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"Untrain their Brains for Creativity to Feel Normal": A Case Study of Four Early Career Secondary English Teachers' Perceptions and Practices for Cultivating Creativity

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“Untrain their Brains for Creativity to Feel Normal”: A Case Study of Four Early Career Secondary English Teachers’ Perceptions and Practices for Cultivating Creativity

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by

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Abstract

Creativity in the context of teaching and learning has renewed its popularity in today's social discourse. Journalists, business leaders, economists, government officials, entrepreneurs, and lay people are calling for those in P-20 education to produce workers and citizens with skills that allow them to be flexible and critical thinkers, as well as innovative problem-solvers. This qualitative, multiple case study examined early-career English teachers' conceptual understanding of and classroom practices related to cultivating creativity skills among students. Data were gathered through opening interviews, classroom teaching observations, closing interviews.

This study culminated in four major findings. The first was that the teachers in this study had a basic, foundational understanding of creative theory despite not experiencing direct instruction on creative theory in their teacher preparation program. Second, the data indicated that the vast majority of learning in contemporary secondary English classrooms focuses on cultivating critical-convergent thinking skills, with limited, if any activities focused on developing creative-divergent thinking skills. The root cause of such a focus is the potential ramification of high-stakes, standardized testing results. Third, this study revealed that in addition to the teaching and learning environment conditions under the control of the classroom teacher, there were inherent school structures that supported students in developing their creative skills, specifically elective course offerings and extended block scheduling of classes; and inherent school structures that detracted from creative skills development, namely standardized testing and related preparation. And finally, the data of this study revealed that three of the four participants had alignment between their conceptual understanding of creativity and their

pedagogical practices that supported creative development in their students. One participant struggled to incorporate pedagogical practices that supported her understanding of creativity.

Acknowledgements

Copious thanks, massive appreciation, and multitudes of gratitude to my committee, Drs. Christian Goering, Marcia Imbeau, and Michael Wavering, for their steadfast guidance, continuous support, and gentle nudging during this dissertation experience. Studying under your tutelage and working with each of you on this research study was an honor. The dedication each of you have for protecting and enhancing the teaching profession is remarkable. Thank you for being impeccable exemplars. And more personally, thank you for not giving up on my ability to complete this task. The odds seemed sketchy at times.

Much thanks to the four teacher participants in this study who generously made time for this work and who kindly opened their classrooms for me to watch and learn. Also, much appreciation to their administrators for permitting me to visit their schools and work with their teachers and students.

And above all, to my former and future students, my true inspirations. I am fortunate for my work with you. My former students, you motivated and encouraged me to better understand how and why creativity worked in our classroom. My future students, I look forward to your inquisitive explorations of endless possibilities. All of you make my work a joy, energize me to innovate, and make me want to be a better teacher. Every. Single. Day.

Table of Contents

CHAPTER I

Introduction

Statement of the Problem

Creativity in the context of teaching and learning has renewed its popularity in today's social discourse. Journalists, business leaders, economists, government officials, entrepreneurs, and lay people are calling for those in P-20 education to produce workers and citizens with skills that allow them to be flexible and critical thinkers, as well as innovative problem-solvers. In essence, the need for creative skill is in high demand. Such a call to action is easy to request and one that is not new; however, this notion of creativity in the information, digital age, specifically in the teaching and learning environment, is a bit nebulous. Not only are there variations in the definition of what creativity is and what it means to be a creative person, but also disparate and fragmented direction for educators on what it means to cultivate creativity in their students and how to shepherd their students into society as innovative thinkers and effective problem solvers.

Purpose of the Study

This qualitative, multiple-case study examined how early-career, secondary English teachers conceptualize and cultivate creativity within the practice of teaching and learning. The findings of this study can illuminate teacher preparation practices. The findings may also lay the foundation for further, larger studies to examine teachers' perceptions of creativity in multiple content areas and grade levels, as well as practices that promote the development of creativity in students.

Background of Study

Human creativity plays a vital role in the advancement of society and culture. Art, inventions, scientific discoveries—almost anything that advances and enhances our lives came

into existence through the creative process of an individual or a team. Recently, a renewed interest in creativity has returned to education, business, and political conversations on a national scale. The notion of "21st century skills" (skills individuals will need to master in order to compete and succeed in today's world, of which creativity is often included) are being touted and supported by such entities as the P21 Partnership for 21st Century Learning (a collective of national and international corporations, non-profits, and states), academics such as Tony Wagner (Harvard's first Innovation Education Fellow and founder/director of Change Leadership Group at Harvard Graduate School of Education), and professional education organizations such as the Association for Supervision and Curriculum Development (ASCD) and the National Council of Teachers of English NCTE) just to name a few. Another term that is often present in discussions of 21st century skills is that of "college and career readiness." At the heart of the matter, these skills or readiness factors are the abilities of citizens who are problem solvers, critical thinkers, and communicators; such people are collaborative, agile, open-minded, curious, and imaginative.

As employers express their need for employees with 21st Century skills, the country's focus shifts to educators at all levels to provide a solution. However, research shows that not only educators, but researchers as well, have disparate definitions of creativity. This becomes challenging for teachers to teach in ways that supports students' development of creativity when its definition varies from educator to educator. Some teachers do not see themselves as creative and therefore do not think they are qualified to teach for such a skill. Others view creativity as a skill separate and additional to the content they are required to teach, or believe that creativity does not apply to their subject matter. Still others are challenged by assessing and evaluating student creativity. For any of these reasons, teachers may not utilize practices that support their students in cultivating creativity.

As a result, those who study creativity, specifically in teaching and learning environments, have provided multifaceted definitions, examined its boundaries and development, and analyzed the process of cultivating it across many content areas and grade levels. In an online search of the QuickSearch search engine, under the terms "creativity," "teaching," "practice," and "21st Century," in the discipline of education, there have been 368 dissertations or theses alone completed during the past three years. Understanding the development of creativity in students is a topic of high interest and is currently in high demand. This study seeks contribute to the advancements of our understanding of creativity in the practice of teaching and learning.

Theoretical Base

Creswell and Creswell (2018) state that "the case can be made that no qualitative study begins from pure observation and that prior conceptual structure composed of theory and method provides the starting point for all observations" (as referenced in Schwandt, 2014) (p. 64). As such, the roots of this study are solidly based in a rich and expansive body of research on creativity spanning fifty-plus years. This body of research, analyzed with a focus on applications and limitations to the realm of teaching and learning, provides the basis for the conceptual framework of this study. That framework is as follows:

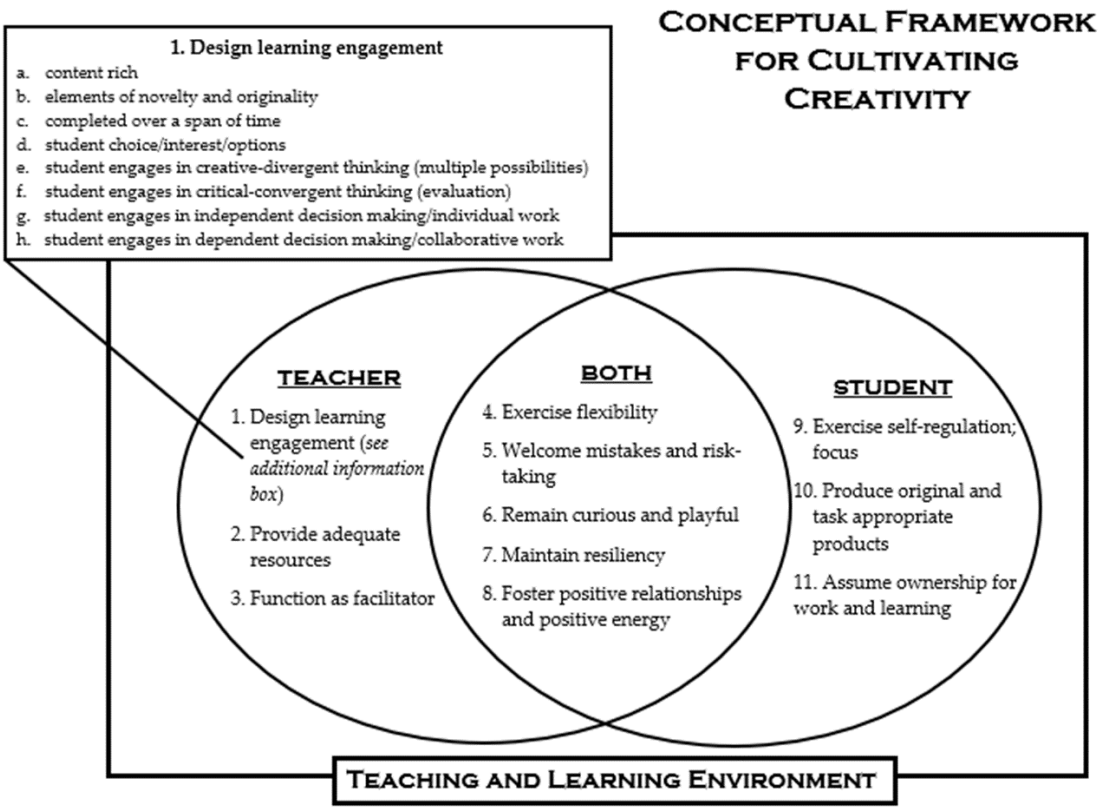

Figure 1.1. Conceptual Framework for Cultivating Creativity

The Conceptual Framework for Cultivating Creativity provided context for the research questions guiding this study, defined who would be participants, and shaped the instruments and formats used to gather data. Baxter and Jack (2008) claim that in qualitative case studies, "the conceptual frame work serves as an anchor for the study and is referred at the stage of data interpretation." Furthermore, they state that "the framework should continue to develop and be completed as the study progresses and the relationships between the proposed constructs will emerge as data are analyzed. A final conceptual framework will include all the themes that emerged from data analysis" (p. 553). The final conceptual framework for this study can be found in Chapter Four.

Scope of the Study

The Conceptual Framework for Cultivating Creativity established the scope of this study.

Through the lens of this framework, this study focused on examining what actions teachers and students take that support the development of creative skills. Based on the body of existing research, this framework notes eleven actions that support the development of creative skills. The eleven actions and parties responsible for engaging in the actions are as follows:

1. Design learning engagement (teacher)
2. Provide adequate resources (teacher)
3. Function as facilitator (teacher)
4. Exercise flexibility (teacher and student)
5. Welcome mistakes and risk-taking (teacher and student)
6. Remain curious and playful (teacher and student)
7. Maintain resiliency (teacher and student)
8. Foster positive relationships and positive energy (teacher and student)
9. Produce original and task appropriate products (student)
10. Exercise self-regulation; focus (student)
11. Assume ownership for work and learning (student)

This conceptual framework also relies on four basic assumptions:

1. The ability to exercise creativity and move through creative processes is valuable to both the individual and society for personal, intellectual, professional, cultural, and economic growth.
2. Specific types of creativity can be taught and cultivated.
3. Effective teachers want to support students' development of creative skills.
4. Teaching and learning that supports the development of creativity is a symbiotic relationship between teacher and students, of which, both are dependent on the other to

contribute to the success of the process.

The current body of literature regarding creative development provides a rich understanding of topic. The Conceptual Framework for Cultivating Creativity focuses specifically on the teaching and learning environment and the corresponding behaviors for both teachers and students.

Research Questions

The purpose of this study was not only to better understand what teachers think about creativity in regard to teaching and learning, but to observe how those ideas manifested, or not, in their teaching practice.

Three interrelated research questions are the basis for this study:

1) How do early career English teachers conceptualize creativity?
2) How do early career English teachers cultivate creativity in their classroom environments through the use of physical and social-emotional spaces?
3) How do early career English teachers cultivate creativity in students through the assignments and activities they design and implement?

Methodology

Through a multiple-case study approach, this study explored the phenomenon of creativity in teaching and learning by examining four second-year English teachers who graduated from the flagship university of a southern state's Master of Arts in Teaching in English Language Arts program and are employed as full-time, secondary teachers in four separate high schools within the same state. (Merriam, 2009).

Data were gathered in four ways for this multiple-case study: 1) teacher-participant interviews, both at the introduction and closing of the study, 2) observations of teacher practice, 3) completion of a creativity characteristic inventory, and 4) sample assignment analysis.

The teacher-participant interviews and the sample assignments were coded using Merriam's five step process for data analysis (Merriam, 2009, p. 178). These data sets for each participant were compared to the observation field notes and characteristic inventories for each participant. Each of the data sets for each case were analyzed and compared to currently established research and studies about creativity in the teaching and learning process. Finally, a cross-case analysis among participants' data were completed to see if generalizations could be made regarding the participants' conceptualizations of creativity (Merriam, 2009, p.204).

Definition of Terms

Two general definitions of creativity and detailed descriptions of specific terms of the conceptual framework of this study are explained in this section.

Creativity—The most applicable definition of creativity in regard to teaching and learning comes from Ken Robinson, educator and author. He explains:

> Being creative does usually involve playing with ideas and having fun; enjoyment and imagination. But creativity is also about working in a highly focused way on ideas and projects, crafting them into their best forms and making critical judgments along the way about which works best and why. In every discipline, creativity also draws on skill, knowledge and control. It's not only about letting go, it's about holding on (Robinson, 2011, p. 5).

This definition touches upon key concepts present in many notable scholars' notions of creativity, such as playing with ideas, fun, imagination, focus, best forms, critical judgements, knowledge, and control. However, what makes Robinson's definition exceptionally valuable to this study is that the concepts addressed in his definition relate directly to the classroom setting.

Types of creativity—Kaufman and Beghetto's (2013) work emphasize that not all creativity is the same and to that end, they have developed the Four-C Model of Creativity which is comprised of the following levels:

- "Mini-c"—creations that are novel, interpretive, sporadic, and evaluated by the

creator/child and not compared to a socially constructed standard (p. 156)

- "Little-c"—creations that are novel, appropriate, and are considered "everyday level" creativity; evaluated by a localized social standard such as a teacher, classmates, or school club (p. 156)
- "Pro-C"—creations worthy of "expert level creators" which includes professionals, career artists; such work is practiced and can be produced on demand (p. 156)
- "Big-C"—creations that are of "highly eminent status" and establish the standard; such work is rehearsed, innovative, and evaluated and agreed upon by the masses (p. 156)

This study's focus was primarily oriented to "Little-c" and building foundational skills to support future "Pro-C" creativity in students.

Learning engagement—Designing the learning engagement is an action that primarily aligns with the teacher's responsibilities, though students may also contribute. When teaching to develop creativity in students, teachers design curriculum that is novel, interesting, and unique for the students in respect to the content being taught. Such assignments or projects have layers of complexity and may incorporate different levels of creativity, as previously discussed. Assignments designed to enhance creative abilities in students result in multiple, viable products of which students choose, and often times are centered on an authentic or real-world problem or situation. Such assignments provide opportunities for students to evaluate their own work, as well as their peers'. Projects provide time for both individual and collaborative work and are completed over a span of time (more than an activity that begins and ends in one sitting).

