), but her answers were the most divergent, particularly in response to "types of people": "nice

people, people with hair, people with feet, mean people, artistic people, sporty people, people with blonde hair".

The last game that we played was "It's Tuesday", where participants stood in two lines facing each other. One person stated to the other, while conveying a particular emotion, "It's Tuesday", to which the addressed person responded, matching that same emotion. The initial person then moved to the back of the opposite line, and the game continued. This game was primarily intended to get participants comfortable with the process and format that I knew I was going to use for our first scene activity. It also was intended to help warm up participants' willingness to take physical and emotional risks. All participants engaged well in the task, and conveyed a variety of clear and precise emotions. This game showed particular growth in Lucy's confidence in acting and taking creative risks.

Rapid fire scenes. My next activity was to transition the participants from warming up to thinking about the topic. I had them do "rapid fire scenes" responding as students and teachers. They had to follow the same structure of "It's Tuesday", except that one person was a student who approached a teacher with a creative idea or suggestion, and the other person had to give a typical teacher response. With this activity, I was interested in both sides: (a) what kinds of ideas and topics the participants thought would be creative, and (b) how they thought teachers responded to those ideas.

In the creative suggestions, 'students' were most often looking for more hands-on and exciting ways to learn ("In Social Studies, can we time travel into the past?", "For Chemistry, could we have an actual chemist come in and talk to us?"). Participants also seemed interested in demonstrating their knowledge in more creative ways ("Can I do a

project or poster instead of an essay?", "Instead of unit tests, can we say what we know out loud?"). There were also a few examples of creative questions for teachers ("Why can't mermaids be real?", "How could I shoot myself out of a cannon?"). What was interesting was that *all* of the teacher responses were positive, or at least encouraging. Teachers were either excited about the suggestion and said yes right away ("Yes! That project sounds impressive", "Of course!"), or they offered opportunities for students to find their own solutions ("I don't know. Interesting. Provide me with some research and we can figure that out.", "Great idea! If you can figure out a way to time travel, I am on board!").

After this activity, I sat down with the participants to discuss their ideas. Anna immediately commented that "I feel like we were really nice teachers...I kept thinking 'we're not being a variety; we're just being great'". They agreed that they were the kinds of responses that they would like to give if they were the teachers. Samantha added, "I felt like a lot of the responses from the teachers' sides were, 'Okay, but...', offering more solutions. But very positive and constructive and not just, like, 'You're stupid'. We were all very good teachers." I asked if the responses were what they would have expected from their actual teachers. Anna told a story of her science fair teacher, who told them that if they invented time travel, they had to come back to that exact moment. Samantha said that she had asked her Biology teacher if scientists could make mermaids: "She just kinda laughed and then when she realized that I was half serious, she looked very disappointed. She was like, 'I'm sorry, what? No.'" Zoe said if she had asked a Math teacher why the line on the calculator was squiggly, she would have looked at her and told her to go back to her desk. Overall, they agreed that the questions they asked were

mainly too extreme to even ask teachers. Lucy said "That's what Google is for."

Samantha and Zoe mentioned that they had both asked their English teacher to do

alternate assignments, and that he considered their requests and helped them find ways to

compromise what they wanted to do with what was required for the course.

Scenes. During the rest of the morning of the playbuilding day, I asked

participants to create scenes in groups of two or three responding to a variety of prompts

relating to creativity and education. Participants had about ten minutes to plan each scene,

which they then performed for each other. Following each scene, we discussed the

content as a group.

Typical response to creativity. The first scene was to "demonstrate a typical

teacher's response to creativity". During the planning/brainstorming, Samantha and Zoe

got to work quickly; they were very positive and had lots of laughter. In the group of

Ellie, Anna and Lucy, Anna was quick to take on a leadership role; the other two took a

more passive role, but they were very willing to collaborate. They came up with an idea

where they could switch seats to demonstrate a variety of responses, but it took them

awhile to figure out what to respond to. Eventually, they asked me to play the student and

give them different prompts.

Ellie, Anna and Lucy performed first. In their scene, they played three different

teachers responding to a variety of student questions. The first question was "Can I do an

interpretive dance instead of a test?". Anna responded with, "You can do the test AND an

interpretive dance? We need the test because everyone has to do the test. That would be

unfair…I don't know how to grade an interpretive dance, so I'm gonna have to go with

no." Ellie said, "It's an interesting thought. It's great that you're using your imagination,

but we have tests for a reason… interpretive dance is a bit subjective…so I'm gonna have to say no." Lucy said, "Is that what you're set on? What about not for a test, but for another assignment?" The next question was "Can I do a creative story about genetics for both Science class and English class?" All three teachers agreed that the student could write the story for English, but not for Science. The Science teacher (Anna) was more open to a different, accurate, non-fiction story for Science. The third question was "What do you think the world would be like if the Holocaust had never happened?" Anna explored some possibilities and then acknowledged that it was "A good question... Do you feel bored in my class? I feel bored." Ellie said "It's hard to answer a question like that. We can make lots of assumptions, but there isn't any way to know…You could incorporate that into an assignment for my class." Lucy said, "Good question. What do you think? I want you to formulate your own answer, then maybe we can discuss outside of class to not take away from other people."

Zoe and Samantha's scene was a more specific example. Zoe played a Biology teacher introducing an assignment where students had to use a PowerPoint to visually represent their understanding of fetus development. Samantha, a student, asked if she could write and perform a song instead. Zoe was set that the assignment had to include visual representation, so they negotiated a little bit, and compromised on Samantha performing the song for the class, with visuals on a PowerPoint in the background.

In our discussion, Anna felt the scenes were both negative. Lucy pointed out that in the second scene, even though it started negative, they did come to a compromise because Samantha was so persistent. Samantha also noted that even in the first scene, none of the teachers just said no—they all offered explanation or negotiation. Anna said it

was "weird, because before we were so nice, but that's when we were having fun and pretending. But when we were doing it in acting and thinking if we were really teachers, we were finding excuses to not be good." I asked if excuses from teachers were commonplace in their educational experiences. Lucy said no, but "that's because I would not have had the desire to do something else." Anna said "I am a weird person, so I would suggest weird ideas sometimes. And a good chunk of the time they would think I was just messing around (which I was), and they'd say no." Samantha commented on the fact that many of those decisions come more from the larger system that teachers are navigating:

> I'd say I've gotten 'yes, buts' from teachers…but I think they're things that are more to do with the school system as a whole…like a teacher doesn't have the authority to be like 'you don't have to take a standardized test'…the system overall is very rigid in what it expects from students. But then you get really good teachers who, within their assignments and the part of the curriculum that they control, are able to say 'Here's a project, you guys can represent it however you want'. I've appreciated teachers who have taken the time to do that when they can.

Ellie agreed teachers say you have to take the tests, but projects are more open with options: "I feel like I learn more and enjoy those kinds of projects more when there's more freedom to take it how you interpret what you're responding to." Lucy added that it is often subject dependent: "there's not a lot of leeway to do creative projects in Math or even Science…just the way it's standardized." Anna commented that when she had teachers allow her to be creative, she was surprised and sometimes did not know what to

do because "usually they tell me exactly what to do." The rest of the participants agreed to that feeling.

  Encouraging student creativity. For the next scene, I asked them to create a scene based on a real experience that one of them had that demonstrated "a student being encouraged to be creative". Participants had a bit of a harder time coming up with examples from their real life. In their discussions, they could find examples where the teacher let them be creative, but that a scene would not be able to capture the "encouragement" of creativity. They expressed that teachers were involved at the beginning, but not really in the process.

  Ellie, Anna and Zoe demonstrated a scene where Anna was allowed to do an audio-visual presentation instead of a research paper. The teacher was very encouraging, as long as she was able to demonstrate all of the same requirements with the same depth. Anna then went off and completed the assignment. The teacher then was "excited to grade the assignment" and Anna got a good mark. The teacher encouraged Anna to continue to make creative projects and movies.

  Lucy and Samantha did a scene that took place in Drama class. Samantha was struggling to start working on a monologue performance assignment. The teacher sat down with her to help her to figure out what she wanted to do. When the classical monologue format was not working for Samantha, they agreed that she could do a musical theatre piece instead.

  In the discussion, participants expressed how hard it can be to remember things that happened to them. I asked why it was harder to find a time when a teacher was involved throughout a creative process, not just at the beginning. They felt mainly like

they did not need the teacher throughout. Lucy said, "A lot of the time when you're encouraged at the beginning to do something that you're passionate about, it's a lot easier for you to personally take it and run with it." Samantha also added that teachers have so many students that it is not realistic for the teacher to help students the whole time. She added that teachers are often willing to help if a student is struggling midway. Anna noted that often she would complete projects last minute. The participants discussed the importance of teacher encouragement to creativity. They discussed a Drama teacher that they all had in common who would rarely give compliments, but when he did, it was very genuine, specific, and meaningful. Anna said "he wouldn't ever tell you lies… so you knew when you messed up and what was actually good." Samantha added that his compliments "actually meant something." Anna said, "he has had a great influence on what I've decided to do [as a career] because he said he thought I'd actually get somewhere. It was such a nice thing for him to say." Samantha mentioned how nice it was when any teacher would encourage her extra-curricular passions and interests, like drama and singing. Anna told a story of her Social Studies teacher who encouraged her to take Social 30-2 in order to spend more time focusing on drama. This became the basis for a scene in the play.

  Discouraging student creativity. For the last group scene, I asked them to create a scene based on a real experience that demonstrated "a student being discouraged from being creative". Ellie and Zoe paired up because of a mutual dislike of Math. Samantha quickly brought up the lack of windows, and she ended up working with Lucy and Anna to explore physical structures that discourage creativity. This rehearsal process was the easiest and quickest for the participants.

Lucy, Samantha and Anna presented a classroom scene where students (Samantha) were seated in rows. Lucy, the teacher, started the class by saying, "Sit forward and do your assignment please. Quietly and without anyone talking." She then introduced Anna, a new student who had spent the last two years living in Sweden. Lucy told Anna to sit down and get to work, but Anna instead turned to Samantha to tell her how schools are so much better in Sweden, and that she should not just sit down and be quiet. Samantha begged her to just sit down so that they would not get into trouble, but Anna persisted. Samantha then complained about how the lack of windows was not allowing her to be inspired and creative, so Anna helped her to smash a hole in the wall. Samantha said "Don't discourage my creativity!" and smashed the wall. She also got mad about the rows and the use of multiple choice tests to understand poetry. Lucy said it was not her fault, and joined them in their revolt.

Zoe and Ellie's scene was set in a Math class. Ellie, the student, asked Zoe, the teacher, about a math problem where she did things differently than the way the teacher did, but still got the right answer. She asked if that was okay and the teacher said "no, you have to do it that way because that's the way you were taught". Ellie, frustrated, went and sat back in her desk.

In the discussion, Samantha, Anna, and Lucy acknowledged that their story was not really true, but that the issues of rows, being quiet, and no windows were genuine feelings of frustration for them. Samantha discussed the different structures of classrooms:

There's a difference in the mentality of a classroom that is set up in groups or a circle…where you could actually have discussions, and make friends, and got to

know the teacher. But the classes that were… just in rows and the teacher got up

and talked and it was quiet work time and that was the format…didn't feel like a

community, it was just a class… There wasn't a connection and the environment

wasn't supportive to more creativity.

Lucy added on to the idea of being supportive, and commented that in rigid, traditional

classrooms, "the power dynamic is reflected in that, because the teacher is physically

higher than the students…so the teacher is talking down to the kids." Anna asked why

they do individual tables in rows, and Zoe talked about how when school systems started,

it was during the Industrial Revolution and they were preparing students to work in

factories. Samantha said that one of the major problems in school is that "they only cater

to one type of learner" and that the structures do not accommodate other types of

students. She continued that "you can't really expect students to be thinking creatively

and thinking critically and thinking outside of the box when they can't even really

interpret information in a way that works for them." Ellie added that that was part of the

point of their scene, that people learn in different ways, but students are discouraged from

that and told to things the way they were taught, even if that does not work for them. Zoe

pondered the idea that students could be grouped based on learning styles and taught that

way. Anna thought that people should still be exposed to a variety of types of learners to

learn how to work with everyone, and Samantha agreed and suggested that the classroom

could just be better designed to be more open and accommodate everyone.

   Personal stories of creativity. Before we paused for lunch, I asked participants to

think of a personal story to answer the question "How has school affected your creativity,

personally?", which they presented individually after lunch.

Samantha told her story first. She discussed the ways that school introduced her to a variety of ways to be creative. For example, in grade seven science, she got to pretend to be a scientist, and in grade twelve English, she got to write a song about the themes of a Shakespearean play. "School has shown me that I can utilize my hobbies and the things that I'm interest in and things that I'm passionate about to convey information." She went on to explain that she has always felt very creative, and that her experiences in school have shown her that her creativity can be very useful and can be applied. She was very positive about her teachers as well: "the teachers that I've had have encouraged my creativity." Overall, Samantha had only positive things to say about her education, and expressed that she felt it has helped her really make her creativity useful in her life.

Ellie went second. She was also very positive. She expressed that school actually helped her to become "more creative". That was particularly true in her option classes (especially Drama), which helped her "figure out other things that interested [her]… and helped [her] to express creativity". She felt she got the most out of classes that went beyond "what you should know to be a functioning human", and that helped her to really express her own interests and ideas.