Flexibility—Flexibility for both teacher and students is necessary in the teaching and learning process, particularly in relation to thinking, working, and outcomes. One way that flexibility manifests itself in student work is the presence of divergent thinking, which Guilford

(1959) describes as thinking "in different directions, sometimes searching, sometimes seeking variety" (p.470). Teachers can coach students in divergent thinking by helping them devise multiple possibilities to given problems or situations. Teachers can enhance their flexibility by keeping an open mind regarding how students go about their work and the solutions they develop.

Mistakes and risk-taking—Risk-taking and mistake-making are an organic part of the creative process. To reach a solution or product that is original or unique, students need to risk venturing from the known and familiar. Creating a learning environment that encourages academic risk-taking is vital in helping students reach their full creative potential for "if too few opportunities for curiosity are available, if too many obstacles are placed in the way of risk and exploration, the motivation to engage in creative behavior is easily extinguished" (Csikszentmihalyi, 1997, p. 11).

Curiosity and playfulness—Curiosity and playfulness may be alternative terms for intellectual engagement in a classroom that fosters creative learning and productivity. Amabile (1996) situates creative play in terms of motivation, "if we can define task engagement for extrinsic reasons as 'work,' and task engagement for intrinsic reasons as 'play,' it will be expected that, phenomenologically, states of highly creative activity will seem like play" (p. 102). Teachers may demonstrate their curiosity and enjoyment in playing with ideas, concepts, and course content through the behavior they exhibit toward the topic in the classroom and the assignments they create. Students may follow suit by demonstrating their curiosity and playfulness through their interactions with the content, their peers, and products they create.

Resiliency—Resiliency allows both teachers and students to rebound from setbacks that arise in the teaching and learning process. A similar term recently popularized in education is

that of grit. Grit, in an academic sense, is a concept brought forth by a research team lead by Angela Duckworth, in which the team defines grit as "perseverance and passion for long-term goals" (Duckworth, Peterson, Matthews, & Kelly, 2007, p. 1087). Another related idea is that of Dweck's concept of "growth mindset." A student or teacher with a growth mindset maintains a belief that he or she can cultivate personal qualities through his or her own efforts, which may take considerable time and effort (Dweck, 2006, p.7). As creative learning engagements have levels of complexity that are challenging to the learner and are completed over a span of time, the embodiment of resiliency is a tool to assist students in generating a creative product.

Positive relationships and positive energy—To be creative is to make oneself vulnerable, as the notion of creativity is one that relies on its interconnection with a community. To surrender a novel idea or product to a community is to open oneself to praise and accolades, as well as questions and criticisms. Csikszentmihalyi (1997) frames creativity as being "an idea or action that is new and valuable" (p. 23). Qualities such as "new" and "valuable" depend on a social context; new must be in "reference to some standard" known to others and valuable is not determined "until it passes social evaluation" (p. 23). Csikszentmihalyi concludes:

> Therefore, creativity does not happen inside people's heads, but in the interaction between a person's thoughts and a sociocultural context. It is a systemic rather than an individual phenomenon. (p.23)

In a classroom striving to cultivate student creativity, the social-emotional environment should be one that is respectful, safe, and supportive for sharing ideas and that fosters positive growth and interactions.

Self-regulation—Though targeted for students, teachers can greatly assist students in honing this supporting skill for creativity. Lois Hetland (2013) explains that while teachers observe and respond to students and their work through the creative process, "teachers are also aware and thoughtful of students' needs for privacy at times to develop a relationship with

materials, tool and their own work" (p. 16-17). Teachers support creative development by granting students such freedom to explore. Furthermore, Hetland explains "by stepping back, teachers set an atmosphere of unobserved independence for the students, while remaining close enough to see what is going on and being ready to intervene with questions, suggestions, or demonstrations as the need and opportunity arise" (Hetland, 2013, p. 17). Students in a classroom supporting creative development are allowed to independently explore but are not abandoned as the teacher is available to provide support when needed. Experiencing the freedom of learning independently, yet also knowing when to seek the teacher's guidance helps students to exercise self-regulation to the best of their abilities and with responsibility.

Significance of the Study

This study is significant because it examines early-career, English teachers' understanding of creativity in the 21st Century classroom and how their understanding manifests in their current practice. This study contributes to the existing body of research because limited research exists regarding cultivating student creativity in an English classroom, as well as there being limited research that examines how teachers' perceptions on creativity manifest in their teaching practice.

The potential impact of this study on professional practice is twofold. First, this study can inform the practice of career educators who want to support and further cultivate creative skills in their students. Also, though the participants in this student were limited to English teachers, the findings may be conceptually applied and expanded to other content areas. Secondly, as the participants of this study were second-year teachers who graduated from the same teacher preparation program, the findings from the study may illuminate aspects of that specific teacher preparation program in regard to preparing teachers for developing creative skills in their

students.

Creativity is a skill that today's students need to be successful in the digital age. This multiple case study will examine the conceptual understandings four teachers have concerning creativity and the practices they implement to support creative development in their students. The next chapter will provide a comprehensive review of the body of literature regarding creativity and its connection to the teaching and learning environment.

CHAPTER II

Review of Literature

This chapter reviews many aspects of creativity theory and highlights the perspectives of leading researchers on the topic. Definitions of creativity were examined, in addition to elements of creative practice and characteristics of creative individuals. This chapter also explores the history and development of creative theory over five decades, but primarily focuses on present-day applications research concentrating on K-12 educational environments. The chapter concludes with a discussion regarding gaps in the body of literature on creativity.

Introduction

In 1926, Russian psychologist Lev Vygotsky made the following observation about learning, education, and society:

> Together with the growing complexity of life, the individual now finds himself involved in increasingly more complicated and more highly diverse social relations. He is a member of the most diverse social groups, and therefore the full multiplicity of modern man's social relations cannot be confined to any sort of pre-set collection of skills and habits. Rather, the goal of education is to develop, not a definite quantity of skills, but particular creative capacities for rapid and skillful social orientation. (p. 91)

Society echoes this sentiment today. More than ever, the world, the workplace, and our classrooms are demanding innovation that frequently manifests through collaboration. No longer are the powerful the limited few, people or organizations, possessing the most information. The digital age, internet, and personal electronic devices have democratized the global social fabric by making data easily assessable to and shared among the masses. Now, the powerful are the entities that can utilize information in multifaceted, diverse, and purposeful ways. The global community has made a dramatic shift from information acquisition to information utilization; a shift that happened to coincide by and large with the birth of the new millennium.

Though difficult to pinpoint a list of definitive competencies, the term "21st Century

Skills" was coined to encapsulate the skills individuals would need to master in order to compete and succeed in today's world. Business, educational entities, think tanks, and various professional organizations have included the notion of 21st century skills into some aspect of their work or mission. The P21 Partnership for 21st Century Learning (2009), a collective of national and international corporations, non-profits, and states includes "creativity and innovation," "critical thinking and problem solving," and "communication and collaboration" among their list of 21st century skills. Tony Wagner (2008), Harvard's first Innovation Education Fellow and founder and director of Change Leadership Group at Harvard Graduate School of Education, asserts seven such skills that include "critical thinking and problem-solving," "collaboration across networks and leading by influence," "agility and adaptability," initiative and entrepreneurialism," "effective oral and written communication," "accessing and analyzing information," and "curiosity and imagination." Other organizations such as the Association for Supervision and Curriculum Development (http://www.ascd.org), National Education Association (http://www.nea.org), National Council of Teachers of English (http://www.ncte.org), the National Center on Education and the Economy (http://www.ncee.org), and the Great Schools Partnership's glossary of educational reform (http://www.greatschoolspartnership.org/resources/glossary-of-eduation-reform/) all have similarly oriented skills enumerated as being essential for work and life success in the modern era.

The concern over 21st century skills is not isolated to the United States. The World Economic Forum (2015) established 16 global 21st century skills, of which critical thinking/problem solving, creativity, communication, and collaboration were included among core competencies (p. 3). In a report from the UK's National Advisory Committee on Creative

and Cultural Education (1999), chaired by Professor Ken Robinson, then from the University of Warwick, concluded that enhancing creative education enhances human capital and will "enable them [young people] to face an uncertain and demanding future" (p.7). The report outlines that creative education is comprised of four basic features: using imagination, pursuing purposes, being original, and judging value (p. 31-33).

Microsoft Partners in Learning, The Pearson Foundation, and Gallup (2013) teamed up to conduct a study that explored "the relationships between 21st century skills developed in the classroom, student aspiration in schools, and perceived quality of work later in life" (p. 4). Sadly, 59% of those responding indicated that they "agree or strongly agree that they developed most of the skills they use in their current job outside of school" (p. 4). However, the report also offers hopeful insights in that respondents who reported frequently using 21st century skills in their last year of schooling were "more likely to have had greater student aspiration and engagement; and student aspiration and engagement is also positively correlated to work quality later in life" (p. 4). The most promising finding revealed in the report was that strong, positive relationships between teacher and student were key for student success; "students who feel their teachers care and support them are more likely to perceive themselves as successful and valued in their jobs later in life" (p. 5).

Whether directly or indirectly stated, the 21st Century Skills enumerated on various lists developed by various entities pivot on a singular notion—that of creativity. But this is not a new revelation; skills frequently associated with personal and professional success center around innovative abilities and creative aptitude and thinking. Consider this:

> It is often observed these days that we have fallen down in the way of producing resourceful, creative graduates. How true this is, in comparison with other times, I do not know. Perhaps the deficit is noticed because the demands for inventiveness are so much greater at this time.

Clearly this captures the zeitgeist of present-day education. However, it may be surprising to learn that this is an excerpt from J.P. Guilford's seminal Stanford University address, *Three Faces of Intellec*t, presented in . . . 1959. Both then and now, the need for creativity and "inventiveness" are in high demand. Institutions of higher education, more specifically the departments charged with the responsibility of training future teachers, have an opportunity to showcase their deliberate efforts answering this call by preparing teachers who are dynamic, synergetic, and are able to embrace the symbiotic relationship between teachers, students, and society—preparing teachers who can support creative development in their students. A focus on cultivating creativity has been, and will continue to be, necessary in developing productive, thoughtful citizens. Being labeled as a "21st Century Skill" may help draw attention to the need for teachers to be able to assist students in cultivating their creativity. Also, as the previously mentioned entities of society embrace the popularity of the need for creativity, educators at all levels may be motivated and invigorated to further incorporate elements of creativity in today's classrooms. Creativity is not an additional concept or skill to be added to ever-growing lists of standards to be taught. In fact, it has been overshadowed by such thinking and nearly eclipsed by standardized testing. Bottom line, cultivating and supporting student creativity is good teaching. Cultivating creativity is solid learning. It has been and will continue to be. Teachers who are actively able to support the development of their students' creativity will find themselves leading this response to a critical social need.

Defining Creativity

Creativity is often defined through the eye of the researcher. There are many ways in which to view creativity and there are many facets of the concept of creativity that are available for examination. Creativity can be a means of self- or artistic-expression. Creativity can be a

means for innovation and advancing understanding. Creativity can be defined by process or personal characteristics or through intellectual abilities. For the scope of this study, the notion of creativity was examined within the context of teaching and learning and through a variety of aspects that are meaningful, beneficial, and quite often necessary for classroom teachers in their pursuit of educating students.

To begin, let's consider what creativity is. Several creativity scholars have similar, or at least related, ideas about it. Beghetto and Kaufman's (2013) concept of creativity combines two crucial elements, "originality and task appropriateness" (p.12). Similarly, Robinson looks at creativity as being "original and of value" (NACCCE, 1999, p. 30). Sternberg and Lubart note that creativity is "the ability to produce work that is both novel and appropriate" (1999, p.3). Continuing along these lines, Gardner (2006) defines creativity as "a characterization reserved to those whose products are initially seen to be novel within a domain but are ultimately recognized as acceptable within an appropriate community" (p. 42). The similarity among these scholars is that creativity is fresh and meets some form of an expectation. Weisberg (2010) offers an expanded definition of creativity. He aligns with the previous ideas by using the terms "new and intentional;" however, he makes a distinction between creativity and innovation, specifically attributing innovation to an industrial context; "Creativity results in something new, but an innovation is a new idea that is brought to the marketplace as a new product" (p.236). Though Weisberg acknowledges that value is associated with creativity, he deliberately does not incorporate it into his definition as "value is not constant. Sometimes a novel product only comes to be valued by later generations" (p. 236). Amabile (1996) conceptually defines creativity by stating that "a product or response will be judged as creative to the extent that (a) it is both a novel and appropriate, useful, correct or valuable response to the task at hand, and (b) the task is

heuristic rather than algorithmic" (p. 35). Her definition of a heuristic task is one "not having a clear and readily identifiable path to solution—tasks for which algorithms must be developed" (p. 35). So, for Amabile, a creative solution would not be obvious, which further enhances the importance of novelty. Gute, Gute, Nakamura, & Csikszentmihalyi (2008) offer an interesting contribution to the definition of creativity. They inform us that creativity is located "in the space between anxiety and boredom" (p. 344), a space where classroom teachers frequently find their students.

The definition that best encapsulates creativity in the context of teaching and learning comes from Ken Robinson, an educator himself. Robinson states "being creative does usually involve playing with ideas and having fun; enjoyment and imagination. But creativity is also about working in a highly focused way on ideas and projects, crafting them into their best forms and making critical judgments along the way about which works best and why. In every discipline, creativity also draws on skill, knowledge and control. It's not only about letting go, it's about holding on" (Robinson, 2011, p. 5).

Types of Creativity

It is important to note that there are many types of creativity explored in the body of literature and notable variations in the research exist depending on what type of creativity the scholar is examining. Kaufman and Beghetto's (2013) work emphasizes such variations in creativity and to that end, developed the Four-C Model of Creativity which is comprised of the following levels:

- "Mini-c"—creations that are novel, interpretive, sporadic, and evaluated by the creator/child and not compared to a socially constructed standard (p. 156).

- "Little-c"—creations that are novel, appropriate, and are considered "everyday level" creativity; evaluated by a localized social standard such as a teacher, classmates, or school club (p. 156).
- "Pro-C"—creations worthy of "expert level creators" which includes professionals or career artists; such work is practiced and can be produced on demand (p. 156).
- "Big-C"—creations that are of "highly eminent status" and establish the standard; such work is rehearsed, innovative, and evaluated and agreed upon by the masses (p. 156).

For effective student development of creativity, educators will need to discern the distinctions between these four levels of creativity in order to effectively support students in their academic growth. The students' ages, knowledge base, and skill levels are taken into consideration when developing appropriate assignments and assessments. While less experienced, younger students learn the formal constructs of a discipline, for example identifying and writing parts of a composition in an English Language Arts class, they may find their activities and work products at the mini-c level and advancing to the little-c level. However, as students advance in their understanding and application of a domain and gain more experience, they may be able to operate and produce at a Pro-C level. Producing work at this level satisfies many educational standards that call for authentic student products, specifically in content areas that seek experiences for real-world applications; for example, real and timely audiences and contexts for writing. When educators understand the varying levels of creativity, they can maximize their students' growth in acquiring this skill. Not understanding these levels may cause complications; for example, not providing opportunities for students to advance from the lower levels of creativity may limit the growth of their abilities, while setting expectations in the

higher levels of creativity that are not aligned with age, knowledge, and skill can prove overwhelming and inhibit students' willingness to actively engage in creative exercise.

Creativity and Intelligence

Much of the research on creativity connects it to intelligence; however, the extent of that connection is somewhat varied, not to mention disparities in what constitutes intelligence. Most of the leading researchers in creativity studies claim that revolutionary, standard-bearing creatives possess an extraordinary amount of domain-specific knowledge. Such research is valuable in examining creativity in the classroom as it can be used to inform our understanding of developing creativity in young people through content knowledge; however, it must be kept in mind that such studies are centered on Big-C creativity. And for many of these researchers, Big-C creativity is dependent to some extent on expertise knowledge, and not a working knowledge of a given subject. This study is focused on how creativity can be cultivated in individuals, namely school-aged children, who are mutually acquiring domain-specific knowledge and creative skills. Much of the research on creativity in children and young people extrapolates and applies findings from scholars studying fully grown, self-actualized, experienced adults. Clearly, much can be learned from such research, but one must exercise tempered caution in applying such notions directly to learners and novices.

Guilford offers some notions that are compatible with K-12 education. Guilford's (1965) Structure of Intellect (SOI) model of intelligence connects creativity and intellectual function; however, Guilford points out that one is not necessarily dependent on the other as "creativity need no longer be confined to the supposedly uniquely gifted few; it is potentially distributed in the population as a whole" (p. 452). Guilford further posits that creative potential exists in problem solving; "all problem solving, insofar as it is genuine problem solving, involves some

novel behavior on the part of the solver, hence to that extent, some creative activity" (p. 452). Further exploration of Guilford's SOI model will be addressed later.

Weisberg (1999) acknowledges "a tension between knowledge and creativity" in that "while it is universally acknowledged that one must have knowledge of a field if one hopes to produce something novel within it, it is also widely assumed that too much experience can leave one in ruts, so that one cannot go beyond stereotyped responding" (p. 226). Ultimately, Weisberg (1999) concludes that "extensive domain-specific knowledge is a prerequisite for creative functioning" (p.227), but again, keeping Kaufman and Beghetto in mind, Weisberg's research focuses on Big-C creativity, which in most cases will not be the experience of the typical classroom teacher or student. In the classroom setting, students are exposed to different levels of domain-specific knowledge as they progress through their formal schooling. Their primary work is concentrated on learning and experimenting with new, domain-specific knowledge. However, through their work, students can exercise lower levels of creativity and with the support of their teachers, advance through the levels of creativity and quite possibly position themselves for future advancement into the Big-C level.

Gardner (2006) also notes "a tension between creativity and expertise" (p. 42), and echoes Weisberg's Big-C notion of creativity by stating that "one cannot be creative unless one has mastered a domain" (p. 67). Even though Gardner claims that children cannot be termed creative as "informed exploration of the boundaries of the domain cannot yet be undertaken," he does offers the concept of "apprenticeship," specifically targeted for school-aged children, as a time when they are learning "the rules of domains and the conventions of culture" (p. 47). It is quite possible that in this stage of apprenticeship, educators can assist students in developing different types of creativity as they strengthen their domain-specific knowledge.

Gruber's Evolving Systems Approach (ESA) is a personalized approach that examines the creative process in a single, notable individual (e.g. Charles Darwin), over time, through the individual's work and the process the individual implemented to complete his or her work. This method of studying creativity is again focused on Big-C creativity for individuals who have expertise knowledge in their fields. Gruber clearly conveys that this model is not designed to draw inferences about creativity that can be applied to others (p. 346). Because this model studies specific standard-bearers in specific disciplines, though informative, it is not an appropriate model to use in a classroom setting.

Characteristics of Creative Individuals

Research suggests that some personality characteristics, mindset, and behaviors tend to exist or manifest in creative individuals as they work through the creative process; however, agreement on a precise, definitive set of such traits does not exist.

To begin, for all intents and purposes, the myth of the spontaneous genius has been debunked. Weisberg (2010) argues against the creative genius myth in that, "there is nothing extraordinary about the cognitive process or personality characteristics of creative geniuses" (p. 246-247). Domain shattering contributions to a given field rarely happen instantaneously, but usually occur over an extended period of time. Gardner (2006) coined the term, the 10-Year Rule, which posits that it takes an individual about 10 years of extensive study to master a domain before moving from novice to expert, which is where he claims leading, domain creativity can begin. Both Weisberg's and Gardner's ideas suggest that creativity is not something exclusive to a few nor spontaneous, but a cultivated skill possessed by several which is consistently practiced over time.

Though the presence of a combination of specific characteristics alone does not mean that

a person is or will be creative, research does support that the presence of such characteristics and dispositions do combine to provide the individual with a way of perceiving and engaging in the world that is conducive to creative thinking and production. Sternberg (1988) associated the following dispositions with creative people: "tolerance of ambiguity, willingness to surmount obstacles, willingness to grow, intrinsic motivation, moderate risk-taking, desire for recognition, and willingness to work for recognition" (pp. 143-145). For Gardner (2006), both the concepts of expert and creativity are more closely tied to personality traits than pure intellect and he specifically addresses these observations in school-aged children; "Those youngsters who are (and who feel) marginal within their culture, those who are ambitious and stubborn, those who can ignore criticism and stick to their guns are 'at risk' for a creative life. On the other hand, those who feel comfortably a part of the group and who advance in their domain with little feeling of pressure or asynchrony are probably headed for (or consigned to) the life of the expert" (p. 47-48). Such behaviors and attitudes can be conducive to support creative thinking and ultimately lead to the development of creative products.

Starko (2014) in her text *Creativity in the Classroom* divides such characteristics into two categories; cognitive and affective characteristics as shown in Table 2.1.

Table 2.1 Starko's Cognitive and Affective Characteristics Exhibited in Creative Individuals

Cognitive Characteristics (pp. 104-110)	Affective Characteristics (pp. 110-118)
Connectedness and metaphorical thinking	Willingness to take risks
Flexibility and skill in decision making	Perseverance, derive and commitment to task
Independence in judgment and evaluation	Curiosity
Coping well with novelty	Openness to experience
Logical thinking skills	Tolerance for ambiguity
Visualization	Broad or focused interests
Escaping entrenchment	Value originality
Finding order in chaos	Being internally occupied or withdrawn

Classroom teachers can use knowledge of personality characteristics to help identify and better understand underlying behaviors in students. Caution and mindfulness should be exercised so that such lists are not used to label students into groups of creatives and non-creatives. Instead, teachers may use such knowledge to better understand each students' creative needs and encourage students in exercising affective characteristics that support creativity development (e.g. provide unique learning experiences to students or provide feedback that encourages students to take academic risks). Teachers may also design learning activities that afford students opportunities to engage in cognitive skills that are conducive to developing creativity (e.g. exercises or projects that require students to sort out order and reason from disorder, allow for flexible thinking, or permit student self-evaluation or peer-evaluation). Guilford (1965) eloquently acknowledges:

> The recognition of some degree of creative potential is in everyone, and the fact that every person's pattern of abilities is different, including those more related to creative potential, puts the spotlight on the individual. The democratic spirit, which is a great respecter of individuals, is in agreement with these facts of life. Each child, accordingly, needs his own prescription for optimal education, so far as he is concerned (p. 457).

In the teaching and learning environment, respecting that each student brings some level of or experience with creative thinking and practice. Effectively cultivating student creativity then seems to require differentiated instruction based on each student's individual needs for creative skills acquisition.

Based on MacKinnon and Sternberg's research on characteristics commonly found in creative individuals, Westby and Dawson (1995) developed a comprehensive list of 20 personal characteristics, 10 most typically exhibited in creative people (e.g. impulsive, individualistic, determined, non-conformist) and 10 least typically exhibited in creative people (e.g. reliable, practical, dependable, understanding). In their study they had teachers rate their favorite student

on the 20 characteristics, as well as their least favorite student on the same characteristics. The study revealed that:

> Children who were the teachers' least favorite students showed a pattern of behavioral characteristics that was quite similar to the pattern for the creative prototype. Conversely, the teachers' favorite students showed a pattern of behavioral characteristics that was the opposite of that for the creative prototype. (p. 8)

The researchers concluded that:

> Teachers' dislike of behaviors associated with creativity leads to the extinction of those behaviors. Thus, potentially creative students might learn to conform so as to improve the teacher-student relationship. This attempt to appease the teacher and do better in the classroom could cause children to suppress the very characteristics that make them creative. (p. 8)

This conclusion is chilling as teachers may be inadvertently squelching behaviors that when appropriately harness or directed may support creative development. This study underscores the need for teacher professional development regarding creativity, particularly with cultivating social-emotional skills that support creative thinking and practice.

As indicated in the introduction of this paper, the 21st century skill of creativity is not only a much-needed skill, it is also a very en vogue buzzword. However, educators, industry leaders, and the general public supporting this desired skill may not have a clear understanding or a fully operational definition of creativity. They may not know how creativity looks in the classroom, nor understand how it manifests itself in student behaviors and work products that lead to a successful transition into the workplace. Teachers could benefit not only from professional development that builds a theoretical understanding of creativity and its importance to the teaching and learning process, but from professional development that provides specific, concrete strategies that can be immediately implemented into their classrooms. In this way teachers can become more effective in their classroom practice and their professional agency, as well as adequately equipping their students for tomorrow's employment opportunities.

Social and Collaborative

From Westby and Dawson's example previously discussed, teacher and student social interactions have a powerful impact on the development of student creativity. This notion leads to the exploration of the social and collaborative nature of creativity. Some creativity theorists define creativity in terms of social interactions and societal influences. Csikszentmihalyi (1997) further illuminates societal influences on the definition of creativity itself. Csikszentmihalyi explains that creativity is a social construction because for something to be original or new, it is being compared to some criteria or standard that had previously been determined; and for an idea to be deemed as having value, it must pass some form of an assessment. "Therefore," he concludes, "creativity does not happen inside people's heads, but in the interaction between a person's thoughts and a sociocultural context" (p. 23). Applying this concept to teaching and learning, the classroom, school, and communities-at-large (both geographical towns and on-line communities) have the opportunity to provide rich, authentic sociocultural environments for developing creativity.

One of the cornerstone purposes of education is that schooling prepares competent citizens to effectively interact with society. To accomplish this goal, educators create activities and environments that allow students to interact with others during the learning process. According to Vygotsky (1978), such interactions are vital:

> Learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers. Once these processes are internalized, they become part of the child's independent developmental achievement. (p.90)

For educators who are focused on teaching to develop creativity in students, academic social interactions for students are necessary. In the classroom, teachers can manage social constructs and interactions to maximize creative development in students. This independent development

achieved by the student's internalization of social interactions will be further explored in this chapter.

Hetland, Winner, Veenema, and Sheridan (2013) in their book, *Studio Thinking 2*, address creating a studio culture which supports creative learning. Though these scholars are specifically addressing visual arts education classrooms/studios, the underlying points made can apply to most classrooms focused on developing creativity. One of the main aspects of creating a studio culture considers the design of the physical space. Not only does the space need to facilitate "getting materials and tools into students' hands efficiently" (p. 15), but also needs to "accommodate different social groupings" (p. 16). Mindfully orchestrating academic social interactions among students and between students and teacher through the configuration of the physical environment assists in cultivating creative learning.

Amabile further provides insight regarding the importance of the environment's role in developing creativity in general, which can be extrapolated into the teaching and learning environment of the classroom specifically. Amabile emphasizes creating environments that "support intrinsic motivation" and include the following three conditions: "(a) frequently focus learners on their increase in competence; (b) emphasize the joy of discovery; and (c) allow learners considerable autonomy in the learning process" (1996, p. 257). By learning in an environment that supports competency growth at the individual level, views learning from the perspective of joy not drudgery, and permits student choice and ownership in the process, students will be well positioned to engage in creative learning. It can be argued that the "autonomy" Amabile explores can be supported by Vygotsky's notion of developmental independence that is created through social interactions. Teachers who understand the social and

collaborative nature of creativity can structure both learning activities and the classroom environment in ways to maximize the creative growth in their students.

Along this line of exploration, Weisberg (2010) offers a cautionary point; "I agree that creativity is essentially a social act, but . . . I do not believe that the value judgments of others determine what is creative. Rather, we need other people to determine what is novel" (p. 237). Though subtle, this nuance of the social aspects of creativity is significant in two ways. First, students' abilities to discern novelty from ordinary can be enhanced as teachers work to expand students' domain-specific knowledge. As students advance in their understanding of a domain, their notions of what is novel within that domain will narrow. As the focus becomes narrower, the students will be better positioned to advance through the types of creativity as previously established by Kaufman and Beghetto. Second, Weisberg's quote calls attention to audience. As previously mentioned, products of creativity need to be valuable, appropriate, and purposeful; however, Weisberg begs the question, to what audience? Just as students need to learn how to judge what is and is not novel through their understanding of a given domain, they also need to examine the type(s) of audience(s) that evaluate their work product. Student may begin to understand that certain solutions are more valuable and appropriate to varying audiences. Discerning which solution is most appropriate and useful for which audience is an elevated form of self-evaluation, as well as an example of multiple-solution problem solving. Such exercises can further develop both creative intellectual and creative social-emotional skills.

Novelty, Fun, Play, and Flow

As previously mentioned, an important aspect of teaching and learning for creativity is novelty. Novelty is impacted by the depth of the student's knowledge acquisition; the greater and deeper the content knowledge, the more challenging it may be to achieve novelty within a given

domain. Therefore, particularly in a learning environment, the level of content knowledge impacts the formulation of novel solutions; "Novel solutions to a given problem thus come about because new information moves the individual away from the original conception" (Weisberg, 1988, p. 155). So, one could say that as students gain deeper understandings on given subjects, not only does academic rigor intensify, but students also have greater opportunities to advance through the types of creativity within the scope of that subject.

Students aren't the only ones on the novelty hook in a creative learning environment. Teaching methods and strategies that are novel in nature can provide experiences for students that advance their creative thinking. We can extrapolate the connection of novelty to creativity from Vygotsky's (1926/1997) explanation of why novelty is important for the learning process:

> Wherever our surroundings are fully known to us and our behavior proceeds effortlessly and unimpeded, as if it's simply a matter of adjusting to our surroundings, there is no thinking. . . . But as soon as the environment presents us with any kind of new and unanticipated position . . . that requires in our ways of behaving likewise new moves and new reactions and quick reorientation of our activity, there thinking arises (p. 92).

So, not only are these "new moves," "new reactions," and "quick reorientation" the places where "thinking arises," it is also the place where creativity is sparked. For the creativity-centered classroom, novelty must manifest itself on two fronts. As explored in this section, novelty needs to reside in creative process and products generated by students; however, novelty also needs to exist in the tasks and assignments facilitated or created by the teacher. Hetland (2013) supports this notion in her comments about teaching isolated concepts. She notes that students should use their knowledge "flexibly in response to novel circumstances" and reminds educators that strategies learned in isolation rarely transfer to "unfamiliar challenges" (p. 67). A need for "unfamiliar challenges" set forth by the teacher or established by the student, not only helps students produce products of a creative, possibly novel nature, but also reinforce understanding

of content, domain-specific knowledge. Such unfamiliar situations staged in the teaching and learning environment create a state of, what Piaget termed, cognitive disequilibrium for the learner. Through the process of creative problem solving (learning), the student reaches an elevated state of equilibrium through his or her solution (Gredler, 2009).