Lucy went next. She talked about how she did not see herself as very creative because she liked Math and Science, which "in high school you don't really associate creativity with". She said that she felt uncomfortable with more creative projects, and that she actually liked standardized tests. Lucy then explained that she went into engineering in university as a way to be involved in science without being limited to research. In university, however, she realized that Math and Science "can be creative". She elaborated that:

For engineering, you have to do a lot of problem solving, and a lot of the time you're making something, so you have to be creative, you have to think outside the box for concept generation. You have to go and make something that no one else has made before…so you really have to trust your instincts and trust your imagination.

These ideas became the basis for her monologue in the final performance.

Anna went next and spoke about the moments in her education that affected her the most. The first story was about an early elementary school teacher who told her that she was "writing stories wrong". The teacher told her that the names and ideas in her stories, particularly a story about a pig who liked to fly airplanes, were not real or possible. This teacher also criticized the amount of time it took her to draw a watch during parent-teacher interviews. Anna commented that "it took me a long time to realize that she was not a good teacher. I just thought that she was right that I wasn't a good writer or that great at art…She took away all my confidence." Anna became frustrated by the pressure to impress teachers and to live up to other people's standards; however, she felt that she eventually learned to do things for herself, like keep a journal of her writing. She said this revelation happened in junior high, when she had more "teachers that sucked" and had "the worst years of [her] life". Anna felt like, previously, she really listened to authority figures, so their judgements of her really mattered. She told a story of when she was told to write an essay in junior high, and she did not know how to. In the whole period, she wrote one sentence and her teacher "instead of trying to figure out how to help [her], she said 'you wasted this whole class. What were you doing this whole time that all you could come up with was one sentence?'" Anna said that this made her lose all

respect for this teacher. Another comment that particularly upset Anna was when the teacher said, in public, "Anna, in teaching you, I'm learning more about how to deal with *people like you*." These encounters led Anna to believe that she was "the one doing something wrong". At this point, Anna was taken to the guidance counsellor, who told her that her teachers said she didn't care about school and was a bad student. Anna concluded that "Bad teachers are bad. Why are there so many of them?"

Zoe spoke last. She talked about how she was put into French Immersion in elementary school, which caused her to struggle with her reading comprehension. She also had a teacher in her early years who she thought "didn't like [her] very much". Zoe continued to struggle with reading, speaking, and assignment completion because of the French, and her grades were low. This led Zoe to develop the perception that she was "dumb and couldn't do it", so she put in the minimum effort and stop caring. Once she transferred to an English school, she found more success. Overall, the message of Zoe's story was that her achievement in school really affected her beliefs about herself, which in turn affected her effort and enthusiasm about school. Zoe then shifted gears, and told a story about how her whole grade eight class put together a Renaissance Fair (which Samantha was also a part of). She really enjoyed this because it allowed her to be creative and involve her outside interests (costuming and hair became something that she did for drama productions in high school). She also spoke highly of English projects, where she could represent her ideas creatively. In these activities, she enjoyed the process, and felt good about her achievement.

At this point, the participants casually shifted into telling stories of times in school where they were allowed to be creative. Lucy described a Spanish fair they did in junior

high, which she enjoyed because the teachers "found a way to get us excited about what we were doing". Samantha and Zoe did a program in junior high called Career and Technology Foundations. In this, the whole school got together every Friday to do open creative projects, like building a website or building a computer. Samantha said that she looked forward to these days the most, and that they "really enriched [her] education". Zoe remembered that one of her projects was trying to write a novel, and another was imagining where they would be in ten years, and then acting out a school reunion. I asked how involved teachers were in the projects, and they explained that teachers would explain the project at the beginning, but then they essentially just supervised and supported as needed. Samantha enjoyed that all of the resources were available to them, for example the construction teacher could help them build things. I asked if they were assessed on these projects, and they said yes, but their grades did not really concern them. They were more focused on the process and products than the assessments. The program got cut back when they were in grade nine, which upset them. These stories really exemplified the excitement and pride that the participants found in activities that engaged their creativity and allowed for freedom and expression.

 Rehearsal. At this point in the day, I introduced the playbuilding activity, and that they had to work together to create a play that answered the question "How does school affect students' creativity?". They had an hour and a half to plan, develop, and rehearse their play. I encouraged them to really think about everything we discussed previously, and to make sure to honour the voices of all of the participants. I also encouraged them to develop an overarching theme/message, and then use a range of theatrical formats to convey their ideas. I told them they did not need to be restricted by

one narrative structure, but that the play should be linked thematically. Otherwise, I intentionally left the process quite open for them to interpret however they wanted. Before I turned them loose, we briefly discussed the topic. I asked what the word "school" encompass, and they listed, teachers, classes, subjects, structure, school system, peers, and expectations. They seemed to feel comfortable getting started, so I let them get right to work. The theatre's technical manager was on hand throughout the afternoon to help them with lighting and sound effects, but he did not offer ideas.

The participants immediately started off brainstorming and chatting, particularly about the key elements that they explored in the morning. They quickly decided that the answer was "it depends", and then worked to figure out the details and how they wanted to structure their ideas. Samantha naturally assumed a leadership role, helping to keep everyone focused. Zoe also stepped up to help figure out a structure. Anna suggested that they use music as a unifying effect, which led them to spend quite a bit of time looking through their phones and discussing favourite artists. At that point, I reminded them that they had just over an hour, and perhaps they should start with ideas, and then figure out the technical elements afterwards. Samantha again took on a leadership role and helped them to focus on what scenes they wanted to include. She also started writing the ideas down to keep them organized. Zoe offered a lot of suggestions on how to unify the scenes, such as using the whiteboard in each scene. Once they started working on specific scenes, Zoe took a backseat role, offering to just help in whichever scenes needed her. Anna offered a lot of really big, creative ideas, trying to incorporate elements such as music, choreography, and costumes. Many of these ideas for technical elements proved to be impractical due to time restrictions. Ellie and Lucy initially sat back a little during the

planning phases, but were still engaged and offered personal stories and scene ideas. All of the participants were very supportive of each other's ideas and suggestions. None of the ideas were outright rejected or criticized; selection of ideas was more based on what worked in the time frame and what could represent all of their stories and perspectives. The participants focused on including ideas rather than theatrics, so many of their technical suggestions, such as a movement piece and the use of masks, were let go. The only idea that did not seem to make it from brainstorming into their final performance was that many teachers respond to creative suggestions with "Yes, but…".

The main points that the participants chose to express in the performance were:

- school could have positive or negative effects on students' creativity, or both;

- the physical structure of classrooms, such as desks in rows, was discouraging of creativity and individuality;

- artistic opportunities, such as theatre, were pivotal in helping them to become more creative and more confident in their creative expression;

- school should not always be about academics; supporting students means supporting their passions, and interests, and trying to address each student individually;

- good teachers often take on mentorship roles, and care about students individually;

- there are other systemic issues that affect students' experiences, such as standardized tests and mandated curriculum;

- their overall message was "How can we make it better?", and that there is definite room for improvement, both on a small scale with teachers and assignments, and on a larger scale, such as standardization and structures.

After coming up with their main idea and structure, the participants determined the content of each scene, and the play came together quickly. They ran through the play one time, improvising dialogue as they went.

Performance. After an hour and a half of planning and rehearsal, the participants came up with a short play that answered the question "How does school affect students' creativity?". Their performance was 18 minutes long, and consisted of a prologue and six scenes that each demonstrated typical effects of schooling on students. The rough structure, the ideas, and some of the key phrases were planned, but most of the dialogue was improvised during the performance. Though it was primarily based on their personal experiences, they also exaggerated and fictionalized some elements in order to make their ideas clearer and add conflict. Appendix C contains the entire transcribed script and a link to a video of the performance. There unfortunately was no audience—just myself and Dr. John Poulsen watched the show. The participants did not seem at all affected by a lack of audience; they still felt that their play had purpose and meaning.

Prologue. The play opened with a stark set: a whiteboard that said, "HOW DOES SCHOOL AFFECT CREATIVITY?" and five chairs arranged in rows facing the audience. The arrangement of the chairs was meant to reflect the physical structure of most high school classrooms, with students separated into rows, and looking directly at the teacher. The five participants entered to the sound of talking and laughing. At the sound of a school bell, the participants sat down in their chairs, gradually stopped talking

and faced forward. This was followed by a long silence. This shift in tone was meant to reflect the feeling of most classrooms, where students are expected to be quiet and listen passively to the teacher. Anna's character was notably the last one to stop talking and face forward, reflecting her character's reluctance to follow the rules and her disillusionment with the traditional classroom.

     Scene one. The first scene was a monologue by Lucy. She sat on the ground at the front of the stage, meant to illustrate her reflectiveness and honesty. In her monologue, Lucy discussed her own journey with creativity. She explained that her beliefs about her own creativity came from (a) that she "gravitated more towards Math and Science" and (b) that she believed them to be less creative subjects than "more artsy things" like English and Social Studies. She extrapolated that she was, therefore, also less creative, and that "creativity was…out of reach". She went on to state that after graduating, her definition of creativity expanded to include "how to apply your imagination", which was also possible in math or science. This was a reference to her experiences in first year engineering, where she was very engaged in problem solving and designing activities. Lucy described her growing understanding of what creativity entails as "pretty cool".

     Scene two. The second scene was set backstage before a school theatre performance. Ellie played a student new to performing; Samantha was an experienced performer. Zoe played their Drama teacher and director. During the scene, Ellie expressed her gratitude for the opportunity to do theatre and to "be creative in school". She also stated the importance of "mentors", who helped her discover her passions: "You guys showed me that I can". Samantha also expressed appreciation of the teacher's role in fostering passion and creativity, as well as the lasting impact of drama and performing on

her creative self-perception: "Thank you for showing me that I can be confident in myself, and that I can be creative". Samantha seemed to draw the link between creative self-efficacy and creative output: "I never thought that I was good enough" grew to "now I'm gonna do it hopefully for the rest of my life". She also expressed gratitude for having theatre as part of her school experience because it demonstrated that "the things [she was] passionate about can be just as important as everything else". Zoe's role as the teacher was less prominent; she expressed words of support, both for the upcoming performance and of the creative process ("You've been doing great this entire time"). In this scene, both Ellie and Samantha got a chance to reflect on their real experiences with theatre in school, and their shared journey of growing in confidence and positive self-perception. Ellie's character was intended to illustrate both of them when they were in grade 10, and Samantha's character represented both of them now, as they are about to start post-secondary education in theatre.

Scene three. Scene three took place between Anna and Lucy outside the traditional classroom. The remaining students stayed seated at their desks, but faced away from the audience and Anna, reflecting Anna's isolation from and rejection of the traditional environment. In this scene, Lucy and Anna were skipping classes (Math and Chemistry, respectively), and reflecting on their feelings about school. Anna confessed to Lucy that she was thinking about dropping out of high school, and taking courses online instead. At first, Anna explained her thinking as a longing for more freedom. She referenced a Ted Talk about a homeschool kid who got to travel, and children in Sweden who get to "play as long as [they] want and then eventually want to learn". Lucy agreed that that made more sense than "just being told you want to learn and being told to sit

down". As her thinking developed, Anna began to reflect more on her own experiences in school, particularly with "terrible teachers", as a reason for dropping out. She told a story about her elementary school teacher, who criticized her creative story writing: "[she] would tell me I was writing stories wrong". She was particularly upset about the potentially long-lasting impact that kind of critique could have had: "I mean…That's, like, when you're starting to grow as a person". The two girls then headed back to class.

In this scene, Anna got to articulate some of her personal experiences and feelings. She said after the performance that she had considered dropping out of high school many times, but that she did not discuss those feelings with her parents, friends or teachers. She just always felt different and that she was being forced into a structure that was uncomfortable for her. The story was one of two true stories that Anna told during the rehearsal period. The seemingly offhand critiques of a teacher of "That's not a proper name" or "Pigs can't fly airplanes" were, to Anna, still a significant and powerful representation of a system that does not allow for full creativity, especially when it challenges the status quo. It also seemed to be the start of her feelings that she was different, and that those differences were not appropriate for school. These beliefs and experiences seem to have been the foundation of Anna's recurring statement that "school sucks".

Scene four. In scene four, the focus shifted away from the students and on to the perceived restrictions of a larger educational system on teachers' choices. In this scene, Samantha portrayed a well-meaning and creative English teacher who was addressing a "Board of Trustees", asking for some educational reform. In her speech, the teacher stated a "need to make some changes about what our educational system can do for

[students]". She particularly emphasized that "unit tests and standardized multiple choice testing" are "unfair" and "short handing" students. Her assertion was that "if they could represent their learning in a different format, [she knew] they would be excelling. And…we need to learn how to cater to more different types of learners". She elaborated that "students are so different and they all come with their different challenges and perspectives and personalities and [she thinks] that we should be pushing them to succeed and do what's best for them…". At that point, she was cut off by the members of the board of trustees, who each offered reasons why those kinds of reforms would not work: "We have to talk to parents [and] teachers" and "We have standardized testing for a reason. It's a uniform way to test all of our students to see their level of knowledge". These excuses built up until Samantha's character became defeated and sat down with her head in her hands.

In this scene, participants wanted to explore the impact of the larger educational system. It was their belief that many teachers *want* to be creative and provide students with more creativity in their assignments, but that teachers themselves are limited by a rigid structure. This scene seemed to be a natural extension of the positive teachers from the morning scenes who wanted to find some compromise for students to be creative while still meeting mandated curriculum and assessment practices. This scene also introduced the participants' idea that standardized tests and particularly multiple-choice tests are not compatible with students' creativity. Not only do the tests restrict creativity, but they also seem to cause creative students to be less successful in school: "They're almost failing out of class". This belief that "if [students] could represent their learning in

a different format…they would be excelling" matches the desire to complete alternative assignments that participants expressed during the morning scene work.

Scene five. In the fifth scene, Anna's previous character met with Samantha's teacher character to discuss her plans to drop out of high school. Anna was hesitant about discussing the matter, but chose to discuss with Samantha's character because she is "kinda cool". In explaining her reasons, Anna mentioned that she has been struggling in school and that her marks have been "terrible". Samantha was positive, supportive, and non-judgemental in her responses. She offered her opinion that Anna "readjust and re-prioritize, and look at managing [her] time a little differently". She noted that Anna's character is really passionate about and talented at art, and suggested that Anna take non-academic classes in order to focus more on her artistic endeavours:

> And so, if I were you, I would just, you know, maybe take some -2 classes instead
> of taking Calculus, and all these tough, rigorous courses that you really don't need
> for art school. You could just drop into -2 and excel in those and have a lighter
> workload, and then you can dedicate more of your time to working on your art.
> And you can hone your craft and just do what you need to do to get into art
> school. And then really make a future doing what you love and what you're good
> at.

Anna seemed more positive and encouraged after this interaction, and left saying that she would "think about it".

This scene was based on a real experience that Anna had with her high school Social Studies teacher. Her teacher noticed that she was struggling in academics but thrived in drama and art. He suggested that she take Social Studies 30-2 instead of 30-1 to

allow her more time to focus on her passions. Anna did not follow his advice and said that she really regretted it. She said that at the time she felt a huge pressure from her family, friends and herself to stay in the academic streams, and that the academic courses were expected of her. However, she really appreciated that her teacher took the time to get to know her interests. Anna also appreciated that he put the same importance and value on the arts as on academics, which is not something that she felt from much of the rest of her high school experience. In this scene, both Anna and Samantha wanted to show a teacher who valued passion, creativity, and individuality within a system that so often seems to emphasize academic achievement. The juxtaposition between scenes four and five illustrated this dichotomy, and showed the importance of teachers' attitudes and their relationships with students.

Scene six. In scene six, all of the participants gathered together to discuss their educational experiences and wrap up their ideas. Anna began with a familiar "school sucks", which was met with agreement from the other four participants. Samantha went on to discuss the feelings of being "stuck in [a] building", and Ellie added the feeling that most of what she has learned will not be useful in her real life. Anna commented on the classroom structure of rows, which Zoe identified as a remnant of the Industrial Revolution. This led to the critique of treating students like "pieces of labour that need to be honed for working" and negative feelings about multiple-choice testing. The topic shifted to teachers when Lucy brought up that "some of [their] teachers haven't been that bad". This was met with agreement that "there's been teachers that, like, encourage [them] to do what interests [them]". Anna challenged this with "the reason why we know we had, like, good teachers is because they stand out. And the reason why they stand out

is because they're rare." The conversation then shifted back to the physical structure of schools, and the lack of windows in many of their classrooms. Ellie tried to keep things positive with "it's not all bad, right?", to which Samantha answered "we did have that one project in English where we could just do whatever we wanted. That was so fun." Again, Anna challenged the positivity by suggesting that "not *all* bad" was not a very flattering way to describe their education. Samantha concluded that "I used to love to learn, you know? And I want to keep loving learning, but I can't do that when I'm told how to learn. I want to be, you know, creative and unique and myself." Zoe brought the discussion back to the whiteboard questions of "How does school affect creativity?", and the group each wrote their answers on the whiteboard. Zoe wrote "What is normal?", Lucy wrote "Choice to be", Ellie wrote "Exploring new concepts" and "Who are you?", Samantha wrote "Confidence", "Expression" and "Good teachers", and Anna drew scribbles, which turned into "IT SUCKS". Zoe then erased the initial question and wrote "HOW CAN WE MAKE IT BETTER?". The participants exited, and the show was over.

This final scene was intended to be a conclusion and way to explore all of their ideas in a concise way. They wanted to mimic the style and feel of the previous debriefs that we had done after each scene. Ellie, Samantha and Lucy seemed to try to keep a balance of specific critiques and positive opinions. They were, however, overshadowed by Anna's more negative opinions. Zoe brought the idea back to their overall message that school does affect students' creativity in both positive and negative ways, and that the school system could be better.

Group Interview

Immediately following the performance, I sat down with all five participants together for a group interview. During this interview, we discussed the process, the ideas generated in their performance, and their final thoughts about their educational experiences.

In terms of the process, the participants admitted that they struggled a bit, especially at first. Lucy said it was like "navigating in the dark". Samantha said "we were okay once we got rolling…once we decided what we wanted to do and a structure it was not a problem." She also added that even though there was only a short rehearsal time, "the things that we were doing all morning was getting us into the mindset and the thematic elements…we spent a lot of time thinking about it". Anna said it was different for her to create a play as a collaboration, because she is used to writing plays alone. Lucy talked about how the experience was totally new for her, as she has not been an actor before. She said that she felt comfortable because she "knew the people [she] was working with". I questioned Lucy about her previous self-assessment as only being moderately okay with taking risks, and asked how she was able to take the risk today. She said, "I think I'm okay with that. Cause I think—not even just in a creative sense but just in how I've grown as a person—I think my experiences outside of high school have shown me that I can take bigger risks."

All of the participants felt way more comfortable with the final product than the process. Samantha articulated, "I was more comfortable in the performance than in the rehearsal, because in the rehearsal I was like 'Are my ideas going to be good?' but once we were in it… we were all in it together." When I asked "Which is most important:

process or product?", they responded with both. Lucy said, "You can't have a good product without a good process."

Next, I asked the participants how they demonstrated creativity during the process and product. They generated the following ways:

- coming up with ideas and concepts (Zoe, Samantha, and Lucy). Lucy connected this to her experiences in engineering: "What was important here was that none of us shot each other down. Because you really limit someone's creativity and limit someone's voice when you say 'no'."

- synthesizing and distilling ideas into something more manageable and effective (Zoe, Samantha, and Lucy)

- letting go of personal ideas (Anna)

- making a performance out of their own thoughts and ideas (Ellie)

- formatting information (Samantha)

- problem solving: the prompt was the problem and "we took that and ran with it" (Lucy)

- taking "safe risks" (Lucy)

- finding comfort with space and environment (Samantha)

Overall, the participants all felt like they had engaged in a highly creative process, and that they generated an original and creative product at the end.

The last question I asked was if their performance was an accurate representation of their experiences in school. Anna opened with the fact that she actually did consider dropping out several times, but that she didn't because "some people were awesome". All of the participants expressed that it felt truthful. Samantha noted that the performance

encompassed a lot of different experiences, which felt truthful to her: "I had mostly good experiences in high school and mostly supportive teachers. I know people who aren't maybe as creative by default, and who maybe struggled with their relationships with their teachers and struggled with their grades. I think we represented a bunch of different types of people and different types of experiences." When I asked why the morning scenes were more positive in tone, the participants responded that the morning was more based on "what a teacher is *supposed* to say", whereas the afternoon was more based on real stories and personal experiences, school, and teachers. Ellie added that they were "thinking about the question and topic more critically". We then discussed the importance of teachers in their education, and the participants agreed that teachers' influences, both positive and negative, have had the strongest impact on their perceptions of school.

Exit Questionnaire

Following the group interview, I had each participant individually complete an exit questionnaire—see Appendix B for questions. My intention with this questionnaire was to give each participant a final chance to reflect on their experiences, connect back to what they had said previously, and allow them a chance to get some personal closure on the experience.

Overall, the participants did not have much that they needed to add; they expressed a feeling that they had said what they needed to during the performance and interview. Lucy was the only participant to change her self-assessment: she changed her overall creativity score from a two to a three, and her risk-taking skills from a three to a four. Ellie, Zoe, and Samantha stated the playbuilding day made them more aware of different experiences and perspectives of school, and more appreciative of the positive

experiences that they had. The participants had some suggestions for future research. Samantha suggested that it would be interesting to try the same activity with participants without a drama background. Lucy commented that there should be exploration of *how* changes can be made and implemented. Ellie expressed that she would like to see more teachers pay attention to students' individualities. Zoe stated that she would like there to be more exploration of learning environments and structures.

Analysis

Revisiting the Creativity Construct

In the questionnaires, interviews, and playbuilding, the participants explored many components of my creativity construct (reinserted below for clarity). The importance of many of the elements were confirmed through their stories and ideas.
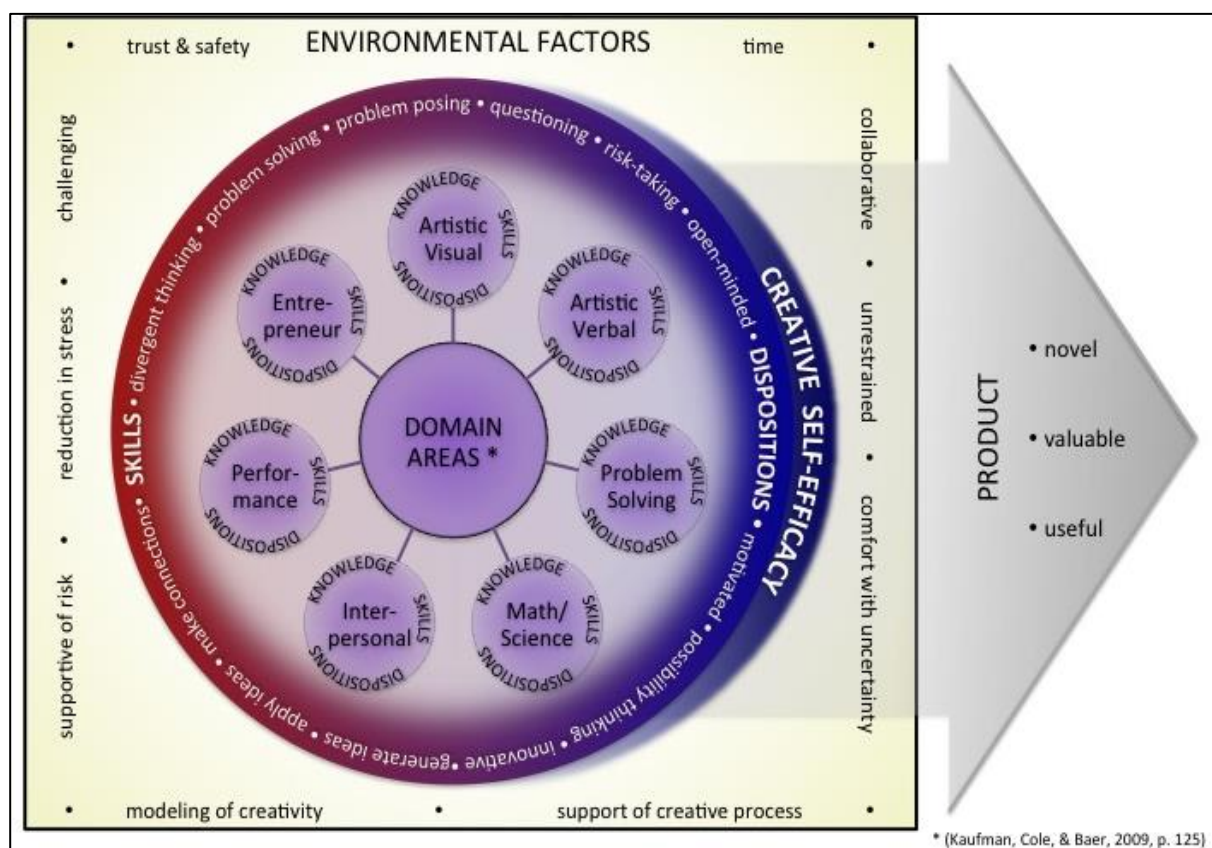
Figure 8. Creativity construct.

Environmental factors. In my review of the literature, I found that environment was a key predictor of creative achievement (Baer & Kaufman, 2005; Sawyer, 2015; Davies et al., 2013; Barbot, Besançon, and Lubart, 2015). I identified the most predominant environmental factors in the following list, which I rearranged to reflect the order of significance, as articulated by the participants:

1. establishment of trust and safety,

2. supportiveness of risk,

3. supportiveness of process,

4. unrestrained,

5. comfort with uncertainty

6. encouragement of collaboration,

7. modeling of creativity,

8. allowance for enough time,

9. reduction of stress, and

10. challenging.

As mentioned above, the nature of the teacher and the environment of the classroom had significant effects on the participants' views of creativity, as well as their willingness to be creative.

A safe and comfortable environment was identified by all five participants as a key factor that fostered their creativity and allowed them to take creative risks. Lucy in particular expressed that she sometimes struggled with creative assignments, but that she was okay when she felt comfortable and safe. In Zoe's interview, she gave contrasting examples of classroom environments created by teachers. She said her English teacher

made her feel comfortable "by creating a safe environment", whereas a previous Math

teacher created what felt like "a negative space" based on "assigned seating in rows, and

'you can't do this, you can't do that'" statements. This directly affected her achievement

in the classes, as she expressed feeling happy and confident in English, but she felt

"dumb" and like she "couldn't do things" in Math. Ellie focused on the trust and

emotional safety of the Drama room, which led to her feeling that "the environment itself

made [her] feel comfortable with who [she] was and what [she] had to offer."

Supportiveness, both from the teacher and from peers, was equally identified by

all participants as a key factor in fostering creativity. An environment that was supportive

of process was explained as being ones that included feedback, encouragement, and

assistance. Samantha described this supportiveness of process as:

> I felt that I could find support in my peers, as we were all attempting a similar
>
> thing. I also felt supported by my teacher, and knew I could go to her for feedback
>
> and inspiration. I was supported by the resources provided to me, and felt
>
> confident in my ability to format the work based on the instruction I was given. I
>
> was also given a lot of artistic freedom, which made my ideas feel supported and
>
> valued.