One way to achieve novelty in assignments is to incorporate the notion of play or playfulness into the classroom environment. Amabile (1996) situates creative play in terms of motivation, "if we can define task engagement for extrinsic reasons as 'work,' and task engagement for intrinsic reasons as 'play,' it will be expected that, phenomenologically, states of highly creative activity will seem like play" (p. 102). Vygotsky (1926/1997) takes this line of thought to the next level, specifically advocating that games provide novel situations to students that allow for the development of creative thinking:

> By repeatedly throwing the child into ever newer situations, subordinating him to ever newer conditions, games force him to vary the social coordination of his movements in infinite ways and teach him such a degree of flexibility and elasticity, and such a wealth of creative skill, as does no other field of education (p. 92).

This is not to say that the classroom should be transformed into an arcade of sorts, but that classrooms can capture a playful spirit, a playfulness, that projects the message that learning is enjoyable, desirable, and dare I say, fun. A game incorporated into the classroom, in and of itself, is not justifiably promoting creative thinking and learning. However, deliberate and purposeful implementation of playfulness and gamification attributes of assignments and projects can lead to elevated levels of creative output.

Educators creating classroom environments that generate highly creative activities that seem like play may find that some students are able to reach flow. Csikszentmihalyi (1997) coined the term flow, which he defines as an "optimal experience" that is an "almost automatic, effortless, yet highly focused state of consciousness" (p. 110). This state of creating comes when

the creator is completely engrossed in the process of creating. He further explains that the creator is in a state that is balanced between challenge and skill, distractions are excluded from consciousness, there is not worry of failure, and quite often time is distorted (p. 110). The activity (or in creative classroom terms, the project or assignment) becomes "autotelic," or in other words, the learning becomes an end in and of itself (p. 110).

Incubation and Resiliency

Structuring such assignments over an extended period of time affords the experience of incubation for the students. Incubation is an important element of the creative process and can be described as time away from a given assignment or project in which the student is not actively engaged in the work, is doing something else (either at school or at home, academic or for personal enjoyment), but the brain is subconsciously mulling around the project. By stepping away from the project, the student often returns refreshed, often with a new perspective on finding solutions, and sometimes with a viable solution at hand.

Resiliency in the creative classroom forms a symbiotic relationship between teacher and students as the determination within students to achieve and within the teacher to help his or her students achieve is interconnected.

In the 1920s, Wallas introduced the concept of incubation in relation to the creative process. Wallas's four steps model of the creative process include: 1) preparation—individual is gathering knowledge, 2) incubation—individual is not actively thinking about the problem and is often engaged in other, unrelated activities, 3) illumination—the moment when a solution becomes clear and understandable, and 4) verification—solution is tested to assure viability (Starko, 2014, p. 29). This idea of taking time away from a problem, often through a series of breaks, and then returning refreshed or in a new state of mind to work on a solution is a mainstay

in creative research and practice. Many scholars subscribe to the value of incubation. Csikszentmihalyi (1996) explains incubation periods as the time when "the creator becomes puzzled by an issue and remembers coming to a sudden insight into the nature of a problem, but does not remember any intermediate conscious mental steps" (p. 98). Amabile (1996) describes incubation as a period of time "after ceasing to consciously work on a difficult problem, they [creative individuals] sometimes experience an apparent flash of illumination, during which the solution appears to them unexpectedly" (p. 83).

For classroom application, the step of incubation in the creative process is not only necessary, but supports the idea that exercising creativity is an extended process. To that end, assignments and projects that support developing creativity in young people will have complexities to them that do not allow for immediate answers. Assignments that foster creative thinking require students to synthesize multiple pieces of knowledge, have multiple viable answers for solutions, and are solved over an extended period of time. Such assignments require not only think time for students, but periods of incubation, as well. Assignments that are not solved in one sitting, but over a series of instructional periods, in between incubation breaks, provide the opportunity for students to exercise intellectual endurance. Such assignments will model authentic, real-world problem solving. It is here where the craft of effective teaching takes center stage. Assignments that are designed to be sufficiently complex, incorporate think-time for students to engage in divergent thinking for solutions, and permit students space to analyze and test potential answers will organically afford incubation periods. Assignments that are worked over a period of time allow students time away from the task so that they may tease out the problem at a subconscious level. Crafting such projects requires expertise skills; if teachers make the assignment too complex, students may be unduly frustrated or overwhelmed; if not

complex enough, students may not gain the experience of fully engaging in the creative process.

Incubation periods assist students in pursuing complex problems. The ability to maintain determination and resiliency over time until a solution is achieved proves to be a much-needed skill for academic and personal success. This aligns with Dweck's (2006) work with growth mindset, which she defines as being "based on the belief that your basic qualities are things you can cultivate through your efforts" (p. 7). Dweck contends that through trial and error over a period of time an individual can successfully cultivate behaviors and knowledge. Dweck does not subscribe to the notion of a creative genius (which we have previously debunked in this chapter), nor to someone being innately talented (a fixed mindset where talent or creativity is either a trait one possesses or not), but does acknowledge that through perseverance and work over time, one can attain his or her goal. Dweck (2006) explains mindset this way:

> When you enter a mindset, you enter a new world. In one world—the world of fixed traits—success is about proving you're smart or talented. Validating yourself. In the other—the world of changing qualities—it's about stretching yourself to learn something new. Developing yourself (p. 15).

The notion of resiliency is also present in Duckworth's research on what she terms "grit"; "We define grit as perseverance and passion for long-term goals" (Duckworth, Peterson, Matthews, & Kelly, 2007, p. 1087). The nature of creative problem solving is that the problem itself is not one that offers a quick or easy fix. Guiding and coaching young people through the creative process to produce a creative product can also be a means in helping them develop perseverance. "The gritty individual approaches achievement as a marathon; his or her advantage is stamina. Whereas disappointment or boredom signals to others that it is time to change trajectory and cut losses, the gritty individual stays the course" (Duckworth, Peterson, Matthews, & Kelly, 2007, p. 1088). The classroom that is focused on cultivating creativity may substitute Duckworth's term "achievement" with the phrase "finding creative solutions." Both are attained

overtime with periods of incubation.

The Duckworth team (2007) concluded that "achievement is the product of talent and effort" (p. 1098). Defining achievement in these terms parallels our understanding of creative production. Creative solutions and products that are truly creative do not manifest instantaneously through muses or genius. Most of the time such results are generated through deliberate, time consuming work. Duckworth, Peterson Matthews, & Kelly (2007) further found that:

> The amount of energy one invests in a particular task at a given moment in time is readily apparent both to oneself and to others, the consistency of one's long-term goals and the stamina with which one pursues those goals over years may be less obvious. Similarly, whereas the importance of working harder is easily apprehended, the importance of working longer without switching objectives may be less perceptible. (p. 1098)

The less obvious pursuit of goals over time dovetails with Gardner's ten-year theory; his observations of creative individuals concluded that it takes roughly ten years to move from novice to expert and be positioned to make Big-C creative contributions to the given domain. The realization of significant goals or the production of creative products is that both activities require persistence and tenacity.

Weisberg's discounting of the myth of the creative genius is further clarified by his claim that creativity is "the result of ordinary processes" (p. 246). Such a perspective of creativity operates in the creative classroom. Weisberg offers the CHOICES model as an organizer for the creative process:

> C = Creative thinking
> H = Habitual: within the box
> O = Ordinary: everyone is capable of creative thinking
> I = Incremental: small steps
> C = Conscious: conscious work
> E = Evolutionary: builds on what is available
> S = Sensitive to external events: influenced by context (Weisberg, 2010, p. 247).

This model can serve as a valuable tool for teachers when evaluating lessons focused on developing creativity. Teachers can look for elements of each of these steps embedded in their instruction. This model can also be used with students for explaining the creative thinking process and the way in which many people devise creative products.

Kaufman and Beghetto (2013) refer to one's understanding of their progression through the creative process as creative metacognition (CMC), which they define as "a combination of creative self-knowledge (knowing one's own creative strengths and limitations, both within a domain and as a general trait) and contextual knowledge (knowing when, where, how, and why to be creative)" (p. 160). Kaufman and Beghetto (2013) further explain the teacher's role in CMC development, "in addition to helping students understand the nature of creativity and its potential costs and benefits, teachers can support the development of students' CMC by providing them with continual informative feedback on their own creative strengths and limitations" (Kaufman & Beghetto, 2013, p. 162). Feedback from peers can also assist students' development of CMC. It is through the student's development of CMC where ownership of the learning and the project shifts from the teacher to the student. Referring back to Vygotsky's notion of mediator . . . both teachers and peers serve as mediators in a student's CMC development.

Divergent Thinking, Flexibility, and Open-Mindedness

Guilford's (1959) Structure of the Intellect (SOI) model is a three-dimensional model with content (information perceived through the senses, through symbols, or through verbal expression), products (classifications, transformation, implications), and operations (intellectual abilities such as memory, cognition, evaluation) serving as the three dimensions. Within the operations dimensions, Guilford includes divergent thinking and convergent thinking as separate

entities. He defines divergent thinking as thinking "in different directions, sometimes searching, sometimes seeking variety" and convergent thinking as thinking that "leads to one right answer or to a recognized best or conventional answer" (p. 470). This model was the first not only to incorporate, but value the idea of divergent thinking, as prior models of intelligence focused solely on convergent thinking that concentrated on determining a singular, best answer (Starko, 2014). Since Guilford's model, divergent thinking has been deemed an integral part of creative thinking and the creative process.

However, with the current reliance on standardized testing as the ultimate measure for assessing student academic achievement, not to mention serving the measure for school funding, developing creativity may sacrificed. Standardized tests, by their nature, focus on finding the best answer (convergent thinking) and may not be assessing properly for the creative, digital-age skills (divergent thinking) that we know are necessary for 21st century success. According to Sternberg and O'Hara (1999), "conventional tests of intelligence most often require convergent operations to produce a single correct answer to multiple-choice questions" and therefore exclude assessing for divergent thinking (p. 252). Gardner (2006) states that "assessment can be much broader, much more humane than it is now and that psychologists should spend less time ranking people and more time trying to help them" (p. 23). It is at this juncture where educational practices severely misalign with educational goals. Schools are pervasively assessing convergent thinking and rarely assessing divergent thinking, despite the overwhelming understanding that productive members of the 21st Century citizenry will be required to fluidly exercise divergent thinking skills.

We can look to Guilford (1965) for some clarity as he claims such a limited scope of educational aims is not optimal for learning; "training in critical thinking alone is a negative

approach to education. The most positive approach is in the form of training in divergent production. . . . The ideal way of learning is to have an active seeker and discoverer of information rather than a passive receiver of information that is fed to him." (p.455-456). A recent study also seems to indicate that we are not focusing our educational energies on cultivating creativity. The research team of this study explored the decreasing scores in the Torrance Tests of Creative Thinking. The findings indicated that "until fifth grade, children were increasingly open-minded and curious and more apt to produce unique responses. After that, they began a trend of increasing conformist thinking that continued through high school" (Kim, 2011, p. 291). This is a frightening trend, particularly in present day social, financial, and cultural environments that are practically begging for creative, innovative thinkers.

Classroom teachers can break this trend by promoting divergent, flexible thinking and open-mindedness in students by orienting creative learning around authentic, real world problems. Starko (2014) offers this for consideration:

> An authentic problem (a) does not have a predetermined answer, (b) is personally relevant to the investigator, and (c) can be explored through the methods of one or more disciplines. Students who are to address authentic problems must be provided with the knowledge and tools that allow them to be successful. In a parallel fashion, students who are to be effective communicators not only must have an idea worth communicating, but also must be taught the skills of communication in a variety of formats (p. 21).

Flexibility and open-mindedness are not only requirements for students when cultivating creativity; it is also a necessity for teachers, as well. Educators must be ready to seize the creative moment when it happens. Schacter, Thum, and Zifkin found in their study of creativity development in elementary schools that "in the rare instances when a teacher did elicit student creativity, the teaching strategy was not aligned with the lesson objective, was not explained or elaborated, and the purpose was not made clear to students" (2006, p. 61).

Flexibility and openness are also present in Carl Rogers's definition of creativity. He posits that creativity is the result of healthy human development and views creativity in terms of three characteristics—1) "openness to experience", 2) "internal locus of evaluation", 3) "ability to toy with elements and concepts." (Starko, 2014, p. 61). Both the first and third points imply a flexibility in both thought and experiences; however, the third point calls for closer examination. In addition to flexibility, this point also implies that the individual is willing to take risks ("toy"), escaping from traditional lines of thought.

Pro-Risk Environments, Failure, Motivation, and Respect for the Learner's Autonomy

Currently, powerful educational systems and actors have cultivated a premium value of product over process, which gives more credence to the possession of the proverbial right answer than to the process by which one arrives at such a determination. Sadly, this viewpoint contradicts those clamoring for the need of students and citizens well versed in 21st Century skills, of which creativity is leads the list. For present-day teachers, creating a learning environment that encourages academic risk-taking may be challenging. Dweck (2006) claims:

> There is a strong message in our society about how to boost children's self-esteem, and a main part of that message is: *Protect them from failure!* While this may help with the immediate problem of a child's disappointment, it can be harmful in the long run. (p. 181)

Yet such an environment is vital in helping students reach their full creative potential for "if too few opportunities for curiosity are available, if too many obstacles are placed in the way of risk and exploration, the motivation to engage in creative behavior is easily extinguished" (Csikszentmihalyi, 1997, p. 11). Teachers play a significant role in establishing an environment that promotes intellectual risk-taking. A classroom that is respectful of all, fosters positive and supportive interactions, and finds value and joy in learning is an environment that is fertile

intellectual risk-taking. And a classroom where the teacher models academic risk-taking is often just the invitation students need to immerse themselves in the creative process.

Intrinsic motivation promotes such risk taking, yet intrinsic motivation does not often flourish under the cloud of a state-endorsed test score or a teacher's authoritarian approval. Beghetto and Kaufman (2013) assert that "creativity can suffer when people are promised rewards for creative work when learning conditions stress competition and social comparisons, or when individuals are highly aware of being monitored and evaluated by others. Conversely, creativity generally thrives in environments that support personal interests, involvement, enjoyment and engagement with challenging tasks" (p. 13). Many current educational systems operate under forms of token economies and convince themselves into thinking valuable learning is taking place. Such approaches to rewarding learning frames the learning experience as a quid pro quo venture, which by its structure is externally motivated and counterproductive to cultivating creativity; "it appears that when people are primarily motivated to do some creative activity by their own interest in and enjoyment of that activity, they may be more creative than they are when primarily motivated by some goal imposed on them by others" (Amabile, 1996, p. 15).

Reading, writing, and speaking are mainstays across content areas in contemporary classrooms. No longer are these strategies the exclusive purview of the English classroom. These areas also tend to be utilized as means for assessment and afford, if permitted, room for creative products. With that in mind, Smagorinsky (2013) offers that "what matters is using the developmental potential of speech to generate and explore ideas rather than to always speak and write in ways that meet an assessor's approval" (p. 194). For creative products that are language based, a classroom culture where the teacher's red pen frequently looms can inhibit risk-taking,

thus generating writing or speeches that are formulaic and safe rather than inventive and original.