This is consistent with results from Beghetto's 2006 study on creative self-efficacy:

"With respect to teacher-related influences on creative self-efficacy, the results of this

study suggest that teachers can boost students' creative self-efficacy by providing

supportive feedback" (p. 454). Supportiveness of risk was described as teacher kindness,

non-judgmental peers, and acceptance of failure. Ellie described this as "There is an

element of trust involved where you believe that if you make a mistake, other people will

help lift you up, and people will still applaud you for taking a risk, and that creates a sense of support." Participants felt they could express themselves when they weren't worried about being wrong, and when they felt like they were rewarded for putting themselves out there and trying new things.

A free and unrestrained environment was deemed important by Ellie, Zoe, Anna, and Samantha (Lucy said she preferred to be creative within guidelines). Likewise, the same participants appreciated some level of uncertainty in the possibility. These participants particularly commented on the freedom of the theatre, and the possibilities they could find in its openness. Zoe said the space "allows for anything to happen and anything is possible", and Ellie described it as "an open space without a lot of the confining aspects of a traditional classroom". This openness seemed to encourage the participants to want to create something to fill the space, whether it be a play on a stage, or a project for an open-ended assignment. Ellie, Zoe, and Samantha also commented on how they particularly enjoyed projects that were completely open in terms of format, as this allowed them to connect to their creative passions and talents. It seems that this comfort with uncertainty and freedom is more dependent on other factors: it seems to come with a higher creative self-efficacy and confidence, as well as more trust, safety, comfort and support (as evidenced in Lucy's case).

Collaboration and modelling seemed to be less significant, but were still mentioned by participants. In their examples of creative processes provided in their introductory questionnaires, all participants identified that they were assessed individually, but allowed collaboration in the process through brainstorming or receiving feedback. This helped them to gain inspiration and develop their ideas. Ellie, Samantha,

and Lucy also commented that they valued and appreciated the collaboration provided through class and group discussions in English. Modelling was most often connected with their Drama and English teachers. Participants described these teachers as being creative themselves in their teaching methods, and also as being open with how much they value and admire creativity.

Stress, time, and challenge were factors that had mixed impacts. Overall, the participants seemed to agree that some pressure was important in order to complete the work, but that too much stress or too little time was detrimental to the quality of the work produced, and/or hindered the creative process. Challenge did not seem to be a determining factor for most participants. Ellie was the only one to comment on her appreciation of being challenged to work outside her comfort zone.

Observation of environmental factors during playbuilding. In addition to what participants said, I was also able to observe how environmental factors affected their creativity during the playbuilding day. Firstly, it was clear from the start of the day that the participants all had comfort and trust in the physical space, with each other, and with me. This came primarily from their past experiences working together on theatre projects, and from having me as a teacher. Their comfort was evidenced in their smiles and laughter upon entering the space, their relaxed posture, and their overall warmth and enthusiasm. Many participants hugged each other, and they quickly got chatting about memories and shared experiences. Further, that they felt emotionally safe was made clear in their willingness to share personal stories, and to take risks without hesitation.

The warm-ups that I chose were intended to help develop this collaboration, comfort, and trust between the participants, and they were all very willing to engage.

Additionally, the warm-ups revealed that the participants gave each other a significant amount of support in terms of ideas offered. This continued through the scene work, where participants were confident collaborating, and there was no conflict or judgement. The personal stories also exemplified that the participants trusted each other, and felt safe and comfortable expressing their thoughts. The participants particularly demonstrated support and encouragement of each other in their reactions to more vulnerable stories, such as Anna's and Lucy's. I believe that these positive environmental factors actually helped the participants to be more creative during the play planning, as they were willing to contribute ideas freely, and they could build on each other's ideas supportively and without judgement. That the playbuilding task was so open to interpretation and possibility seemed to inspire some participants (Samantha, Anna, and Zoe). Lucy seemed a bit more hesitant with the format at first, but relaxed as the process developed, and she even concluded in her exit questionnaire: "I like trying something new when I'm with people I trust."

Skills and dispositions. In my construct, I listed the twelve most predominant skills and dispositions associated with creativity. The dispositions, which relate to the ways people tend to think and behave while being creative, are:

- Innovative

- Open-Minded

- Possibility Thinking

- Risk Taking

- Questioning

- Motivated

The skills relate more to the abilities and tasks that people do while being creative, and these are:

- Generate ideas

- Apply ideas

- Make connections

- Problem-solving

- Problem-posing

- Divergent thinking

For clarity and simplicity in my introductory questionnaire, I distilled these down into eight prompts (see Appendix A). Table 3 shows participants' self-ratings on the creative skills and dispositions.

Table 3.

Participants' Self-Ratings on Creative Skills and Dispositions

Particip ant	Risk Taki ng	Open - Mind ed	Motivat ed	Question ing	Proble m Solvin g	Diverg ent Thinki ng	Making Connecti ons	Generat ing Ideas
Ellie	4	5	5	4	3	4	4	4
Zoe	4	5	4	4	4	4	4	5
Lucy	3	4.5	5	5	4	5	5	4
Anna	3	4	4	3	4	4	4	3
Samant ha	4	5	5	4	4	4	4	5

Note: Ratings are from the participants' introductory questionnaire, with 1 being "strongly disagree" and 5 being "strongly agree" (see Appendix A).

Overall on the questionnaires, the participants rated themselves the highest in the dispositions of being open-minded and motivated. These also seemed to be the qualities that they commented on the most as being factors important to creativity. In the scenes, the teachers who supported creativity were all incredibly open to different suggestions and perspectives. Further, in the final play, the very open-minded teacher is seen looking for a wider variety of assessment practices. Participants also felt that their creativity was hindered when they were forced to conform to 'right or wrong' methods of learning and assessment, rather than being allowed to express their ideas; these tasks felt like they threatened their open-mindedness. For example, in one scene, Samantha complained about a multiple-choice test assessing her understanding of poetry. What she was saying there was she felt her open thinking and desire to consider perspectives was being constrained. Being motivated was also a disposition that came up for participants in their desire to engage in challenging creative processes. Zoe in particular talked about how she is only able to be successful when she puts in effort, and this effort pays off. In her story of her elementary school experiences, she felt unsuccessful, which made her unwilling to even try to be creative.

In the skills and dispositions related to ideas and problems, the participants were more moderate, averaging scores of four. The creation and use of ideas seemed to be intrinsic to creativity for the participants, as it was the basis of many of their definitions of creativity: "Creativity is the ability to make and build on ideas" (Zoe); "It means you can take an idea and find a whole new way to look at it, or you can make your own idea" (Anna); "Creativity is the act of forming something…based solely on the individual's own imagination and ideas" (Ellie). When describing tasks in school in which they were

creative, many spoke about the importance of brainstorming to generate unique ideas. Conversely, participants expressed feeling less creative when they were not required to have or consider original ideas. This is evidenced in Ellie's description of a class that used primarily direct instruction: "You were told how to do something and you did it…I didn't feel like I got to use my mind for it." Problem solving and questioning were of particular importance to Lucy, who realized through this process that her engineering skills actually made her more creative than she originally had thought.

Interestingly, risk taking was the lowest self-rated disposition amongst these participants, but the highest in terms of how much it was discussed. Several participants qualified their self-assessments in that they are able to do things that others might consider a risk (such as performing in front of large groups), but that they do not feel it is a personal risk because of their comfort and experience with it. Many participants mentioned risk when discussing the environmental factor of safety—they are able to take risks when they have trust and comfort. Therefore, it seems that risk-taking is a large component of creativity, and it is one that is very dependent on environment and creative-self efficacy.

Observation of skills and dispositions during playbuilding. Observing the skills and dispositions of my participants was a main area of focus for me during the playbuilding day. It is important to note that the skills and dispositions that I discuss here are those that apply to general creativity, rather than the specific domains. I chose warm-ups specifically correlated to my construct list, as I knew the participants would need to apply these skills and dispositions during the scene work and playbuilding. I monitored the participants' behaviours throughout the day, which I then cross-referenced with their

self-assessments. Overall, they were largely consistent, with a few discrepancies that can be analyzed.

Ellie's contributions to the playmaking day were very consistent with her self-assessments on the questionnaire and interview. She was highly engaged in the process, but she was a bit reluctant to offer her own ideas at times. She was also slightly more conservative than the others in terms of her problem solving and brainstorming, often letting others contribute first or take leadership roles. This perhaps stemmed a bit from her fear of judgement. In her exit questionnaire she commented, "I enjoy performance and generally applying original thought to things, but there are still times that I feel restricted to doing things one way for fear of being wrong."

Zoe's behaviours were also very consistent. She offered a lot of ideas, particularly to the play development, and with particular regard to developing a play structure. This matched the five that she gave herself on the introductory questionnaire for generating ideas and the four she gave herself for problem solving. She reiterated this in her exit questionnaire, by basing her still high view of her own creativity on "how [she] came up with ideas". What is interesting, though, is that in her exit questionnaire, she also reported that she learned that she was "a little scared to share [her] ideas with the people around [her]".

Lucy's skills and dispositions on the playbuilding day were somewhat surprising. She was really willing to put herself out there and take emotional risks, such as in her monologue. Where she was consistent was in her high self-ratings of working hard when motivated, making connections, thinking about things in different ways, and asking and answering questions. These were all skills that Lucy demonstrated in her planning and

participation; she appeared determined to convey a variety of experiences, and she was thoughtful and analytical in her approach to answering the question at hand. This was reflected in her change in self-assessment that she reported in her exit-questionnaire, which she based on her contributions and her self-reflections: "Through this experience, I realize that I am more creative than I give myself credit for. Also, I like trying something new when I'm with people I trust and/or I see value in the risk." From my observations of her behaviour, I believe that Lucy's initial assessment of her creativity was less accurate than her final assessment, and that it was based on both an incomplete understanding of creativity and an underestimation of her own skills and abilities.

Anna's contributions to the playbuilding day were perhaps the least consistent with her self-assessment. She was one of the most active participants, offering a significant amount of ideas and suggestions. This contrasts with the three she gave herself for generating ideas. It is more in-line with her qualitative self-description on her exit questionnaire: "I kept having a whole lot of ideas pop in my head, and it made me feel excited and capable of creation". Overall, Anna seems confident in her abilities, but struggles with recognizing or acknowledging these as strengths, or perhaps the overall value of these strengths.

Samantha's skills and dispositions on the playbuilding day were very in line with her reported beliefs about her own creativity. She consistently took on a leadership role during planning and rehearsals, demonstrating a strong confidence in her ideas and her abilities.

Domain areas. As I mentioned in my rationale, my research was less concerned with domain areas, and more with overall educational experiences and creative self-

efficacy. However, there were some factors related to domain areas that are worth noting. On the questionnaire, participants rated their views of their own creativity in each domain area, reported in Table 4.

Table 4.

Participants' Self-Ratings in Creative Domain Areas

Participant	Artistic Verbal	Artistic Visual	Problem Solving	Math/ Science	Inter- personal	Perform -ance	Entre- preneur
Ellie	4	2	3	1	5	4	2
Zoe	4	3	3	2	4	4	3
Lucy	2	1	5	3/4*	4	2	3
Anna	3	4	4	3	3	4	3
Samantha	4	2	4	2	4	5	3

Note: Ratings are from the participants' introductory questionnaire, with 1 being "strongly disagree" and 5 being "strongly agree" (see Appendix A).
* Lucy split her answer, giving herself a 3 in Math and a 4 in Science

Ellie, Zoe and Samantha had very similar responses, rating themselves more highly in the artistic verbal, interpersonal, and performance domains, and notably lower in math/science. This reflects the classes and activities in school that they preferred. Lucy is an outlier, rating herself high in the problem-solving, math, and interpersonal domains, and lower in the performance and two artistic domains. Again, this is consistent with her favourite classes, as well as her chosen career path. Anna's scores were more similar across domains, which I believe reflects that she sees her creativity as more domain-general; she approaches all subject areas and tasks with a similar mindset and level of creativity. What is interesting to note is that for Ellie, Zoe, and Samantha, their overall

creativity assessments seem to match only their highly-rated domains, meaning they use their strengths to determine their overall assessments. Lucy initially based her assessment on her lower-rated domains, but then after the process, changed it to reflect more of an average across the domains.

In their interviews, questionnaires, and during the playbuilding day, participants all reflected the view that creativity is more commonly linked to certain domains, particularly the artistic and performance domains. Samantha, Ellie, and Lucy mentioned art and/or performance in their overall definitions of creativity, whereas Zoe and Anna were more general. Participants also were very consistent in their perception that school emphasized creativity in some subjects and not in others. Creativity was allowed and encouraged in arts classes and in English Language Arts, and seemed to be actively discouraged in Math and Science. This definitely seems to have influenced the participants' views of creativity. Those participants who identified as more creative (Samantha, Zoe, and Ellie), were also the participants to expressed the most dislike of math and science, and were very critical of the 'right versus wrong' teaching methods experienced in those classes. Lucy outright stated that the lack of creativity in high school math and science classes caused her to believe that she was not creative.

Observation of domain areas during playbuilding. My observations only saw participants working in the verbal, interpersonal, and performance domains. Overall, participants demonstrated strengths in all of these areas. As a group, they were very able to express their thoughts and ideas verbally and through dramatization. They also worked well together, seemingly instinctually knowing when to lead and when to compromise. This was consistent with the high scores that Samantha, Zoe, and Ellie gave themselves

in these areas. Lucy was the most discrepant here: despite rating herself as lower in both verbal and performance creativity, she was actually quite strong at expressing her ideas through drama.

Product. In my creativity construct, I indicated that product is the result of all of the other components of creativity working together. From my review of the literature, I synthesized that in order for a product to be creative, it should be novel, valuable, and useful. I situated it outside of the rest of the model, as creative products are often judged outside of context, which I hypothesized had the potential to damage creative self-efficacy. In their questionnaires and interviews, all of the participants agreed that process and product are important to creativity, and they felt both were of equal value. They felt a creative product could be an idea, a work of art, a story, a solution to a problem, or even a joke (Lucy).

I asked participants whether process or product was emphasized more in their educational experiences, and they all reported feeling like product was significantly more important to their classes and teachers. This was evidenced during the second scene, where participants struggled to find an example of when a teacher was involved throughout an entire creative process. The participants stated that the only time process was acknowledged and/or assessed was in Drama classes and infrequently in English classes[3]. I asked all of the participants if they felt that the assessment of their products usually matched their perceptions of their processes, and all of the participants except Anna indicated yes. Furthermore, all of the participants except Anna indicated that the

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[3] The English assignment the participants referred to assessed using a rubric that I developed based on my own creativity construct.

assessments of their creative products did not matter to them as much when they had truly enjoyed or found value in the process. This was especially the case for many Drama assignments, Lucy's English project, and the Career and Technology Foundations program. Ultimately, for all of the participants except Anna, this discrepancy in weighting between process and product did not affect their self-images.

Anna, on the other hand, described some profound experiences that she had early in her schooling that affected her beliefs about creativity and herself. In her interview, the first factor she listed as having negatively affected her perceptions of her creativity was "people's expectations". In both of her stories, she took the judgements that teachers had of her creative product as an indicator of her abilities. When she was in elementary school, her teacher called the product of her story wrong. When she was in junior high, her teacher said the sentence she wrote was "waste", then negated her process with "What were you doing this whole time?". Anna said that her "aim was to impress the teacher and to do good by the teacher, rather than to help [herself]", and she applied these teachers' negative judgements to her own perceptions of herself: "If a teacher tells me something about myself, I really listen to them." Anna expressed a feeling throughout her education that she was wrong or different, so she must be creative. But this also implies an underlying belief that creativity is wrong or different, especially within the confines of school. This led Anna to an incomplete definition of the creative product, which really significantly omitted the words *useful* and *valuable*. She frequently used the words "creative" and "original" interchangeably, and as Beghetto (2005) stated, "Creativity often is viewed as simply that which is unique, out of the ordinary, bizarre, or deviant. Without the additional criterion of usefulness, creativity quickly can become a

euphemism for negative, undesirable traits" (p. 256). Anna was taught that her creativity had no use or value within the school system, and so she took this same view of herself.

Observation of product during playbuilding. During the playbuilding day, there was a significantly greater focus on process rather than product. Participants spent five hours on process, and only 18 minutes on product, and, unlike most of what they did in school, there was no assessment or personal stakes in the product itself. I believe that this let the participants relax and focus on the meaning and analysis of the topic. In her exit questionnaire, Samantha noted that this was different from her usual experiences: "It is easier for me to be creative after spending a fair amount of time thinking about a topic. I often am more focused on the product, but today I learned the process is just as, if not more, important." That being said, the product of the play brought the creative process of the day to a culmination, completing the construct. The participants all expressed a feeling of pride in the product, and that they had created something tangible that also had value and purpose.

Creative Self-Efficacy. Of the five participants, three reported high creative self-efficacies during and immediately following high school (Ellie, Zoe, and Samantha). The other two (Lucy and Anna) reported low or moderate creative self-efficacy while in school, though these views have changed in the year since graduating. For Ellie, Zoe, and Samantha, their strong creative self-efficacy seems to come from a focus on their strengths and talents, which has been reinforced throughout their education. All three participants provided numerous examples of opportunities where they were allowed to be creative, where their creative processes were encouraged, and where they received praise for their creative endeavours. They all recalled multiple teachers who modeled and

fostered their creativity. That there is a clear relationship between participants' creative self-efficacy and their shared involvement in theatre is not surprising. In Beghetto's 2006 study "Creative Self-Efficacy: Correlates in Middle and Secondary Students", he reported that "students in the high-creative self-efficacy group reported significantly higher levels of participation in school activities like band, drama, art" (p. 453). Lucy's initial lower creative self-efficacy clearly stemmed from an incomplete definition of creativity that had been perpetuated throughout her education (that because Math and Science are not creative, she is not creative). Though she could still recall instances where her creativity was encouraged, it was not in her particular passion area, and so she did not consider it as part of her personal definition of her creativity.

What is also interesting and significant is that the participants' creative self-efficacies seem to correlate with their overall views of their education. This is also in line with Beghetto's (2006) results: "Students in the high-creative self-efficacy group were significantly more likely to hold more positive beliefs about their academic abilities in all subject areas" (p. 453). Samantha was notably the highest in her self-reported creativity, and she was also by far the most positive about her schooling, particularly when discussing how much support she received from teachers, and how much opportunity she had to be creative. Lucy's lower views of her own creativity seem to stem directly from her perceptions of school; though she was not completely negative about school, she was definitely impacted by the practices that seemed to limit creative thought. She was especially vocal about the frustrating physical structures of classrooms. Anna was by far the most critical of her educational experiences, and particularly of many of her teachers.

This seems to have led to her belief that her creativity was not valued or "right" within the restrictions of school.

This relationship between creative self-efficacy and perceptions of school seems to be mutual and self-perpetuating. When a student has a high creative self-efficacy, she will engage in more creative activities, which she enjoys. This then further develops her creative self-efficacy, which leads to even more positive feelings. However, these positive feelings also seem to act as a protective shield, allowing students with high creative self-efficacy to be less personally affected by educational practices that restrict creativity, even across domain areas. For example, Samantha and Ellie expressed annoyance at standardized in-class essays, but they did not feel any less creative because of them. On the other hand, Anna found these types of essays debilitating, and they made her believe she was not good at school. Likewise, all of the participants commented that Math and Science classes are often focused on one right way to do things, and do not allow for original thought. Lucy, though, was the only participant to transfer this feeling to her own creative self-efficacy. This relationship reinforces the need for creative expression in school, as well as for more creative opportunities in all subject areas.

Discussion of Emerging Themes

The Role of Teachers. For these participants, the number one influence on their views of how their education shaped their creativity was the role of their teachers. Their teachers' attitudes and beliefs about creativity, communicated through their choices in assignments, methods of teaching, and feedback to students, directly impacted participants' views of creativity and themselves. This effect was either positive, in the form of modeling and praising creativity, or negative, in the form of judgements and

restrictive teaching methods. Overall, with these participants, it seems that the positive effects of a few teachers outweighed the negative effects of others in the determination of their creative self-efficacy.

When the participants spoke about teachers who restricted their creativity, there were two main attributes and behaviours: (a) expressing negative judgements of students' creative products, and (b) focusing their teaching on "right versus wrong" methods. Anna, in particular, told stories of how teachers' negative judgements affected her views of creativity. The potential effects of these experiences were also identified by Barbot, Besançon & Lubart (2015): "If a climate of criticism and normative behaviour dominates in a classroom, children will integrate that creativity is 'not part of the program', will not be rewarded, and may even be seen as disruptive" (p. 377). Anna's experience of being told that her creative story was wrong had a lasting impact on her willingness to express herself in school. This was shown in her keeping a journal of her writing, but not allowing it to be seen by anyone. Anna's junior high teacher openly talking about how it was a challenge teaching her type of learner further communicated to Anna that her learning style was wrong, and that being creative made her less good at school. These judgements affected Anna's views of herself, and also affected her continued views of the value of creativity in the world. Though she sees herself as highly creative, she still struggles with seeing this as a good quality.

In terms of teaching methods, the participants who rated themselves as very creative (Ellie, Zoe, Samantha, and Anna) all expressed frustration in classes where they were taught that the most important part of learning was being right, and following one prescribed method. Samantha expressed this in the final scene of the play: "I used to love

to learn, you know? And I want to keep loving learning, but I can't do that when I'm told *how* to learn. I want to be creative and unique and myself." This was also exemplified in Ellie and Zoe's Math class scene, where the student got the right answer through different methods, but was still told she was wrong. Participants felt frustrated with the lack of original thought required for these classes, even when they felt they could be successful in them (Ellie). All of the participants agreed that most of their math and science classes did not allow for or foster creativity. This lack of creative teaching in math classes was also explored by Noddings (2013) in "Standardized Curriculum and Loss of Creativity", where she explores the case of teaching algebra: "I taught high school mathematics more than 40 years ago and, aside from slightly different language, there is nothing new…Textbooks have provided graded exercises in algebra for years" (p. 211-212). The effects of these teaching methods on my participants were mixed. Though it was frustrating for Ellie, Samantha, Zoe and Anna, it did not seem to have a profound effect on their creative self-efficacy. This issue actually had a more profound effect on Lucy, who personally enjoyed those classes where she had to find the right answer or apply the right method. For Lucy, she concluded that because what she enjoyed was not creative, that she herself was not creative. This made her more reluctant to try creative endeavours. Now that she has experienced the creative side of science and math through engineering, Lucy's views are beginning to change.

On the positive side, many of the participants discussed teachers who fostered and encouraged their creativity throughout their education. The opportunities to be creative in school made the participants with high creative self-efficacy more engaged in what they were doing. This was evidenced in the Career and Technology Foundations program that

Samantha and Zoe enjoyed, and the participants' positive views of classes like English, Drama, and Design, which allowed for creative self-expression. For the participants, they felt that their creativity was more nurtured by (a) being allowed choice and autonomy in assignment methods, and (b) having a teacher who modeled creativity. This response closely aligns with the work of Jeffrey and Craft (2004). They described teaching for creativity as "firstly making teaching and learning relevant and encouraging ownership of learning and then by passing back control to the learner and encouraging innovative contributions" (p. 81). They also found that teaching for creativity "is more likely to emerge from contexts in which teachers are teaching creatively…Learners model themselves on their teacher's approach, find themselves in situations where they are able to take ownership and control and are more likely to be innovative" (p. 84). Throughout the playbuilding day, participants continually expressed a desire for learning activities and assignments that allowed them to express their ideas in alternate formats. This was particularly clear when they were offering suggestions for being creative in classes during the scene work. The participants expressed that the opportunities that they had in school to choose a format were not only more enjoyable but made them more confident in their demonstration of content knowledge. Participants also expressed gratitude when teachers themselves were creative, and demonstrated an appreciation for creativity. Anna spoke highly of one of her Math teachers, who praised her for a unique perspective, and several participants commented that being allowed to be creative demonstrated to them that their passions had value and merit.

Both of these qualities can be seen in the case of a particular teacher whom several of the participants identified in their questionnaire/interviews. Samantha, Zoe, and

Ellie all had the same teacher for all three years of AP English, and he has clearly had a
profound effect on their creative views. They all described him as personally very
creative, and that he modeled creativity through his teaching methods, lesson plans, and
assignments. They particularly expressed appreciation that his classes were always
varied, and always designed to keep them engaged and interested. In her questionnaire,
Samantha articulated these qualities:

> This teacher allowed me to showcase my knowledge in unconventional ways, and
> designed his projects so that they could be presented in many different formats.
> He supported me in my individual interests by giving his students control over a
> lot of assignments, and he encouraged creativity by allowing us to infuse our
> schoolwork with the things we were passionate about. I know this teacher valued
> creativity because he always ensured he was finding new and different ways to
> teach us…The environment in his class was never static, so it was clear that he
> was trying to cater to many different learning styles and encourage creative
> thinking. He also displayed creative projects around the room to promote unique
> and creative work in the classroom.

They also all commented that he catered well to their individual learning styles, allowing
for individual expression whenever possible. Lastly, they all mentioned that his
classroom was designed to foster collaboration, open discussion, and mutual respect,
making them all feel very valued and able to be themselves. This teacher matches both
the work of Craft and Jeffery (described above), and the creative teachers presented by
Henriksen and Mishra in "We Teach Who We Are: Creativity in the Lives and Practices
of Accomplished Teachers (2015). They found that teachers successfully fostering

creativity "implement creative approaches in their classrooms that utilize real world learning, cross-curricular connections, and a willingness to take intellectual risks (p. 35). Interestingly, he matches their work in a further element: "Another core finding of this study suggested that outside pursuits always factor into how creative teachers think about their classrooms, because teachers tend to 'teach who they are'" (p. 36). This teacher's belief in creativity extends to his personal pursuits, as he is currently working on his master's degree in creative writing.

One interesting idea that came up during the playbuilding was the role of external forces on teachers. This was made clear in scene four, where a teacher's requests for freedom in how she approached the curriculum and assessment were rejected by a school board's insistence on standardization. Here, the participants expressed the feeling that they believe that teachers typically have good intentions, and that many teachers *want* to allow for more creativity in their classrooms, but that they are restricted by mandated curriculum and assessment choices. The participants followed up with the viewpoint that "good" teachers find opportunities to allow for creativity *despite* standardization, whereas "bad" teachers remain limited by the same restrictions, subjecting their students to a more restricted classroom environment. In the group interview, Lucy stated, "Teachers can only do so much, but I definitely do appreciate the teachers who have taken the curriculum and then taken liberties to deliver it in a different way than what was expected," and Samantha added that is because "teachers are our connection to the education system and curriculum". These tensions are repeated consistently in much research on creativity in education (Beghetto, 2005; Davies et al, 2013; Henriksen & Mishra, 2015; Jeffrey & Craft, 2004; Noddings, 2013; Olivant, 2015; Sawyer, 2015;).