Hetland (2013) also points out the importance of social environment in facilitating and developing creativity in students. In addition to teachers staging physical learning spaces that promote creativity, Hetland also explains the important role of the social environment and classroom climate; while teachers observe and respond to students and their work, "teachers are also aware and thoughtful of students' needs for privacy at times to develop a relationship with materials, tools and their own work" (p. 16-17). This is an important consideration in our current assessment-obsessive culture. Not every activity in the creative process needs to receive teacher feedback; "by stepping back, teachers set an atmosphere of unobserved independence for the students, while remaining close enough to see what is going on and being ready to intervene with questions, suggestions, or demonstrations as the need and opportunity arise" (Hetland, 2013, p. 17). It is in the place of "unobserved independence" where students will be free to take creative, intellectual risks. They are able to play with ideas, constructs, and tools within the discipline being studied. They will begin to build notions of what works and what doesn't in unselfconscious ways because they are not constrained by frequent external assessment, whether formative or summative. Such an environment is present in many studio-based classes and has the potential to appear in more classrooms that have not traditionally been viewed as studio-based. Amabile advises similarly regarding environments that support the development of creativity in children; "Encourage autonomy by avoiding excessive, anxious control of children's activities and by respecting each child's individuality" (1996, p. 261). She further explains that "autonomy and independence can be supported in the socialization process by emphasizing values (guiding principles) for behavior rather than rules, and by teaching children the reasoning behind these values" (Amabile, 1996, p. 261).

This idea of "unobserved independence" is not limited to the realm of education, but has beneficially manifested itself in the work place at such cutting-edge organizations as 3M, Google, Facebook, and LinkedIn and was responsible for such innovations as Post-Its, Google News and Gmail. In the business sector, this is commonly known as 20 percent time which operates under the assumption that "knowledgeable workers are most valuable when granted protected space in which to tinker" (Tate, 2013). Roughly 20 percent of the worker's time, or one day per week, is spent working on self-selected projects. This business practice has come full circle and has been implemented as a teaching strategy, often referred to as Genius Hour (www.geniushour.com), where students are given a predetermined amount of time each week to explore their personal interests within the domain or content area.

Gaps in Literature

Before taking on a study of this nature, one must first identify the relevant literature and corresponding gaps or areas that past studies haven't specifically explored. The first gap is in defining creativity. The earlier body of literature (mid- to late- 20th Century) had a wider variance on the definition of creativity. Twenty-first Century research seems to have narrowed the scope of the definition, but still has nuanced variations. Blending the definitions of creativity from scholars such as Beghetto, Kaufman, Robinson, Sternberg, Lubart, Gardner, Weisberg, Amabile, Runco, and Csikszentmihalyi, this study will frame the notion of creativity in teaching and learning through two cognitive functions: 1) creative-divergent thinking (generating many options and possibilities; novelty) and 2) critical-convergent thinking (evaluating appropriateness and quality based on current knowledge of a domain).

The second gap in the literature is the limited studies of creativity in secondary English classrooms. Most studies concentrate on elementary classrooms and explore creativity in

general, non-content specific terms (Andiliou & Murphy, 2010). This study will add to the body of literature by focusing specifically on the secondary English classroom.

The third gap in the literature is in regard to early career teachers. There are studies about creativity and teaching in general. Several scholars (Beghetto, 2007; Chan and Chan, 1999; Craft, Cremin, Burnard, and Chappel, 2007; Fleith, 2010; Runco, 2002) have studied related areas of this issue. However, no studies have been conducted that examine cultivating creativity within the classrooms of early career teachers; early career teachers defined as educators who are new to the profession, having three or fewer years of experience.

The fourth gap in the literature is the one most appealing to me. This gap concerns the quality of data gathered from previous research studies. Andiliou and Murphy (2010) examined the body of contemporary research on conceptions of creativity among researchers and teachers. They found that "no direct links were made in most of the reviewed studies between teachers' espoused beliefs and their enacted classroom practices" (p. 216), which calls into question the validity of data that are solely self-reported. Andiliou and Murphy (2010) further advise that "Triangulation of data seems paramount when considering the relation between beliefs and behaviors" (p. 216). This study has components that will afford triangulation of data that are discussed in the methodology section.

This chapter explored many facets of creativity theory as it pertains to the teaching and learning environment. Definitions, characteristics, and practices of creativity were presented, along with an overview of the history of creativity as it has developed over the past fifty years. This qualitative research study used this body of knowledge as the lens by which to examine how the study participants, four high school English teachers in their second year of teaching, understood and implemented practices that cultivated creative thought and skill in their students.

CHAPTER III

Methodology

Introduction

This chapter explains the research methods, design, and procedures for this qualitative, multiple-case study on cultivating and developing creativity in secondary English classrooms. The purpose of this study was to examine early career English teachers' understandings and practices about cultivating creative skills and thinking in their students in the school setting.

A review of the literature revealed mostly subtle but notable variations on the definition of creativity by forerunning scholars on the topic. Furthermore, the definitions were not necessarily exclusively focused on defining creativity as an activity or skill, nor within the scope of the teaching and learning environment. By examining the definitions of creativity from scholars such as Beghetto, Kaufman, Robinson, Sternberg, Lubart, Gardner, Weisberg, Amabile, Runco, and Csikszentmihalyi, this study narrowed its scope of examination by observing creativity in the classroom setting as a skill that can be cultivated through two primary cognitive functions: 1) creative-divergent thinking and 2) critical-convergent thinking. This study examined early career secondary English teachers' perceptions, classroom practice, and assignments in terms of how their efforts support the development of creativity in their students.

An interesting aspect of creativity revealed in the existing literature was that "no direct links were made in most of the reviewed studies [on creativity] between teachers' espoused beliefs and their enacted classroom practices" (Andiliou & Murphy, 2010, p. 216). This study examined teachers' beliefs regarding creativity through teacher-participant interviews, classroom observations, and analysis of assignments given to students. Though the sample size of this study was limited, analyzing the participants' statements regarding their perceptions of creativity in the

teaching and learning environment alongside classroom observation notes regarding their practice may inform future studies with statistically significant number of participants.

Researcher's Positionality

As "the researcher is the subjective lens through which the data are known," I am compelled to share that the origins of this dissertation study are deeply rooted in my experiences as a teacher (Bryant, 2004). My career as a high school English teacher began immediately after graduating college. I had a three-year run in a small, rural community school—a seven period day with six different course preparations and one planning period. I was also assigned as yearbook advisor and speech coach. Due to my love and experience with technical theatre and the school's lack of a theatre department, my second year I added the role of drama coach and took students to the school's first ever one-act competition. Though teaching brought me immense satisfaction, I burnt myself out and left full-time teaching at the end of my third year to spend several years as a university fundraiser, part-time technical writer, and occasional adjunct instructor at local universities.

Eventually, I returned to the high school English classroom with more informed work experience and a rekindled passion to teach. It was during these years in the classroom that a specific situation prompted a change in my teaching that ultimately served as the foundation for this research study.

Merriam (2009) claims that "Investigators need to explain their biases, dispositions, and assumptions regarding the research . . ." because it "allows the reader to better understand how the individual researcher might have arrived at a particular interpretation of the data" (p. 219). My relationship to the topic of this research study is rooted in a complete and utter surrender; a deliberate leap from a mount of desperation I reached as an experienced, high school English

teacher juggling state and national test preparation, standards attainment and mastery, and real-world applications of the English language among the backdrop of excessive student absences on fall semester Fridays along with other social and personal challenges my students faced. When I raised concern about this significant loss of instructional time regularly occurring on game-day Fridays in a faculty meeting during my first year teaching at this school, I was told it was a tradition spanning generations for the football team, the full band, all the cheerleaders (varsity and j-v), the band auxiliary, pep squad, and dedicated student fans to support the school and the team by attending games during the season. Each year I tried implementing various strategies to increase attendance and minimize the effects of the lost instructional time. My moment of surrender ultimately came my fifth fall at this school—during second hour, a roster of almost thirty students was attended by only three. This was a record low for attendance and was beyond unacceptable. Something had to drastically change and as the trained professional, I understood it was up to me to facilitate this change.

The following weekend, I started working on an elaborate and challenging creative fiction writing activity. Having participated in the summer invitational with a site of the National Writing Project and the Folger Shakespeare Library's Teaching Shakespeare Institute, I understood and valued the role of creative writing in the English classroom. However, in an educational environment desperately focused on standardized test scores, creative writing had been nearly squeezed out of existence in the secondary English classroom. Fridays were an opportunity to welcome it back to my classroom and I hoped my students would welcome it, too. It was at this point that I accepted that I had nothing to lose. As the loss of instructional time on Fridays was commonly accepted by the professionals at this school, along with parents and the community at large, I ventured that no one would question the academic value and real-world

application of material covered during Friday classes.

The students found the activity playful and intriguing. It involved artifacts and objects whose meanings the students constructed. The activity grouped students in small teams, allowed for both individual and collaborative work, engaged all students in copious amounts of discussion and decision-making among their teams, assignments were loosely structured and provided flexible guidance rather than rigid direction, and was completed in class on Fridays during the entire fall semester. There was no right or wrong way to complete the project, but students knew that they may be asked to explain their rationale for tackling a given task in a certain way. No grades were awarded or deducted. No make-up work assigned to those who were not in class. Student expectations for Fridays were to show up and work productively. And they did.

Friday attendance increased. Students were focused and took ownership of their work, both as individuals and as teams. They made authentic, thoughtful authorial choices. They had fun and there was laughter in the classroom as the students worked. It seemed as if a pressure valve had been released for all of us and in doing so, immense learning was taking place—for students and teacher alike. I knew it and my students knew it. One day two football boys took pause and verbally lamented that they would miss the activity on Friday because they had a game. The fact that those boys took a minute to reflect was evidence for me that something powerful was working with this project. Students dropped by before and after school to work on their writings; "Mind if I work on my story for a while?" The teams, by and large, wrote copious amounts following our classroom mantras, "Be true to the story," and "Write until it's done." Though there was never an expectation set regarding the length of the writings, many groups had final projects exceeding 75 double-spaced pages. A couple groups exceeded 100 pages. As the

fall semester came to an end, several students asked if we could continue the project in the spring or start a new one. We were all sad that we could not.

This learning project was far more successful than I had the capacity to imagine. It fascinated me then and still does today. The learning the students engaged in, both academic and social-emotional, was exceptionally productive. Since this experience, I have been driven to understand what made this project such a powerful tool for learning. As I began exploring professional journals and books on pedagogy, I kept crossing the notion of creativity. Creativity was at the core of this experience. As the teacher, I exercised my creativity in designing a project rich with multiple, acceptable outcomes and my students exercised creativity through the decisions and approaches they made executing the project to produce piquant writings.

I wanted to learn more about how and what teachers do to promote creative development in their students. I wanted to know if there were specific elements or conditions in curriculum, pedagogy, or learning environments that were more conducive than others for assisting students in developing their creative skills and thinking. My curiosity drove me to take a couple graduate seminars and eventually led me to officially apply for my Ph.D. program in Curriculum and Instruction. The Friday desperation I felt so many years ago as a frustrated high school English teacher led to the development of an intriguing learning experience for my former students and was the basis for this research study.

Research Design

This study was conducted as a multiple case study and explored the concept of creativity in the teaching and learning environment through the bounded system of employed 2015 cohort members of the MAT English Language Arts program offered at the state university system's flagship campus (Merriam, 2009). Of the ten graduates of this cohort all were employed after

graduation with six securing employment as full-time, secondary English teachers. These six served as the population for this study, from which four became the study's sample. The four serving as study's sample secured permission from their respective administrators and agreed to participate in the study. One of the employed six declined to reply to multiple requests to participate. The last of the employed six was agreeable to participating in the study, however administration at the potential participant's school declined the request.

In the spirit of full disclosure, it is important to note that prior to working with the participants in this study, I had worked with them two academic years prior during their teacher preparation program at the university. They were enrolled in a course in pedagogies for the secondary English classroom, and I served as a teaching intern for their class as part of the requirements for my doctorate of philosophy's course work. I taught some lessons on creative writing with them, as well as supported them with teaching writing lessons to secondary students at a summer writing camp held on campus. The instructor of record for the course where I served as a teaching intern was Dr. Christian Goering, dissertation director for this study.

The data collection instruments used in this study included opening- and closing-study interviews, classroom observations of participants teaching, and sample learning activities that participants assigned their students while I observed the teacher teaching. Collectively, I examined how the participants conceptualized the notion of creativity in a teaching and learning setting and individually I examined what each participant specifically did to cultivate creative skills in their students. I then explored how the participants' classroom actions and decisions related to their conceptualizations of creativity. To accomplish these goals, I approached the opening- and closing-interviews through a cross-case analysis as a means to "build abstractions across cases" (Merriam, 2009, p. 204). The opening- and closing- interviews were coded using

Merriam's (2009) five step process for data analysis, which involves open coding and axial coding of the participants' responses regarding their conceptualization of creativity and effective teaching (p. 178-193). However, as each participant had a very distinct way in which she approached teaching, individual case studies for each participant proved necessary to understand the ways each participant supported their students' development of creative skills and thinking. The individual case studies were developed by examining each participant's practice through the Conceptual Framework for Cultivating Creativity (Figure 1.1). This "particularistic" case study "is an especially good design for practical problems—for questions, situations, or puzzling occurrences arising from every day practice" (Merriam, 2009, p. 43).

The individual case studies were used as snapshots (or as Lightfoot termed "portraits") that when curated as a small collection allowed for a cross-case analysis among participants (Merriam, 2009, p. 49). The cross-case analysis of the participants' data determined if generalizations or patterns could be identified regarding the early-career English teacher participants in this study and furthermore, could inform future studies of creativity in teaching and learning environments (Merriam, 2009, p. 204).

Overview of Procedures

1. The secondary English teachers and their respective high schools were selected.
2. Each participant was assigned a pseudonym. As the participants are secondary English teachers, the pseudonyms were derived from female characters in Shakespearean plays.
3. Opening-study interviews were conducted, recorded, and transcribed. Interviews captured participants' perceptions on effective teaching, motivation for pursuing a career in teaching English, and a description of a highly effective teacher they had during their respective schooling experiences.

4. Each teacher-participant was observed teaching. Times for observations were determined by teacher availability, researcher availability, and school calendar of events. All participants were observed twice. Three of the four participants were observed three times.
5. Teacher-participants provided copies of learning activities they assigned to their students during observation sessions.
6. Closing-study interviews were conducted, recorded, and transcribed. Interviews captured participants' perceptions on the role of creativity in the teaching and learning environment, specifically regarding their understanding of whether creativity is a static or dynamic skill. Interviews also captured how teacher-participants thought schools and teachers afforded experiences for creative practice, as well as how teacher-participants were prepared in their teacher preparation programs regarding the incorporation of strategies and methods that specifically cultivate student creativity.
7. All recordings were transcribed through VerbalInk, an on-line transcription service.
8. Data from the opening and closing interviews were coded using Merriam's five step process for data analysis (Merriam, 2009, p. 178).
9. Data secured from the observations were examined as four single case studies then further analyzed across cases (Merriam, 49).