Sawyer (2015) asserts that "in the most effective classrooms…[and] for students to learn creatively", teachers are constantly balancing these pressures: "Teachers constantly improvise a balance between creativity and constraint…[and] teachers adapt textbooks and develop lesson plans that enable students to participate in classroom improvisations" (p. 21).

Overall, teachers who fostered creativity seemed to validate students' creativity as a whole, helping them to develop a strong self-efficacy across domains. On the other hand, teachers who did not seem to foster creativity mainly seemed to affect students' views of a particular subject area, rather than their internal views of themselves. They only had a lasting impact on creative self-efficacy when larger judgements were made about the individual herself (e.g. Anna).

The Importance of Arts Education. One of the more personally affirming aspects that the participants focused on, both in their interviews and in the performance, was the power and the importance of the arts in education. Sawyer (2015) asserted, "The teachers who are most receptive to creativity in the classroom are arts educators, because in traditional schools, creativity is rarely found outside of arts, music, and drama classes. Thus, one of the most obvious ways to increase creativity in schools is to strengthen arts education programs" (p. 4). In "Does Experience in the Arts Boost Academic Achievement?", Eisner (1999) articulated reasons why arts education in its own right is hugely important for students. Among these, he included that "students should acquire a feel for what it means to transform their ideas, images, and feelings into an art form" (p. 148). He also argued that arts education allows students to develop a unique set of skills and dispositions "that appear to be cultivated through…the process of artistic creation"

(p. 148). These, all associated with the development of creativity, include "a willingness to imagine possibilities…a desire to explore ambiguity…[and] the ability to recognize and accept the multiple perspectives and resolutions that work in the arts celebrate" (p. 148). For all of my participants, the positive effects of their involvement in the arts have seemed to outweigh any negative effects of school in determining their positive self-efficacy.

Drama. Ellie, Zoe, and Samantha particularly identified that being involved in theatre gave them much more confidence in themselves, their ability to be creative, and their overall ability to express that creativity. In fact, for all three participants, drama was the first thing they listed as having an effect on their views of themselves as creative, *and* their views of their educational experiences. For Anna, her involvement in theatre and other art classes seemed to be the only redeeming part of her schooling, and one of the few activities that kept her in a traditional school, rather than taking her classes online. What seems to be important is the community of support and encouragement, and the opportunity to be challenged and take risks.

All of the participants commented on the supportive physical and emotional environment of the drama community as having a very positive impact on their self-perceptions. "Drama activities offer opportunities for pupils to express their ideas; in a creative environment, pupils work in a permissive atmosphere. Due to the positive atmosphere, pupils do not need to be afraid of failure or performance-focused evaluations that inhibit creativity" (Toivanen, Halkilahti & Ruismäki, 2013, p. 1172). They felt a comradery with their peers that allowed them to be themselves, and that made them feel valued for their contributions. This environment also made them feel incredibly safe and

free from judgement, which allowed them to express their unique thoughts and ideas. Ellie described this: "I was surrounded by people who I knew I would consistently be able to share my ideas with without being judged, and there was an atmosphere of freedom."

The participants who were involved in performance (Ellie, Zoe, Anna and Samantha) also commented on the positive impact of the drama teacher as someone in their lives who valued the same things that they did, and acted more like a mentor than a traditional teacher. Ellie described the significance of her drama teacher:

> [They] supported me by taking the time to really get to know who I am as a person, and then using that sense of who I am to guide me in ways that they could see benefitting me… This teacher showed a visible commitment to guiding each and every student based on what they wanted to get out of their education, which I think is important when it comes to creativity, as opposed to teaching each student the same way and assuming that that is "the right way".

The participants particularly felt appreciative of the feedback and critiques of the drama teacher, even when constructive, as they helped participants to develop and grow. They expressed that the teacher pushing them to improve and to take on more challenges helped them to be more confident in their own abilities, and to attempt to do more and go further with their performances. Beghetto and Kaufman (2014) state that "Feedback is one of the most important things in helping shape one's mini-c ideas into little-c contributions that others can appreciate as creative" (p.55). What they mean here is that feedback is essential in helping students manifest their internal personal ideas (mini-c creativity) into an everyday tangible creative product (little-c creativity).

Another significant component to drama education is that it helped the participants to feel comfortable taking risks and accepting challenges. None of the participants expressed feeling like performing on the playbuilding day was a particular risk; however, they did express that that probably was because they have had so much experience doing it, and because they felt so comfortable in the environment. "Teachers can provide opportunities for students to take smart risks …[and] must remember to not only create a safe environment for failure and discovery, but also must encourage and remind students to take those risks" (Luria, Sriraman & Kaufman, 2017, p. 1036). Drama as an art form is unique in that it allows for, and often actually encourages, failure with little to no consequences. Theatre requires significant rehearsal, where all participants make creative choices; some work and some do not, but it is the attempts, the risks, and the failures that lead to the successes. Additionally, all of the participants except Lucy had a lot of experience with improvisation. Improv goes even further in celebrating risk taking and failure because the actors are constantly coming up with new ideas, which either work or do not work. However, whether an improvised scene is a success or not, the performers learn, and have the opportunity to grow. All of the participants had significant experience with the theatrical process, whether in the performance or technical side or both. This practice taking risks and repeatedly learning from failure is, what I believe, made these participants so comfortable doing so, resulting in five young people who were very willing and able to express their thoughts, ideas, and feelings through performance.

A final component of drama education that is different from many other subjects is the more equal emphasis on process and product. The participants who had been more

involved in acting and drama classes (Ellie, Samantha, Zoe and Anna) stated that drama class was one of the few classes where students actually received feedback on how they are doing before the assignment was complete. It was also one of the few classes where they recalled being assessed on their process as well as product. In their drama classes, students were graded by the teacher on their contributions to large projects, and they were also required to do peer- and self-assessments of their process. Because there is so much consideration of process in the creation of theatre, these participants seemed very aware of the importance of process when it comes to creativity.

English Language Arts. All five of the participants identified English Language Arts as the core subject in school that allows for the most creativity. This was felt due to the openness in terms of methods of expression, as well as the feeling that the teacher supported creativity itself. This parallels the "Classroom Contexts for Creativity" described by Beghetto and Kaufman (2014): "Creativity-supportive practices include (a) explicitly teaching for creative thinking, (b) providing opportunities for choice and discovery, (c) encouraging students' intrinsic motivation, (d) establishing a creativity-supportive learning environment, and (e) providing opportunities for students to use their imagination while learning" (p. 58). This potential for English Language Arts to positively affect students' creative self-efficacy is important, as it is a course that is mandatory for all students to take from kindergarten until grade 12 in Alberta.

The number one activity in English that the participants said allowed for creativity was in projects. All five participants, either in their interview or during the playbuilding day, discussed an English project that they particularly enjoyed or felt proud of. Participants said they particularly enjoyed projects where they could express their ideas

in whatever format they desired (such as Samantha writing a song, Anna's research movie, or Lucy's "Cards Against Humanity" project). The participants expressed that this choice not only made the assignment more interesting, but it made them feel like their preferred method of expression had merit and value. In this way, they could utilize a format that they felt comfortable with, allowing for more comfort and success with the content.

Another aspect of English Language Arts that seemed to inspire creativity for the participants was the reflection, discussion, and analysis of literature. The participants commented that they appreciated the opportunity to converse with their peers, and build on each other's thoughts and ideas. For the participants, this class discussion was unique to English classes, and made them more engaged in the subject matter. The analytical and personal connections that some of the participants made with the literature and with each other in English class also helped them to develop their critical thinking skills and their empathy. Sawyer (2015) emphasized the importance of reflection in effective learning environments: "Students learn better when they express their developing knowledge—either through conversation or creating papers, reports, or other artifacts—and then are provided with opportunities to reflectively analyze their state of knowledge" (p. 15). These skills of questioning, making connections, and building on ideas, commonly found in English Language Arts, are all core to the development of creativity.

However, several of these participants recognized that their experiences in Advanced Placement English were not necessarily typical for all students in English Language Arts, and there were some aspects of English that frustrated them. During the playbuilding day and in several interviews (Lucy, Anna and Zoe), participants expressed

frustration with the standardized testing, both in the timed essays and in the reading comprehension tests. They felt that these restrictions caused them to be less creative on those particular activities. Nevertheless, much like was the case with teachers, for these participants, the positive impacts of the creative projects and discussions outweighed the negative impacts of the standardized testing.

Classroom Structures and Environmental Factors. In the questionnaires, interviews, and playbuilding, one element that kept surfacing was the environment in which creativity thrives. What is interesting is that most of the negative factors were physical structures, whereas the positive factors were social and emotional.

One aspect of school that the participants explored in their playbuilding was the effect of the physical structure of classrooms and schools on students' creativity. In their literature review on creative learning environments, Davies et al (2013) found that classrooms that promoted creativity were "capable of being used flexibly" and that "there should be a sense of openness and spaciousness, removing as much furniture as possible to enable pupils to move around the space making use of different areas to support the grown of ideas" (p. 84). Though they did not explicitly mention openness, my participants all expressed frustration with sitting in rows, particularly those that separated them from other students, as this hindered their ability to collaborate and communicate with their peers. They also commented on the nature of rooms where the students face front, which indicated to them that the teacher is the most important person, and that students are passive receivers of information. These set-ups gave the direction to students to be quiet and to listen, rather than to express themselves and participate in their education. The participants indicated a preference for classrooms that were set up non-

traditionally, in pods or in U-shapes, which allowed them to see and communicate with their classmates. They also said that these set-ups made them feel like their opinions and ideas mattered. In her interview, Lucy explained why she preferred the U-shape set-up of her English classroom to other traditional structures:

> It wasn't a 'You have to listen to me and that's it' for an hour and a half. It was more of an equal dynamic, instead of just being talked down to physically…Subconsciously [a traditional set-up] might say that they [the teachers] know everything and you [the students] know nothing, so your ideas don't matter as much, because there's a right and wrong way. Whereas [in English] there was that equal footing that maybe my opinion matters a lot more *here,* and what I say matters a lot more *here* than in other classrooms.

The participants expressed that they were more likely to be more creatively engaged and produce more creative ideas when they were in a physical space that showed them that their ideas mattered and were important. The participants, who all attended the same high school, also expressed frustration with a lack of windows in the building, which added to the feeling that the rooms were confining and shut off from the rest of the world.

Participants were very focused on social and emotional factors when exploring environments that foster and encourage creativity. These were explored primarily in the questionnaires and interviews, where participants described "a time, place, and/or situation at school in which [they] were allowed to be completely or very creative". All of the participants described assignments that they completed alone, but they all also described them as collaborative processes, where they relied on the teacher and/or classmates for help brainstorming and for feedback throughout. This collaboration and

feedback made the creative process easier and more comfortable for them. This is also reflected in the work of Davies et al (2013): "As well as supportive relationships with their teachers, there is strong evidence that pupil creativity is closely related to opportunities for working collaboratively with their peers" (p. 87). Participants also expressed that they were more willing to take risks and express their ideas when they trusted their teacher and classmates, and felt free from judgement. They felt they did their most creative work when they had some level of freedom, particularly in the format of the assignment. "There is strong evidence from across the curriculum and age-range that where children and young people are given some control over their learning and supported to take risks with the right balance between structure and freedom, their creativity is enhanced" (Davies et al, 2013, p. 85).

 Assessment. Surprisingly, the participants talked very little about assessment, and its impacts on their creative self-efficacy. During the interviews, I asked participants how they felt when they were assessed on creative projects and assignments, and they all expressed that it was a non-issue, and that the grades on creative projects did not seem to affect their views of their creativity either positively or negatively. What seemed to affect them the most was just having the opportunities to do creative projects and to be able to express their understandings creatively, as well as their engagement in the processes. These experiences made participants feel more comfortable with the creative process, and having their talents and passions validated helped to foster a positive creative self-efficacy. This supports the ideas presented by Beghetto (2005) that "teachers' classroom assessment practices are laden with goal-related messages that influence the motivational beliefs and subsequent achievement behavior of their students" (p. 257), and that

assessment itself does "not necessarily diminish or undermine student creativity; rather, how students perceive the goal messages sent by their teachers' assessment practices is what matters" (p. 259).

The assessment type that the participants expressed as having restricted their creativity the most was standardized testing, particularly multiple-choice tests. Noddings (2013) warned about the negative effects of standardized testing on students' creativity: "The grim enactment of lessons designed to elicit answers to test questions impedes genuine education" (p. 213). Olivant (2015) further explained: "High-stakes tests typically demand reproduction of a set of facts (in other words, novelty and ambiguity are rejected) in settings where only low levels of risk can be tolerated (i.e., failure is unacceptable); thus, they discourage the fostering of creativity" (p. 117). The issues of standardized testing were discussed in Lucy, Samantha, and Anna's scene on discouraging creativity, as well as in scenes four and six of the play. In scene six, participants expressed frustration with multiple-choice testing, particularly in that it does not allow for free-thought or creative expression. In scene four, the teacher actually goes further in stating that these tests actually prevent creative students from fully demonstrating their knowledge and finding success in school. As with previous issues, these tests do not seem to have damaged the participants' creative self-efficacy, but rather simply affected their views of certain subjects. Perhaps had participants been exposed to a wider range of types of assessments, they might have developed a more well-rounded view of creativity, particularly in the math/science domain.

Implications for Practice

This study revealed some clear areas where educators can improve their practice in order to help develop and foster students' creativity and creative self-efficacy.

Make Room for Creativity

One major method for doing this is to simply find the time, space, and opportunity for creative expression and individual choice within *all* subject areas. "For students to be willing to take the intellectual risks necessary to express their creativity, teachers must enact classroom practices, policies, and procedures that are supportive of creative expression" (Beghetto, 2006, p. 449). In 2006, Jeffrey found that "The young participants engaged meaningfully with learning when they had an opportunity to own the knowledge they encountered or the processes with which they were engaged (p. 410). Likewise, my participants expressed feeling more engaged and more likely to demonstrate deep thinking when they were able to express their understandings creatively. However, in high school they felt like these opportunities were limited to English Language Arts and arts classes. This resulted in disengagement from other classes, particularly Math and Science, and a restricted view of what creativity actually is. Further, Luria, Sriraman and Kaufman (2017) reported that "The traditional procedures-based mathematics classroom, or didactic teaching, in which students learn the step-by- step process to solving problems, may actually inhibit both their mathematical understanding and their mathematical creativity" (p. 1035). In order to combat this, I would suggest finding opportunities for students to utilize and grow their creative skills and dispositions across the curriculum. This would also ensure that creativity is developed across the domain areas. "A…way to foster creative learning would be to alter the design of learning

environments in the content areas, so that the knowledge that students acquire better prepares them to engage creatively with that knowledge" (Sawyer, 2015, p. 11). Lucy offered the example of engineering projects as a way to blend the content of math and science with creative problem solving and idea generation. Any type of open-ended project, design-based activity, or deep problem-solving task would help students to develop their skills, and also demonstrate that creativity is possible within all subject areas. Additionally, allowing for student choice in how they demonstrate their knowledge, rather than relying solely on standardized assessments and tests, demonstrates to students that their personal talents and their creativity has value, and allows for greater confidence in their application of content.

Focus on Process as well as Product

In high school education, there seems to be a huge focus on product: tests, assignments, and grades. One of the lessons that can be learned from drama education is that rehearsal also matters. Allowing students to fail, and then learn from those failures offers both deep learning and mastery of content, and makes students more comfortable taking academic risks. The reason that drama students are willing and able to express themselves dramatically is because they have experience and comfort with doing so in low-stakes processes (rehearsals) *and* high-stakes processes (performance). In many academic subjects, students only get experience with high-stakes processes (graded assignments, tests). Allowing opportunities for students to practice skills, and to put an equal emphasis on what is learned through this practice, has the potential to develop students who are more confident in their abilities in all subject areas. This is what Beghetto (2005) describes as the difference between performance goal structures, which

"stress the importance of avoiding mistakes, besting others, getting the highest grades"
(p. 257), versus mastery goal structures. Mastery goal structures:

> Focus on self-improvement, skill development, creativity, and understanding…
> Empirical evidence suggests that students in mastery goal structured classrooms
> are more likely to adopt healthy motivational beliefs and mastery-oriented
> achievement behaviors, including enhanced interest in learning, more positive
> attitudes toward learning, attribution of failure to lack of effort (rather than to lack
> of ability), high levels of academic engagement, perseverance in the face of
> challenges, more risk-taking, and asking for assistance when needed. (p. 258)

One example of employing this mastery goal structure to emphasize process could be the
writing process in English Language Arts. Instead of focusing so much on the product
(the in-class essay), more time could be spent on understanding and developing the
process—the rehearsal of writing. These processes should also be assessed, either
formally or informally, to provide valuable feedback on not just what students are doing,
but more importantly, *how* they are doing it.

Consider Non-Traditional Classroom Structures

The participants all expressed frustration with the physical structures of many of
their high school classrooms, particularly where desks were separated from each other
and focused solely on the teacher. "There is evidence that suggests an impact of creative
learning environments on learners' academic achievement; increased confidence and
resilience; enhanced motivation and engagement; development of social, emotional and
thinking skills; and improved school attendance" (Davies et al, 2013, p. 88). In order to
create classroom environments that foster creative thought and expression, the furniture

arrangement needs to facilitate and encourage collaboration, discussion, comradery, and possibility. Above all, the physical set-up should reflect that students' voices and ideas matter and have worth, otherwise they will not express them. The participants were clear that desks facing forward in rows indicated that they should be quiet and listen, whereas desks in U-shapes or pods indicated that they should participate and be engaged. Furthermore, looking for opportunities to branch out of the traditional classrooms through field trips and other real-world learning experiences would also help to encourage student creativity by developing comfort with uncertainty and stimulating curiosity.

Understand the Weight of Being a Teacher

Above all else, the teachers were the defining factors for how the participants developed their creative self-efficacy. "By their attitudes and way of being, adults may impact children's development of creative potential…High expectations, mutual respect, the modeling of creative attitudes, flexibility, and dialogue are among the most important features of the teacher-learner relationship for creativity" (Barbot, Besançon & Lubart, 2015, p. 377). As some of their final words on the playbuilding day, Ellie said, "Teachers are a big part of the experience because their opinions are what you are striving for as a student. You want to succeed in a class and if you have positive feedback from a teacher, that encourages you more." Samantha concluded that, "You spend months with this one person who is teaching you, telling you things, guiding you, shaping you, giving you constructive feedback on your work…when you have a really good teacher, they have such a strong impact." A positive, supportive relationship with a teacher can help a student gain confidence and motivation. On the other hand, overly harsh, critical, or judgmental words from a teacher can have a lasting impact on how she views herself and

the world. Teachers also model to students of all ages what has value and importance. They do this through the choices they make in the structures of their classes; their methods of teaching; the assignments they design; and their personal words and actions. Individual teachers *do* have the choice to embrace and foster creative development in their classrooms. But above all, it is vital for teachers to make sure they are demonstrating that what has the most value and importance in their classrooms is each individual student.

Suggestions for Future Research

This study was significant in that it managed to get a deeper look into five participants' educational experiences and the effects that this has had on their creativity and creative self-efficacy. It explored several key issues that affect student creativity, and offered suggestions on how to improve educational practices. However, there are some areas that could be explored and developed in future research.

Expand Playbuilding

Because of the nature of this project, it was important to condense the playbuilding into one day. I think that it would be interesting and revealing to expand this process over the course of several days or even weeks. This would allow participants more time to think about what issues are the most significant, and would also allow them to reflect independently between sessions. This would also allow the group to refine their scenes within the play to make sure that they conveyed all of their ideas effectively. They would also be able to incorporate more of their creative ideas, such as costuming, music, and other technical elements, which could further reinforce their ideas. It would also be interesting to involve a larger audience, which would raise the stakes for the participants,

as well as offer an additional perspective. An audience, particularly one that included educators, could be surveyed or interviewed to hear their opinions and perspectives on the issues addressed.

Expand Participants

I previously discussed the limitations of my participant selection, and I acknowledge that their perspectives and even their willingness to engage in the creative process was somewhat limited. It would be very illuminating to repeat this study with participants who have little or no experience in theatre. This might change both their visible skills and dispositions during the playbuilding activities, and likely their views of creativity, their self-efficacy, and their educational experiences. It also would be interesting to incorporate male participants, or even younger participants to broaden the range of perspectives.

Follow-Up on Teaching Practices

An interesting companion piece might take a closer look at teachers' perspectives of fostering creativity and creative self-efficacy. A study that explored how teachers are able to be creative in their practices, how they view their own creativity, how they understand and perceive creativity in general, and how they actively work to foster creativity in students could deepen the understandings found in this study. For example, do the teachers who feel creative offer more creative experiences for their students? If so, how do we allow for teacher creativity within our school system? Or, what are Math and Science teachers' views of their own creativity and creativity in their subject areas? If they do feel creative, how are they exposing students to math/science creativity? Studies

such as these could offer insight into some of the disconnects that are occurring in classrooms.

Conclusion

This thesis intended to develop a comprehensive definition of creativity, which included a link to creative self-efficacy. This construct was then applied, through a variety of qualitative methods, to explore five participants' views of how their education affected their creativity and creative self-perceptions.

1. My findings confirmed much of what was articulated in my construct model, particularly that the classroom environment, especially the choices that teachers make, have a significant impact on how willing students are to be creative.

2. My research also revealed that high school education seems to present a limited view of what creativity encompasses and where creativity occurs, allowing for creativity in artistic domains, while ignoring creativity in math/science domains. This limited representation can lead to disengagement in those areas, or can negatively affect students' creative self-efficacy.

3. The further exploration of the participants' creative self-efficacies revealed that students who are exposed to arts education (Drama and English Language Arts in the case of these participants), and who are given significant opportunities to engage in creative experiences in school, develop a stronger creative self-efficacy, and are more willing and able to engage in the creative process.

4. Creative self-efficacy is especially reinforced by teachers who support and promote creativity.

5. Students with a high creative self-efficacy and who have a creative outlet seem to be less personally affected by educational practices deemed to be less supportive of creativity.

Ultimately, the participants in this study expressed an overall message that the impact of schooling on students' creativity "depends". What they were referring to is that students' creativity and the development of their creative self-efficacy is dependent on their exposure to opportunities to be creative, and the environments established by individual teachers. Furthermore, the development of creative skills, dispositions and self-efficacy in students is key to the development of confident, articulate, happy, and resilient graduates. Therefore, we, as educators, must always be focused on the question: "How can we make it better?"

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Appendix A

Introductory Questionnaire

1. How would you define creativity?

   - What does it mean to be creative?

   - What does creativity look like?

2. On the scale below, indicate how creative you think you are *overall*.

1	2	3	4	5

   |--|

   Not at all creative   Extremely creative

   - How did you arrive at this assessment?

   - What factors did you consider when making this assessment?

   - How do you think your educational experiences affected this view?

3. Describe your high school experience, with regards to creativity.

   - In high school, what was your favourite subject(s)? Why?

   - What was your least favourite subject(s)? Why?

   - What extra-curricular activities did you participate in? What drew you to them?

4. Think of a time, place, and/or situation **at school** in which you were allowed to be completely or very creative.

   - What about the environment enabled you to be creative?

   - Were there any restrictions (e.g. time, format, other?)?

   - Were you working alone or collaboratively?

   - Were there any factors that made you feel supported?

   - Were you challenged?

- Did you feel comfortable in the situation?

- How does this environment compare to most of your high school experience?

5. Think of a teacher who you felt nurtured your creativity. Describe the teacher.

- How did he/she support you?

- How did you know he/she valued creativity?

- Would you describe this teacher as creative (i.e. did he/she model creativity)?

- Was this teacher similar or different to most of your high school teachers? How so?

6. Indicate how much you agree or disagree with the following prompts. Feel free to comment on any prompt that feels problematic.

	1 = Strongly disagree	2 = Disagree	3 = Neither agree nor disagree	4 = Agree	5 = Strongly agree	Comments:
I enjoy taking risks when being in a creative situation.	1	2	3	4	5	
I consider myself to be open-minded and willing to consider varying perspectives.	1	2	3	4	5	
When I am interested in what I am doing, I am motivated to work hard.	1	2	3	4	5	
In general, I enjoy asking questions and seeking answers.	1	2	3	4	5	
I can find unique solutions to problems.	1	2	3	4	5	
When working on something, I like to think about things in lots of different ways.	1	2	3	4	5	

I can and enjoy making connections between different subjects, topics and ideas.	1	2	3	4	5	
I am good at brainstorming and generating original ideas.	1	2	3	4	5	

7. Rate how **creative** you see yourself in each of the following areas:

	1 = Not at all creative	2 = Not very creative	3 = Somewhat creative	4 = Very creative	5 = Extremely creative	Comments:
Artistic Verbal (using words to express ideas)	1	2	3	4	5	
Artistic Visual (creating or using visuals/images to express ideas)	1	2	3	4	5	
Problem Solving	1	2	3	4	5	
Math and/or Science	1	2	3	4	5	
Interpersonal (communicating and/or working with others)	1	2	3	4	5	
Performance (drama, dance, music, sports, etc.)	1	2	3	4	5	
Entrepreneur (business, advertising, etc.)	1	2	3	4	5	

8. Is there anything else you would like to add at this time about yourself, your own

creativity, and/or your experiences at school?

Appendix B

Exit Questionnaire

Name: _____

1. Please review the answers you gave on the first questionnaire. Are there any answers you would like to change or modify? Please list changes below, and explain why you would like to make the change.

2. What did you learn about your own creativity through this process?

3. Have your views about your educational experienced changed at all through this experience? How so?

4. Are there any issues relating to your education experiences or creativity that you think need further exploration?

5. On the scale below, indicate how creative you think you are *overall.*

   |--|

   Not at all creative   Extremely creative

   a. How did you arrive at this assessment?

   b. What factors did you consider when making this assessment?

Appendix C

Script for Final Performance: How Can We Make It Better?

The entire performance can be viewed at http://goo.gl/vLU4w1

Prologue:

On the stage are 5 chairs arranged into rows. Behind them is a whiteboard that reads, "HOW DOES SCHOOL AFFECT CREATIVITY?" *Sound of a crowd of students entering a classroom. Five students enter. They are laughing and chatting. Anna draws a picture on the whiteboard and everyone laughs. A school bell rings. The students sit in their chairs. They face forward and sit quietly. Anna takes the longest to face forward. Silence.*

Scene One:

Lucy gets up and sits on the floor down centre. She addresses the audience directly.