Rationale

Participants for this study were selected from the graduating 2015 cohort in the Masters of Arts in Teaching at the state university system's flagship campus. Selecting participants from the same graduating cohort afforded a level of consistency in the participants' teacher preparation that may not have existed if participants had been selected from a cross-cohort pool

or candidates from another institution of higher education. All participants in this study were in the same class sections as they advanced through the program's sequence of courses.

Furthermore, upon graduation from the MAT program, all of the participants were employed by school districts within the state that followed the state's English Language Arts Standards Grade 6-12 (Arkansas Department of Education, n.d.). With all participants teaching under the guidance of the same state standards, a broad, common foundation of academic objectives was established.

Such commonalities among the participants allowed for a tighter examination of the data gathered during this study. In essence, the participants had the same baseline preparation, instructors, content, and number of years of professional experience. These commonalities, prima facia, appear to possibly lessened the disparity of among participants' pedagogical understanding and practice.

Context

Participants in this study taught in high schools in the northwest region of the state. This region geographically abuts the southern Missouri boarder to the north, the eastern Oklahoma boarder to the west and the Boston Mountain range of the Ozarks to the south. Economically, this region is home to many national and international corporations and has a considerable number of cultural resources compared with other regions of the state.

Demographics of the communities in which the study participants' high schools were located compared to state demographics are presented below in Table 4.1. Data used to populate this table came from the United States Census Bureau website (2019). In general, when compared to state averages, the schools in which this study's participants teach have a higher median income, lower rates of poverty, and more citizens with high school or higher degrees.

Table 3.1
US Census Data—City Information for Participating Schools

Indicator	School A	School B	School C	School D	State
Population	less than 5,000	35,000—40,000	5,000—10,000	65,000—70,000	3,013,825
Median Household Income	$60,000—$65,000	$75,000—$80,000	$65,000—$70,000	$45,000—$50,000	$43,813
Poverty rate	9.4%	7.3%	6.7%	18.8%	16.4%
High school diploma or higher	93.3%	93.3%	92.3%	71.6%	85.6%

Demographics of each study participant's school compared with each other and state averages are presented below in Table 3.2. Data used to populate this table came from the Arkansas Department of Education's online published School Performance Report Cards for the 2016-17 academic school year (2018), the year in which all data were gathered for this study. In general, when compared to state averages, the schools with teacher participants in this study tend to have lower cost per pupil spending, higher percentage of student body identifying as white, lower percentage of students being special education eligible, higher educational attainment for teachers, and higher average teacher salaries.

Table 3.2
Comparison of 2017 School Performance Report Card Indicators for Participant Schools

Indicator	School A	School B	School C	School D	State
School Enrollment	409	3,511	1,236	2,265	479,258
Per pupil spending (district)	$8,204	$9,418	$9,418	$9,684	$9,807
Average class size	13	16	14	18	16
Primary student ethnicity	91.2% white	76.4% white	71.7% white	47.3% white	61.1% white
Secondary student ethnicity	6.1% Hispanic	10.5% Hispanic	13.8% Hispanic	38.8% Hispanic	13.0% Hispanic
Limited English proficiency	2%	3%	5%	32%	8%
Low income	41%	20%	25%	50%	60%
Special education eligible	7%	9%	11%	8%	12%
School drop-out rate	1.71%	2.17%	.65%	4.13%	2.32%
School attendance rate	98.0%	92.6%	93.3%	94.2%	94.4%
4-Year graduation rate	96.5%	92.4%	n/a	85.8%	88.0%
School ACT reading score	19.25	23.78	20	20.71	20.39
School ACT English score	18.29	22.87	20.5	19.66	19.23
School ACT composite score	18.63	23.11	20	20.46	19.93
Average years teaching experience	5	12	10	13	12
Teachers with emergency credentials	0%	0%	0%	0%	0%
Teachers with Bachelor's	52%	29%	40%	47%	53%
Teachers with Master's	42%	60%	48%	49%	42%
Teachers with advanced degrees	0%	2%	2%	3%	1%
Average teacher salary	$47,959	$57,557	$57,557	$59,981	$49,104

Other than the populations of the communities and student enrollment numbers, the schools in which the study participants taught were similarly oriented.

Demographics

The teacher participants in this study were second-year English teachers who taught in high schools in four separate communities in northwest portion of the state, no greater than a 35-mile radius from the university from which they graduated. Three of the four participants had progressed into higher education through commonly known as "traditional" routes, meaning they graduated high school and immediately began college. Though these three participants held occasional part-time employment, they had not held full-time, professional employment positions. The remaining participant had secured a Bachelor's degree in a non-education field of study, was employed full-time for a few years, then returned to the university to earn her MAT. Enrollments where the participants taught were over 400 students to under 3,500. The communities of the schools ranged in population size from less than 5,000 residents to almost 70,000. Average annual incomes of these communities varied from just over $45,000 to almost $80,000, with averaged annual teacher salaries spanning a range of over $47,000 to just under $60,000. Most teachers in these districts had attained Bachelors or Masters credentials, a few attained advanced degrees, and no teachers in any of the four schools represented in this study were teaching with emergency credentials (Arkansas Department of Education). The average years of teaching experience for the faculty of each school ranged from 5 to 13 years.

Population and Sample

The population of this study was the ten graduates from the 2015 Masters of Arts in Teaching—English Language cohort. The purposeful, convenience sampling of 6 graduates was further selected from this population based on employment as a full-time English teacher (Merriman,

2009, p. 79). Of the 6 qualifying potential participants, 4 secured permissions from their respective administrations and personally agreed to participate in the study. Each of the participants was white and female.

Data Collection Procedures

Once approval for the study was granted by the university's Institutional Review Board, permissions from the participants and their building administrators were secured via signed "Consent to Participant in a Research Study" forms from the participants and confirming emails from administrators acknowledging my presence in their buildings working with their respective teachers during the semester. Upon finalizing teacher and administrator consent, data collection began.

Opening Interviews. The first instrument used to gather data was the opening interview conducted with each participant. Each interview began by the researcher reading aloud the reminder of consent informing participants of their right to opt-out of a question, the interview, or the study itself. Each interview lasted approximately 30 to 60 minutes. All interviews were audio taped and sent for transcription to VerbalInk, an online transcription service.

Questions for the opening interviews were prepared in advance; however, the semi-structured nature of the interviews allowed deeper and broader exploration of the participants' conceptual understandings with impromptu questions that extended the participants' initial responses (Merriam, 2009, p. 90). The opening interviews provided descriptive information about each participant and assisted in developing a positive, professional relationship with the participants. Questions explored during the opening interviews included, but are not limited to:

- What is your work experience prior to this job?
- Why did you pursue teaching as a career?

- Why did you choose English as a content area?
- What are your thoughts regarding the physical classroom environment and its impact on the learning process?
- What skills are crucial for students to learn?
- What supports and stifles a student's desire to learn?
- What school structures support student learning? What school structures hinder student learning?
- Thinking of the most effective teacher you had during your schooling, what was it about this teacher that made him/her so effective?
- Thinking of the most ineffective teacher you had during your schooling, what was it about this teacher that made him/her ineffective?
- What do you believe is the purpose of education?

Photographs and Sketches of Physical Layout of Classrooms. Each participant had her own, specifically assigned and designated classroom. No participants shared a classroom, nor did any of the participants travel to share rooms with other teachers throughout the course of a school day. Photographs of the participants' classrooms were taken during the first visit to the classroom at a time when no students were present. Photographs documented student desk arrangement, teacher desk location, lighting, flooring, designated work spaces, and décor and objects placed in room or on walls.

Classroom Teaching Observations. At the completion of each opening interviews, the first classroom teaching observation was scheduled. Participants were asked to select observation days that they believed embodied some of their most effective teaching practice. Class sessions that were atypical (e.g. shorten class periods due to an assembly or pep rally

schedule, picture day, etc.) were avoided. At the end of the first classroom teaching observation, the second observation was scheduled, and likewise for the third. When scheduling observations, consideration was given for school, teacher, and researcher's respective calendars. The intention was to observe each participant three times; however, three of the four participants were observed three times and one participant was observed twice. Despite only being observed twice, said participant's school ran a 90-minute block schedule. This afforded a total of 180-minutes of observation time for this participant, which was a greater amount of observation time than another participant who was observed three times at a school that ran a traditional 50-minute period schedule. Observation data were gathered by taking field notes and audio taping the observed lesson. The audio footage was used as a tool to clarify and confirm field notes.

Student Assignments/Activities. The participants provided instructions, directions, material, hand-outs, and the like for the activities and/or assignments with which they taught their students during the scheduled observations. Not only did these assignments serve as their own data set, they assisted in supporting the accuracy of the data gathered regarding the participant's teaching observation. The student assignments/activities were analyzed through the lens of "Design Learning Engagement" under "Teacher" responsibilities of the Conceptual Framework for Cultivating Creativity presented in Chapter 1. The elements of "Design Learning Engagement" include:

a) Content rich
b) Elements of novelty and originality
c) Completed over a span of time
d) Student choice/interest/options
e) Student engages in creative-divergent thinking (multiple possibilities)

f) Student engages in critical-convergent thinking (evaluation)

g) Student engages in independent decision making/individual work

h) Student engages in dependent decision making/collaborative work

Closing Interviews. The final instrument used to gather data was the closing interview. The closing interviews also lasted 30-60 minutes, were audio taped, and transcribed by VerbalInk. These interviews were also semi-structured with prepared questions, but allowed flexibility to ask follow-up questions to further explore participants' understandings and perspectives (Merriam, 2009, p. 90).

In the closing interviews, participants were specifically asked about many facets of creativity in the teaching and learning environment. Until this point in the study, the researcher did not specifically mention creativity so as not to prejudice the participants' responses, teaching, or assignment/activity selection. Questions explored during the opening interviews included, but are not limited to:

- Within the context of teaching and learning, how do you define creativity?
- Within educational systems and processes, where do you think students learn how to be creative?
- In an educational setting, what factors do you think contribute to supporting the development of creativity in students?
    - Physical space
    - Classroom culture
    - Assignments/activities
- As a teacher, in what ways do you support your students' creative development?
- In an educational setting, what stifles creative development in students?

- What systemic school structures support creativity?
- What would you say are some common characteristics of creative students you have taught?
- What would you say are some common characteristics of the most successful students you've taught?
- Do you have a particular assignment that you feel supports the development of student creativity more strongly than others?
- What are your thoughts about creativity as a 21st Century skill (a skill students will need to be successful in the future)?
- Can you think of specific instances in your teacher preparation program where you learned strategies to promote creativity?
- Do you consider yourself to be creative?

Data Analysis Procedures

As case studies produce "a rich and holistic account of a phenomenon," one portion of the data (opening- and closing-interviews) were analyzed with the case being the employed, full-time English teacher cohort of a of a specific graduating class of the masters of arts in teaching program (Merriam, 2009, p. 51). The remaining portion of the data (classroom teaching observations, assignments/activities, and classroom photos) were analyzed as multiple cases using cross-case comparisons (Merriam, 2009, p. 49-51). All data were filtered through the lens of the Conceptual Framework for Cultivating Creativity (Figure 1.1) presented in Chapter 1 of this study by examining specific understandings and behaviors the participants exhibited or expressed that reflect the body of knowledge currently existing on the phenomena of creativity.

There were three interrelated research questions for this study:

1. How do early career English teachers conceptualize creativity as it relates to teaching and learning?
2. How do early career English teachers support creative development and the creative process through the use of the classroom environment, in both physical and social-emotional spaces?
3. How do early career English teachers cultivate creative development in students through choice, design, and implementation of assignments?

Research question one of this study was addressed through data analysis of the opening and closing interviews of the participants. All participant responses from both the opening- and closing-interviews were coded to identify prevalent themes in the participants' collective understanding of creativity in the teaching and learning environment. To answer this research question, the opening-interviews broadly examined the participants' understanding of effective teaching and learning, while the closing-interviews specifically examined their individual experiences and manifestations of cultivating creativity in students in a formal educational setting.

Research question two was satisfied by analyzing field notes, audio recordings, and classroom photographs from each participants' teaching observations. The means by which participants supported their students' creative development varied considerably. Because of this, the observation data collected was analyzed separately by participant to create a series of individual, separate snapshots of the participants then analyzing through a cross-case comparison (Merriam, 2009, 49). This approach was necessary because of the variation of methods and strategies that each participant implemented in her teaching.

Research question three was answered through the examination of both the

assignment/activity provided by the participant to her students, as well as through the field notes from the teaching observation of the participant as she implemented the assignment/activity. Participants were observed teaching the assignment or activity and after the observation, a separate analysis was conducted by examining the participant's assignment/activity through the eight aspects of "design learning engagement" presented in the Conceptual Framework for Cultivating Creativity.

Limitations of the Methods

The teacher participants in this study were all female, middle-class, and white, which has potential to limit findings as they relate to gender, ethnic, and social-economic diversity of teachers and their understanding of creativity. Also, this study was conducted with participants teaching in high schools in the same state, within two counties, in the most lucrative quadrant of the state which has potential to limit findings as they relate to other geographic regions within the state, nationally, or globally.

Initially, the observation forms were intended to be a tool to tally instances of behaviors that supported creative development. This proved to be futile as such distinctions were not clearly compartmentalized; such behaviors and elements were often not clearly distinct or separate from each other. For example, a participant may exhibit a behavior or a blend of behaviors multiple times during an observation. Counting such behaviors quickly proved to oversimplify the examination of creativity in the teaching and learning environment. Field notes for classroom observations focused on examining the participant's teaching in a more holistic manner.

This study was designed to observe each participant three separate times over the course of one academic semester, resulting in one observation per full month of instruction. Due to

participant's schedule, school events schedule, and/or the researcher's schedule this was not attainable in all participant cases. Of the twelve total planned observations, one was cancelled and three were rescheduled. Due to conflicting school and researchers' schedules, one participant was observed twice in one month.

Risks and Benefits

No risks to participants or researcher were associated with this study. Benefits of this study have the potential to extend to teachers, administrators, higher education faculty in teacher preparation programs, and ultimately, students, as greater understanding and effective practices regarding the development of creativity in the teaching and learning environment is attained.

Summary

This study was prompted by two factors. The first was the researcher's interest in gaining a greater understanding of how to support creative development in students. This led the researcher to learn that a disconnect existed in the research between teachers' understandings of creativity and the practices they implement to cultivate creativity in their students. This study was designed to be a qualitative, case study of creativity in the teaching and learning environment that examines teacher participants' conceptual understandings and pedagogical practices that support students' creative development in the secondary English classroom. It was a multiple, cross-case study of four, full-time, high school English teachers who graduated in the same masters of arts in teaching cohort at a tier one research institution of higher education. The data for this study were collected through participant interviews, classroom teaching observations, classroom photos, and assignment and activity materials used during observations. Audio recordings of the participant interviews were transcribed. Audio recordings of classroom teaching observations were used to clarify and assure accuracy of field notes. The data were

analyzed and interpreted to gain understanding about the pedagogical practices teachers implement to support their students' creative skills, thinking, and overall development. Chapter IV discusses the results of the data from this study.