Lucy: So, when I was in high school, I never really saw myself as that kind of person, you know, that creative person. I always kind of gravitated more towards Math and Science, you know, the traditional, more analytical type of subjects. I always associated creativity with more English and Social Studies because that's, you know, that was the time to have those creative projects. Creativity to me was always associated with the more artsy things, you know, but I kind of learned that

even though I didn't see myself as this creative person, you know, that I could still apply myself to be creative... Cause creativity was, like, so much more out of reach when I was in high school. But it kind of shifted to be, like, how to apply your imagination. And that didn't necessarily mean being artsy, right? You know, problem solving even in Math or Science can also be great. I think that was pretty cool.

Lights fade out.

Scene Two:

Lights up on Emily, Samantha and Zoe, downstage. Emily and Samantha are warming up for a performance, their last high school theatre production. Zoe plays their drama teacher/director.

Zoe: So? Are you guys ready?

Emily: *(Visibly anxious)* I'm so nervous

Samantha: Oh, you'll be fine. *(Exhales.)* I can't wait. I can't believe this is my last high school performance ever.

Zoe: You're gonna do **so** amazing.

Samantha: Aww thanks!

Emily: It's my first and I just…I don't know. I'm so scared.

Zoe: You'll do fine. You've been doing great this entire time.

Emily: Thank you! You know, uh, can I say something?

Zoe: Of course.

Emily: Like cheesey or whatever, but I'm just really glad that I did this. And that I

            had these, like, mentors to help me do what I was passionate about.

            Because I- I didn't know that you could do all this fun stuff and still be

            creative in school, and you guys showed me that I can. So, thank you.

Samantha: Awwww…well thank you for joining! Theatre club is so happy to have

            you. I know you're going to make me proud when I leave. Yeah. Um,

            while we're on, you know, sappy show night phase… Listen, Ms. T, I just

            want to say, I never thought that I was good enough for, like, anything, but

            especially this, you know? I didn't think that…There's so many people

            that want to do it, and I never thought that I would be good enough to act

            forever. And now I'm gonna do it hopefully for the rest of my life. So,

            thank you for showing me that I can be confident in myself, and that I can

            be creative, and that the things that I'm passionate about can be just as

            important as everything else in my life. So, thanks for making me who I

            am.

Zoe: Oh, you guys are gonna do fantastic. The show is starting. Go out there

            and do awesome. *(She gives them two thumbs up.)*

Samantha: Alright hands in.

All: *(They put their hands into the centre)* One, two, three…LES MIS!!

Lights fade out.

<u>Scene Three:</u>

Lights up on Anna and Lucy, sitting on a bench down centre. They look bored. The other students sit with their backs towards them and the audience.

Lucy: It's nice to get some fresh air, you know?

Anna: Yeah, yeah. What class are you skipping?

Lucy: Math.

Anna: Chem. We should have just, like, planned our schedules out so that we'd be in more of the same classes.

Lucy: Yeah, we should have.

Anna: And then we wouldn't have to skip. Or we'd skip together.

Lucy: Yeah, we're still skipping together. *(They laugh.)*

Anna: Yeah. *(Yawns.)* Can I tell you something?

Lucy: Yeah.

Anna: Don't tell anyone else yet, cause I'm, like, not sure yet.

Lucy: Okay.

Anna: I…um…I might be dropping out.

Lucy: Wait, like out of high school?

Anna: Yeah.

Lucy: Why?

Anna: Um, like I'm not gonna stop taking school, but I'm just gonna do it online.

Lucy: Oh, okay.

Anna: It's pretty cool.

Lucy: Yeah.

Anna: I've always wanted to, like, know what it's like to be homeschooled. I watched this Ted Talk about this kid who was homeschooled, and he makes it sound pretty cool. He was like this skateboard/surfer kid…

Lucy: Yeah. The one who travels everywhere?

Anna: You watched that too?

Lucy: Yeah.

Anna: No way!

Lucy: No way, yeah. *(They high five.)*

Anna: See, yeah, that's what I want to do. School just sucks.

Lucy: Yeah.

Anna: Yeah, I mean, have you seen those, like, videos of the Swedish kids?

Lucy: The Swed-? No, I don't think I have.

Anna: They have got like such a great school system. You get to play as long as you want and then eventually you'll wanna learn something.

Lucy: Yeah.

Anna: And then they go back in classrooms. And then you actually pay attention.

Lucy: Yeah, that makes sense. You know, instead of just being told that you want to learn and being told to sit down in, like, windowless classrooms

Anna: And they actually pay attention to like who they hire. Like how many terrible teachers have you had?

Lucy: So many.

Anna: So many! I mean how do they even get those jobs?

Lucy: I don't know… They do nothing for the kids, too, right?

Anna: *(Shakes head.)* You know, when I was in [elementary school] I had this teacher who, like, would tell me I was writing stories wrong.

Lucy: What?

Anna: And it wasn't like the normal stuff, like structure or, you know, you have to have a climax. She, she'd go like, "That's not a proper name." Like I'd make up this, this fancy name for my characters and she was like "That's not a proper name."

Lucy: You were in [elementary school]! Who cares about names?

Anna: I know. Yeah. And she's like, "Pigs can't fly." Like airplanes. Like, not like wings. "Pigs can't fly airplanes."

Lucy: Well, even if they could fly with wigs, who cares? You were in [elementary]!

Anna: Yeah. Exactly. I mean, that's, like, when you're starting to grow up as a person.

Lucy: Yeah.

Anna: *(Frustrated sigh.)*

Lucy: Crappy, man.

Anna: Yeah… Anyways… *(She taps Lucy with her foot.)* We should…

Lucy: We should probably head back in. *(They giggle.)* Before they notice anything.

Anna: Yeah, cause we're not that bad of students.

Lucy: *(Laughs)*

Anna: *(Playfully)* Except I'm dropping out.

Anna and Lucy get up and run off.

Lights fade out.

<u>Scene Four:</u>

Lights up on Anna, Zoe, Emily and Lucy, sitting in a row of chairs. They are playing the "Board of Trustees". Samantha, standing, addresses them. She is playing a teacher.

Samantha: Good evening, Board of Trustees. Thank you all very much for agreeing to take this meeting with me. My name is Alexandria Sharp. I am a high school teacher and I would just like to say a few things about what I've noticed about our educational system. So thank you very much for hearing me out. Um, I just think... I've worked with so many students and I just think we need to make some changes about what our educational system can do for them. You know, we have unit tests and standardized multiple choice testing that is designed to fit one very specific type of learner and then we apply them to all of our students. I just think that it is unfair. You know, I see kids every day that are **so** bright and **so** smart and the school system is just completely short handing them. They're almost failing out of class, and if they could represent their learning in a different format, I **know** they would be excelling. And I just think we need to learn how to cater to more different types of learners. We need to provide resources for auditory learners and kinetic learners and visual learners, and not this one size fits all testing that we've developed. It might have worked 20 years

ago, but now students are so different and they all come with their different challenges and perspectives and personalities and I think that we should be pushing them to succeed and do what's best for them…

Anna: *(Cuts her off)* Let me stop you right there. Yeah, sorry. Thank you for coming in and those are good points. Right guys? Yeah. But you see, even if we want to just start this change we can't just go, "Hey, we're gonna change things right now" and everything's solved. We have to talk to parents, we have to talk to teachers…

Emily: *(Adds on. Voices overlap.)* And we have standardized testing for a reason. It's a uniform way to test all of our students to see their level of knowledge. We can't just…

Lucy and Zoe add on other reasons why change is not possible. All four voices continue to talk at the same time. They build to a crescendo until…Samantha, frustrated and defeated, sits down and puts her head in her hands. Lights fade out.

Scene Five:

Lights up on Samantha, still a teacher, sitting, grading at her desk stage left. Anna is standing awkwardly stage right.

Anna: Hey, Miss G.

Samantha: Oh hey! Come on in, Emily. How are you doing?

Anna: *(Hesitantly walks over to Samantha.)* Good. You?

Samantha: Good. What brings you here today?

Anna: Uh, just kinda wanted to talk to you about something.

Samantha: Yeah, sure. Pull up a chair.

Anna: Yeah?

Samantha: Yeah.

Anna: *(She grabs a chair and sits down.)* Sorry, I don't know if you're…

Samantha: No, no… not at all. Just grading

Anna: Yeah?

Samantha: Please distract me from these grade 10 essays. They're terrible. *(They both laugh.)* So, what's on your mind?

Anna: Uhhh, okay… So basically, I, uh, I talked to my parents about this, and they're like "Talk to somebody." So, I chose you cause you're kinda cool. Um, I…think I want to drop out of school. Like, not like completely drop out, but take it online.

Samantha: Right, okay…

Anna: Yeah, and it's super cool. You know, I watched some- one video about it, but, like, there's other stuff… Yeah, but it was about this surfer kid…not surfer kid…

Samantha: *(Cuts her off)* What makes you want to do this?

Anna: What?

Samantha: What has led you to this decision? Why do you think this would be the best option for you?

Anna: Uh, ha, I don't know. I've been in school for, what 11 years? And it still sucks, and I'm not getting any better. Getting worse actually. So…

Samantha: Listen, I know your marks have been…

Anna: Terrible

Samantha: Lately. And that you've been struggling a little bit, but I think, you know, listen, if taking online courses is what you want to do, I'll support you in that. But just, just listen to what I think. I think that instead of doing that, that maybe you just need to readjust and re-prioritize, and look at managing your time a little differently. Like instead of, you know… Emily, I've seen you in art class. I've seen your work and it's incredible. I think… I am, you know, an English teacher and you could talk to your teacher about this, but personally, as just like a human being, I think you could have a real future in it. *(Anna smiles.)* And so, if I were you, I would just, you know, maybe take some -2 classes instead of taking Calculus, and all these tough, rigorous courses that you really don't need for art school. You could just drop into -2 and excel in those and have a lighter workload, and then you can dedicate more of your time to working on your art. And you can hone your craft and just do what you need to do to get into art school. And then really make a future doing what you love and what you're good at.

Anna: Okay…

Samantha: Yeah. Just think about it, because I really think you could do it and I think

you should if that's what you're passionate about.

Anna: I'll think about it

Samantha: Okay. Think about it.

Anna: Thanks. *(She gets up and leaves.)*

Samantha: Have a good night.

Anna: Night.

Samantha: See you tomorrow.

Anna exits and Samantha goes back to

grading essays. Lights fade out.

Scene Six:

Lights up. Zoe, Lucy, Emily, Anna,

and Samantha enter and sit in

chairs, arranged into a semi-

circle. They look tired.

Anna: School sucks.

Samantha & Emily: Yeah!

Samantha: Doesn't it?

Anna: Yeah.

Samantha: It's just like we're stuck in this building all day, six hours of our lives that

we'll never get back, for like 13 years. And for what?

Emily: What am I going to use half of the things that I'm learning in my life?

Samantha: Yeah, like I don't know what a mortgage is or how I pay it, but like

                      triangles? You know, I got those suckers figured out, you know, I can just

                      find all the sides of all the triangles.

Anna: What's the point of having us all sit, like, by ourselves in these perfect

                      rows?

Emily: Right?

Zoe: The Industrial Revolution.

Samantha: Yeah that's why. And you know what? We are not, like, pieces of labor

                      that need to just be like honed for, like, working. We can do whatever we

                      want now. So why do we still have to, you know, fill in these bubbles and,

                      you know, do all these things that, you know…

Lucy: Bubbles aren't that bad.

Samantha: They're kind of terrible.

Lucy: Well, okay, maybe…

Anna: You're talking about different kinds of bubbles here. I know, *bubbles* are

                      fun.

Samantha: But I'm talking about test bubbles.

Lucy: Yeah, okay. Maybe not those bubbles. *(Beat.)* But some of our teachers

                      haven't been that bad.

(Nods and "yeahs" and "that's true" of agreement)

Emily: I mean, I guess, yeah, there's been teachers that, like, encourage us to do

                      what interests us, and…

Anna: But I mean like, what's the ratio between good and bad teachers? Like the reason why we know we had, like, good teachers is because they stand out. And the reason why they stand out is because they're rare.

Samantha: It's not just the teachers; this building has **no windows!**

Lucy: *(Whispers)* Guys, I went to a different high school and they have windows. And I was like "What is this?"

Zoe: When I was in summer school, like, that school had windows everywhere and I was just like "What?!"

Anna: When I was in summer school, I was in a basement and the teacher kept going on about how we were safe if a bomb hits us, because that's what it was built for.

Samantha: That's terrible.

Emily: *(Laughs.)* Hey guys, it's not all bad, right?

Samantha: I mean, we did have that one project in English where we could just do whatever we wanted. That was so fun.

Anna: Okay, yeah, I get that it's not all bad, but, like, we shouldn't be saying that about education. We shouldn't be like…Our attitude towards it shouldn't be like, "It's not *all* bad." I mean there's a few things that are…

(Voices all overlap.)

Emily: Something should change about it.

Samantha: I used to love to learn, you know? And I want to keep loving learning, but I can't do that when I'm told how to learn. I want to be, you know, creative and unique and myself.

Anna: Like we can do anything…*(trails off)*

Zoe: So how *did* it affect us?

Anna: How did what affect us?

Zoe: Like, school? And how creative we are?

They stand up and go to the whiteboard. They write down the ways that school has affected their creativity: Zoe writes "What is normal?" *Lucy writes* "Choice to be." *Emily writes* "Exploring new concepts" *and* "Who are you?" *Samantha writes* "Confidence", "Expression" *and* "Good teachers". *Anna draws scribbles, which turn into* "IT SUCKS". *Zoe erases* "HOW DOES SCHOOL AFFECT CREATIVITY?" *and writes* "HOW CAN WE MAKE IT BETTER?" *They nod at each other, then exit. Lights fade out. The end.*