CHAPTER IV

Data Analysis

Introduction

This study was designed to examine early career secondary English teachers' conceptualization and pedagogical practice regarding the development of creative skills and thinking in their students. This case study was conducted by utilizing the following data gathering instruments: 1) opening study interviews, 2) classroom teaching observations and field notes, 3) classroom photo and sketches, 4) assignment/activity analysis, 5) closing study interviews.

This chapter is divided into four parts. The first part offers a review of the study's research questions, an overview of the data collection procedure, and overview of the data analysis process. The second portion of this chapter provides the educational context in which the study took place. The third section focuses on the results of the study that pertain to the participants' collective, conceptual understandings of cultivating creativity in the teaching and learning environment. The fourth part of this chapter addresses the participants' individual pedagogical practices that support creative development in the teaching and learning environment.

Research Questions

1. How do early career English teachers conceptualize creativity as it relates to teaching and learning?
2. How do early career English teachers support creative development and the creative process through the use of the classroom environment, in both physical and social-emotional spaces?

3. How do early career English teachers cultivate creative development in students through choice, design, and implementation of assignments?

Overview of Data Collection Procedures

1. The secondary English teachers and their respective high schools were selected.
2. Opening-study interviews were conducted, recorded, and transcribed. Interviews captured participants' perceptions on effective teaching, motivation for pursuing a career in teaching English, and a description of a highly effective teacher they had during their respective schooling experiences.
3. Each teacher-participant was observed teaching. Times for observations were determined by teacher availability, researcher availability, and school calendar of events. All participants were observed twice. Three of the four participants were observed three times.
4. Teacher participants provided copies of learning activities they assigned to their students during observation sessions.
5. Closing-study interviews were conducted, recorded, and transcribed. Interviews captured participants' perceptions on the role of creativity in the teaching and learning environment, specifically regarding their understanding of whether creativity is a static or dynamic skill. Interviews also captured how teacher-participants thought schools and teachers afforded experiences for creative practice, as well as how teacher-participants were prepared in their teacher preparation programs regarding the incorporation of strategies and methods that specifically cultivate student creativity.
6. All interview recordings were transcribed through VerbalInk, an on-line transcription service.

7. Data for opening and closing interviews were coded using Merriam's five step process for data analysis (Merriam, 2009, p. 178).
8. Data secured from the observations were examined as four single case studies then further analyzed across cases (Merriam, 49).

Overview of Data Analysis Procedures

1. Opening and closing study interviews were transcribed by VerbalInk, an on-line transcription service.
2. The opening and closing study interviews were coded using Meriam's (2009) five step process of data analysis, which involves open coding and axial coding of the participants' responses.
3. Classroom teaching observations were audio recorded as researcher took field notes. Post-observations, the researcher listened to the audio recordings while reviewing and clarifying field notes for detail and accuracy.
4. Classroom teaching observation field notes, classroom photos and sketches, and assignment/activity materials for each individual participant were analyzed through the lens of the Conceptual Framework for Cultivating Creativity (Figure 1.1). The analysis for each participant was summarized in a snapshot of practice.

Data Analysis Process: Participants' Collective, Conceptual Understandings of Cultivating Creativity in the Teaching and Learning Environment

The data gathering instruments used to examine the study participants' conceptual understanding of creativity and its role in the teaching and learning environment were the opening- and closing-study interviews. The opening-interviews focused on uncovering the participant's understanding and perspectives on teaching, without specifically introducing the

notion of creativity. The prepared questions and impromptu follow-up questions for the opening-interviews purposefully did not reference creativity so as to not bias the participants' responses. This methodological decision was made so as not to influence the participants' pedagogical decisions with preconceived notions of creativity during the following teaching observations. For example, each participant was asked to think of and describe the most effective teacher they had during the course of their formal schooling (Pre-K through MAT). The rich descriptions the participants shared often revealed qualities or pedagogies that research suggests support and enhance the cultivation of creative thinking and skills in students. And to the contrary, when participants were asked to account for the most ineffective teacher they had during their schooling, the behaviors described regularly aligned with classroom practices that have been shown to curb creative development in students.

The questions in the closing-interviews specifically addressed the phenomenon of creativity with the participants. The participants' responses in the closing-interviews, directly addressing their thoughts on creativity in the teaching and learning environment, allowed me as the researcher to align the responses with their teaching observation notes, the sketches and photos of their classroom arrangement, and the analysis of the assignments/activities they engaged the students with during the classroom observations. Such analysis illuminated the connection, or in some instances, disconnection, between the participants' individual conceptual understandings of creativity and their pedagogical practice.

Data analysis for the data gathered through the opening- and closing-interviews began with the interview transcriptions. First, I read a hardcopy transcript of each interview checking for accuracy and jotting notes to clarify or check field notes. I then listened to the audio recordings of each interview while simultaneously reading through the hardcopy transcriptions,

again making clarifying notes to increase accuracy. Finally, I entered corrections to the electronic versions of the interview transcripts as needed and printed fresh transcripts of all interviews.

Next, I began the category construction of this qualitative data through open coding. I read each finalized interview in its entirety and noted key words and concepts in the margins. After a few days away from the data, I reread each interview in its entirety and examined the marginal annotations of key words and concepts to assure accuracy and consistency. Upon completing the second reading and notating of the opening-interviews, I created an Excel spreadsheet for each participant's interview. In these spreadsheets, I entered data in three columns: 1) the participant's designated letter (A, B, C, or D), 2) the interview question, and 3) the open code in the form of key words, concepts, or short phrases. Columns 1 and 2 were solely for organizational purposes as such references would allow me to more efficiently return to the data set and locate specific information, most commonly in the form of direct quotations from participants. This coding process was also followed for the closing-interviews.

Once the spreadsheets for all participant interviews were created, they were printed. The printouts were physically cut into strips, each strip revealing one code. All the codes were gathered, shuffled, then sorted into categories and eventually developed into themes (see Table 4.3).

Results

Table 4.3
Initial Codes, Categories, and Themes for Conceptual Understanding of Creativity in the Teaching and Learning Environment

Initial Code	# of Codes	Categories	Themes
Relevancy	41	Supporting Practices	Teacher Pedagogy
Student Engagement	39		
Role of Teacher	36		
Novelty	19		
Collaboration	19		
Flexibility	10		
Differentiation	6		
Controlling Practices	13	Limiting Practices	
General Concepts	7	Teacher Training	
Specific Practices	13		
Creativity as Skill Set	20	Teacher	Mindsets/Behaviors
Supportive Attitude	34		
Limiting Attitude	21		
Characteristics of Creatives	41	Students	
Limiting Qualities	8		
Choice	31	Choice	Freedom
Failure	8	Failure	
Room Arrangement	15	Physical	Spaces
Ornamentation	7		
Cart Teaching	3		
Multiple Perspectives	8	Emotional	
Positive	7		
Confidence/High Expectations	7		
Elective Courses	7	Supporting Structures	School Structures
Block Scheduling	5		
Testing	14	Limiting Structures	
	19		Misconceptions

Teacher Pedagogy

The most prevalent theme that emerged regarding the participants' collective understanding of creative development in the teaching and learning environment was the value and importance of teacher pedagogy. The four participants were highly cognizant of the impact the teacher and her professional choices have on student learning. Within this theme, three categories emerged; that of pedagogical choices and practices that support the creative development of students, pedagogical choices and practices that limit such development, and pedagogies learned in their teacher training program that support creativity.

Supporting Practices. Whether the participants addressed qualities of effective teaching in the opening-interviews or specifically addressed pedagogical practices that cultivate creativity in the closing-interviews, seven clear concepts emerged regarding teacher pedagogies that support creative development: relevancy, student engagement, the role of teacher, novelty/interesting, collaboration, flexibility, and differentiation.

Relevancy. The participants spoke of relevancy of academic content frequently in terms of creativity and the teaching and learning process. Relevancy was described as the students' desire to connect their learning and personal interests to the world around them. Participants stated that the connections students are able to make between the learning in the English classroom to other content areas, to current events, and to their personal lives makes the content relevant to the student. Helena reflected on an influential English teacher she had in high school who made her learning relevant in a very personal way, "I can even remember what she wrote in my yearbook. She passed away shortly after I graduated. She had cancer my senior year. . . . She quoted Shakespeare, 'To thine own self be true,' and just wrote that whole bit from *Hamlet* into my yearbook, and I guess it's a lesson that I took with me." In this example, classroom content

was connected to the learner's life in a very meaningful way; a way that heightened the value of both the personal experience and the learning.

The participants were mindful of wanting to make content relevant to their students currently, but they were even more focused on the relevancy of learning on their students' futures. Among their responsibilities as educators, the participants claimed they wanted the learning in their classrooms to be relevant for students' future goals, whether college or career. Participants expressed a desire for their students to become strong workers and active citizens through their educational experiences, as well as lifelong learners. Rosalind explained that she wanted her students' educational experiences to "make them better, better in every way—better thinkers, better workers, better citizens" and "to keep learning and never just be complacent." Beatrice shared that the purpose of education is "to make us more well-rounded, better humans."

When specifically asked about their perspectives about creativity as a highly desired skill for 21st Century success, one participant indicated that she had not heard the term "21st Century skills" and another claimed that creativity as a highly desired 21st Century skill was simply a "buzz word." Despite these comments, the participants agreed that creativity is important for the future success of their students. Cordelia stated:

> In the world we live in today . . . you have to be creative to think of solutions. . . . It's a different way of thinking about creativity now because once you leave high school, unless you are an artist or something with the more traditional sense of creativity, it becomes a practical creative. How are you going to use your skills to come up with something, to create something that a business will see as worthy or a business will see as successful or something that they need? I hadn't really thought of it that way until just now but I do feel like once you leave high school or college it is divided into that, the traditional creative side and the practical creative.

Beatrice echoed this sentiment by claiming:

> I believe that this [creativity] is one of the most important skills and it should be considered a 21st Century skill because our world is rapidly changing and the more advanced our technology becomes, we're going to continue to grow and change in

> different ways than we can't even plan for at this point. It's going to happen a lot faster. And I also feel like our global and local and national landscapes are changing. We're becoming a much more globalized world. I think our world today is going to look drastically different for our students. Creativity is going to be really important for them. They're going to have to know how to adapt really quickly and to think about different situations to make connections between things that exist or may not exist yet.

The participants expressed their understanding that creativity is useful, important, and valuable and not merely superficial.

Equally important to relevancy enhancing learning and creativity, the participants identified that lack of relevancy limited and demotivated students. Rosalind claimed:

> Part of it is if they're not motivated or interested at all. I have some students—even if I know that they're intelligent and they are creative, if they just don't care anything about their grades or doing well in the class or they don't care about failing . . . then I'm not going to get anything out of them. . . . If they don't see any purpose in school and they don't find any merit in their grades, if they just don't think that they matter, then of course they wouldn't care.

Participants indicated that a lack of content relevancy stifled students' desire to learn, inhibited their creativity, and was a mark of ineffective teaching.

Student Engagement. Based on the Conceptual Framework presented in Chapter I, which was developed from the body of current research on creativity, student engagement is central to cultivating creative skills and thinking in students. The findings of this study align with that understanding as well. Involving students in the teaching and learning process proved to be of high value to the participants. Words such as "active," "engaged," "student-centered," and "voice" surfaced frequently in the interviews. Participants identified student engagement as a mark of effective teaching that can motivate students to learn; and to the contrary, a lack of student engagement can dull such motivation. Participants revealed that class discussion, particularly student-led discussion as opposed to teacher-led lecture or worksheets, was an effective way to engage students. Hands-on activities, project-based learning, and assignments

that produced original student products in many forms were also mentioned as means to actively engage students in their learning. The participants tended to view student engagement as a joint effort and responsibility between teacher and students, not an obligation set solely on the shoulders of the student, as evidenced in Beatrice's claim:

> I thought it was important to kind of create some—inquiry, some questioning around certain topics that are present in the story, and that kind of leads to curiosity. I believe in a lot of topic choice, especially with writing, because I think students will be more engaged with that process if they're writing about things they are interested in and curious about. So, if no, we're talking about a short story or something. I'm thinking, "How can I make them curious to know more about this?' and so I think inquiry is very important.

Participants acknowledged that knowing students' interests was a way for teachers to promote student engagement. Rosalind emphasized the value of making real-world connections between the classroom and students' interests outside of school as a way to strengthen her students' engagement with classroom content:

> A lot of boys love hunting and fishing and everything, so as soon as I got here, one of the first things we read was The Most Dangerous Game, because I knew I could bring them in to hunting that way. And I did, even my boys who say they don't like English. So I think knowing my kids, that's essential for me to be able to teach them well.

Participants in this study expressed their understanding that student engagement is crucial first step to learning and developing creative skills. This concept was present in several of the upcoming findings themes and categories.

Role of Teacher. Participants expressed in a variety of ways the importance of the teacher in her students' creative development. The teacher's presence was viewed as that of an influential model and facilitator of creativity. When asked where students learn the skill of creativity, Cordelia claimed:

> It falls in the hands of the teachers that they have. If the teacher fosters an environment of creativity and encourages it, then it does grow. But I also think it's a very fragile kind of platform, like a very fragile system for the kids. It can be very easily broken or crushed.

When asked the same question, Beatrice stated, “Definitely in classrooms where they have opportunities to be creative, classrooms where they can inquire and are taught to inquire about things and to be curious—where they’re kind of challenging the norms and what’s always been.” An encouraging environment that provides opportunities for inquiry and curiosity starts with the efforts of the teacher. The term “facilitator” was used often in the participants’ responses, noting that teachers provide appropriate tools that facilitate creative development and that teachers monitor a gradual release of control and responsibility to the students.

However, though acknowledging the importance of the teacher in student creative development, the participants made clear distinctions between teacher as facilitator and a teacher-centered classroom. Participants expressed strong advocacy of student-centered teaching and learning environments as an approach that supports creative development. Rosalind shared that her high school experience was one of teacher-centered schooling and that she did not see a truly student-centered classroom until her student internship modeled by her mentor teacher. The mentor teacher implemented project-based learning with small student groups and assigned student roles culminating in the groups teaching concepts to the other groups. She claimed, “Knowing that they [students] have to be creative on their own to come up with ways that actually help them retain information, they had to think about ‘What can I learn? How can I make it interesting?’ Some students came up with some interesting projects . . . I think it [creativity] is really driven by students, and teachers can only help along the way.”

Novelty. When asked to define creativity, participants noted novelty or closely related terms and phrases such as “unique,” “interesting,” and “grabs your attention.” The participants also were aware that novelty manifests in many ways in a classroom that supports the

development of creative skills–desk arrangements, activities and assignments, and teacher's abilities were a few referenced. Cordelia expressed it this way:

> I would define creativity as not traditional. . . . In terms of a teacher, I would definitely say not traditional, in terms of an English classroom, bringing in art, bringing in music, even physical artifacts. . . . Yes, I do believe it [creativity] can be taught. It can be developed. A lot of times with students, you're going to have to untrain their brains to allow for that creativity to feel normal or to feel right.

Cordelia touched on an interesting notion that exercising creativity feels out of the norm for many students and that it may take time for them to acclimate to a classroom that cultivates creativity. Novelty, with its many facets, can be a means by which to lead students to the exploration of their creative skills. A reason students may feel uncomfortable with creativity can be explained in Beatrice's response below about a high school classroom that severely lacked novelty.

As participants noted that novelty was a central component of creativity, they also noted that lack of novelty was an indicator of lackluster teaching and suppression of creative exploration within students. Beatrice recalled her least favorite class of her high school experience, an English class with a myopic focus on standardized test preparation. She said that:

> I remember literally every single day—we would come in with a different prompt, and she [the teacher] taught us the way we had to do the prompt, and we had points taken off if we didn't circle the right thing. Then, we had to write a very structured response to that, the open response, and that was pretty much all we did in that class. Then, she would refer to us by our test score numbers. . . . It was horrible. . . . One day, she walked up to me and she was like, "You know, you are a three, like you're almost a four [top score].". . . I remember her telling that to me once, like she thought of us in our test score numbers.

This example of repetitive writing drills shows a comprehensive lack of incorporating novelty into the teaching and learning process. The teacher apparently was solely focused on test preparation, having her students produce artificial forms of writing, and even stripped the

novelty of the students' names from them by addressing them as a test score. Such one-dimensional practices diminish creative growth.

Collaboration. Participants revealed that collaboration was crucial to many aspects of establishing a creative-friendly classroom and environment. One participant indicated that her desire for collaboration lead her to into the field of education because of its collaborative nature. Other participants claimed collaboration as a defining pillar of the phenomenon of creativity and the creative process, as a skill needed for learning, and as a quality of an effective teacher. Cordelia shared:

> Every student comes from a different background, different experience, and different culture. They talk together and collaborate together. They see how one line from a novel could be interpreted totally different between two students just because of the background and their culture that they bring to it [the discussion].

Through peer collaboration, students gain a broader understanding and context of the materials being studied. A broad, more thorough context can provide students a rich environment from which to develop creative products, solutions, and commentaries as research has proven that creativity's existence is dependent on a given context.

The importance of physical space and classroom culture also were acknowledged as influencers of a collaborative environment. When asked how the physical classroom environment influences the learning process, Beatrice commented directly on collaboration. She stated, "I think collaboration is really important. I think talking and writing with each other is very important to kind of help us refine our thoughts, get our thinking out, to communicate, and so I've arranged my classroom in a way to be conducive toward collaboration."

Collaboration was not only noted as being valuable for the students and their learning, but also for the teachers and their professional development. Participant B indicated that her participation in her professional learning community (PLC) supported her pedagogy as well as

her students' academic growth. "I like that I'm on a PLC. I like the work that I do with them. I think that we have this open dialogue . . . 'How can we teach these concepts the best, how can we get our students interested?'," she claimed. Through her PLC, this participant is creating stronger, more effective strategies and methods for her students.

Flexibility. A very broad notion of flexibility appeared in the participants' interviews. Participants indirectly referenced flexibility in terms of themselves as teachers by being open to multiple, acceptable responses from students (both in content and in form). They also mentioned the importance of maintaining flexibility in their demeanor, as well as promoting flexible thinking in some of their most rigid thinkers. Rosalind stated: "I saw a lot of students who are like concrete thinkers, and I'll ask them a question or ask them to do something and they just have a very logical response. They say it and then they're done. And then someone's always devil's advocate—'defend what you say'. And they have to think beyond what they originally thought." By extending a student's thinking, the student is placed in a position where he or she has to engage in divergent thinking, developing other possible answers, which is a cornerstone skill to develop creativity.

The participants viewed flexibility as a sense of openness that is beneficial to both teachers and students. Helena explained that teachers can "have the best plans and something is going to happen. And so, you have to be creative enough to flip the script and come up with something. I think that I do a good job of that. . . . So that is creativity but I also think that's flexibility." This participant views flexibility and creativity as synonymous terms.

Differentiation. Participants were in agreement that differentiation was important to supporting the development of student creativity. One participant acknowledged the value of

differentiated instruction, but felt she did not have the time to fully differentiate the instruction for her student load:

> We would only be able to teach to one student at a time," she said, if she were to differentiate the instruction. "When I have a class of 30 students, I try to give them options or I try to maximize what I can. There's just not a way for me to do it for all of them the way that I would like.

Another participant referenced that incorporating technology into instruction and maintaining a student-centered environment promotes creative development. She further referenced learning about differentiation in her teacher preparation program development:

> I'm thinking of my methods class. I did my inquiry project on differentiation. Before that project, I had this preconceived notion that we can differentiate one lesson for one day. We're going to throw in some music and that's differentiated. After the project, I realized, no. Every single student, every single class, individually, you differentiate for that student.

She continued by referencing Socratic circles, tableaus, and "the soundtrack of my life" as pedagogical strategies, student-centered strategies, she learned that help students exercise creative thinking skills.

More specifically, Cordelia referenced that differentiating assessments allows for creative growth, though the creative assessment she cited was not particularly novel. As an example, she referred to a hypothetical student who did not score well on a test in her class; "maybe he doesn't write his answers so well, but maybe I give him the opportunity to be creative and tell me his answers. . . . I think of that as creativity."

Limiting Practices. All participants shared pedagogical practices that research has shown do not promote creative development. The commonality among these discussed practices proved to be behaviors that imposed control over the classroom by the teacher, as opposed to supporting students' agency in their learning.

Controlling Practices. Participants commonly viewed passive, repetitive, non-student-centered activities and strategies as practices that curb creative development. These approaches tended to be ones that limited student voice, where highly prescriptive, and amplified teacher control. Rosalind recounted such approaches by remembering an ineffective teacher she had during her high school experience. When asked what about the teaching made it ineffective, she expressed that it was "restrictive" and said, "A lot of it was textbook work." She continued by sharing that "for almost every chapter, we would just take notes on the textbook. And then when she would give her lectures, she would just be reading off of her notes from the textbook. Just a lot of textbook work over and over and over again." Cordelia supported this sentiment by echoing that non-interactive activities stifles student learning and creativity.

Beatrice found standardized, end-of-year or end-of-course test preparation to limit creative development. She stated:

> So just from my experiences, whenever we have to do more common standardized test-type things, I believe that's very stifling of creativity. I'm just thinking of an example from the tenth-grade class. I see these immense amounts of creativity happening when we're having the [writers'] workshops, but then there's some common things [assessments] that we have to do on our team, and it's like this very structured format of this assessment. So, it's almost like I have to teach the kids how to take the test. Then we have to spend time doing that, and you have to fill in the blanks in a certain way if you want to answer that question correctly. So, I see that as stifling.

The participants' responses for this section were not devaluing or discounting effective classroom management practices; however, they did frequently highlight the quieting of student voices through practices led exclusively by the teacher.

Teacher Training. Throughout the interviews, the participants made indirect and direct references to the methods and practices they were exposed to during their teacher preparation studies. These comments fell into two categories, general concepts and specific practices, that contribute to student creative development.

General Concepts. Overall, the participants agreed that their understanding of how to cultivate creativity in their students was not overtly studied during their MAT program, but through specific strategies presented in classes by their instructors or peers, they learn a variety of activities that facilitate creative expressions and products. Two participants referenced their teaching internship experiences as part of their training that further helped to model teaching that supported student creativity, specifically the execution of operating a classroom that is truly student-centered. Rosalind said, "When I was actually in the classroom for student teaching, I noticed the teachers didn't spend a whole lot of time in front. They might give a little lecture or a little lesson, but then . . . let's do it together as a class, now you do it on your own. I think that was important for me to learn . . . be more of a facilitator." The participants expressed that their training prepared them for cultivating student creativity, but were challenged to pinpoint specifically where in their program direct instruction of creativity took place.

Specific Practices. Participants recounted several strategies they learned in their teacher preparation program that they have since implemented in their classrooms. The most commonly referenced strategies were Socratic circles, tableaus, visual arts integration, musical arts integration, and collaborative writing. The participants said that they remembered not only discussing these strategies, but actually participating in the strategies as learners with their graduate school classmates. Despite feeling some awkwardness when engaging in these activities, Helena reflected on the experience and gained insight to their value. She claims:

> I know that we learned about tableau in the beginning of the MAT program and at the time it seemed like just something to make us feel really ridiculous. But it was a strategy that we were learning that we could take into the classroom. . . . And it may not have been explicitly told that here's a strategy. . . but then you realize, "oh, this is something to help my students connect the information more creatively."

Beatrice referenced her experience with arts integration as it affected her as a professional educator:

> For me personally, with the arts integration, after we did that [in graduate classes], that was something I became very interested in. . . . We did a teacher inquiry project. I guess that promoted creativity in myself as a professional. Did I do it [inquiry project] about creativity? I don't think I focused specifically on creativity because the project was more about the effect on us as a teacher and how that changed and shaped our teaching. So it wasn't specifically about the students to foster creativity, but it was about us and how it affected us.

Beatrice also shared about the effects creativity-supporting activities had on her students:

> Those activities really support and foster creativity in a lot of students, not even just the ones who are already really creative. But even some of the ones that are afraid to be creative or really think or question about things. . . . Arts integration-type activities have always encouraged students to kind of see things or think about things in new ways and kind of draw connections between all those ideas.

The specific strategies participants experienced in their teacher preparation program were utilized in their classrooms with effect. Participants reported that such activities provided an outlet for students to collaborate and exercise creative thinking skills and expressions that helped connect them to the content.

Mindsets/Behaviors

Mindsets and behaviors developed as a theme in this research study based on the participants' interview responses. Not only did the participants reference their own professional mindsets and behaviors, they reported being aware of the importance of the mindsets and behaviors of their students. Participants expressed that both teacher and student mindsets impact creative exploration and activity in the classroom.

Teacher. The first category that developed under the theme mindsets and behaviors were those associated with the teacher. In many ways, the participants expressed the importance of the teacher's ability to view creativity as a skill, or a series of skills, that can be developed over

time and with practice. The other two categories under this theme were mindsets and behaviors that support students and those that limited students' creative development.

Creativity as Skill Set. Participants expressed that creativity is a way for a human being to understand the world around them. They also claimed that by staying curious, being inquisitive, utilizing technology, and being able to empathize with others all factor into the creative success of students. Beatrice defined creativity in terms of a collection of skills:

> So, creativity to me is . . . not necessarily seeking definitive concrete answers for things. But being kind of intrinsically curious to learn and understand the world, which oftentimes means not having a definitive answer, but having lots of questions and seeking out new understandings and trying to connect things with each other. Collaborating with other people. Not necessarily doing things the way they've always been done, but finding new ways to do that, maybe foraging your own path.

Such skills were viewed as transcending any specific content area. Cordelia was quick to point out that creativity "can be present in all content areas, science, math, visual art or visual representation, or thinking about graphing in terms of using visual maps. It can be incorporated." Furthermore, the participants agreed that creativity can be taught and cultivated in a conducive environment, not only for students, but for the teachers as well. Two of the four participants acknowledged that they were working on developing their own creativity in terms of their teaching. Helena claimed that "creativity as an early teacher is just something that I feel like I'm developing" and Rosalind stated, "I'm a good creative second-year teacher, but I wouldn't say I'm an exceptionally creative teacher yet. That's going to take me a few more years because I'm still tweaking things. I'm working on it." The participants seem to understand and value that creativity, for both students and teachers, takes time and practice to develop.

Supporting Attitude. In addition to developing and cultivating their creative skills professionally as mentioned above, all participants were able to characterize themselves as, at some level, creative. The participants not only described themselves as creative, but understood

that creativity is a professional skill that they continually work to improve—they understand creativity to be both an attribute and an activity. By maintaining self-images that characterize themselves as creative and understanding that creativity is a skill to be developed, these participants are well positioned to further support their students' creative development as they comprehend creativity as a static descriptor and a dynamic ability. Below are additional key qualities that the participants identified which support student learning in general, as well as creative development specifically.

Participants emphasized the importance of positive relationships and positive energy in the creative classroom. "Passionate" and "enthusiastic" were the most common descriptors that surfaced in the interviews. Cordelia expressed her thoughts this way, "If the teacher is not passionate there will not be any buy-in from the students themselves, they will not see it [learning] as important. I mean if I don't think it's important, why should they?" Not only does this sentiment apply to learning content, but also to skill development, which includes creativity. Rosalind echoed this line of thought by identifying enthusiasm as being a responsibility of an effective teacher:

> I try to make it seem like I'm enthusiastic about it [teaching and learning]. . . . I did have some teachers, when I was younger—they didn't care about it. So, I didn't care as much about learning. I'm definitely a very energetic person. I try to make it seem like not only is learning important, but it can be engaging, it can be fun. I think it's important for the teachers to show that it's fun, but also this is why you're going to need it in your real life.

When asked if she identifies as a creative teacher, the Rosalind eagerly affirmed that she views herself as a creative person and teacher. She linked her enthusiasm of content and teaching to creativity by sharing her belief that creative people in all fields actively try to be creative within their field. She specifically attributed her identity as a creative teacher to her enthusiasm for her profession; "I think especially since I chose a career that I'm passionate about, that I wanted to

do, I'm going to do my best to be creative with it."

Other teacher qualities that participants identified as being valuable to teaching and learning in a creative classroom were "flexibility," "curious," "motivated," "funny," "caring," "fair," and "a life-long learner." Participants also acknowledged that to effectively support students and their creative efforts, a teacher must be "supportive" and "responsive" to their students' work and abilities. Rosalind further explained, "I have some days when I can tell that my students are really interested in this [an activity]. . . . I could tell that they were working so hard on creating and I gave them more time to prepare. I think it's important to observer your students and listen to what they need that day, what's going to be the best for them." This participant highlights what others also expressed—teachers supporting creative development in students need not only to understand their students, but exercise flexibility in meeting their needs as they develop and learn.

Limiting Attitude. To the contrary of the previous section of this study, the participants were able to identify teacher mindsets and behaviors that hindered learning in general and creative development in particular. A teacher's attitude of inflexibility was the most frequently and directly cited quality by participants as being an obstacle to creative development in students. Participants cited examples of being too rigid with parameters of student responses and work products, being too strict with student classroom behaviors, and being to tightly tethered to lesson plans as ways inflexibility diminishes creative development. Beatrice described a situation in which the teacher's classroom inflexibility was manifested as a result of administrative decisions. She explained:

> I think sometimes a focus on the standardized testing can impede true, authentic learning from happening. Now curriculums are becoming very standardized as a way to hold us accountable for teaching these very kind of narrow ways in order for students to do well on these tests that end up being a reflection of the school. . . . The emphasis on

> standardized tests and accountability has been probably the biggest force that has impeded learning from what I've seen.

Due to the rigidity of standardized test preparation, teachers, and ultimately their students, lose flexibility in exploring multiple possible solutions to problems posed. Granted, this is only one way of thinking, critical convergent thinking, but if school mandates require significant instructional time spent on test preparation, less time is available for students and teachers to engage in activities that cultivate creative divergent thinking.

Other attitudes mentioned by participants that limit student creative development are also qualities of ineffective teachers. Having a teacher-centered classroom, repetitive work that lacks novelty, teacher apathy and burnout, laziness, lack of curiosity, and lack of teacher investment in students were identified by participants as being killers of creativity.

Students. Although participants acknowledged the important presence of the teacher in the in the teaching and learning environment, they equally acknowledged to crucial role students play in the process. Data regarding student mindsets and behaviors fell into two basic categories, 1) characteristics the participants observed in their creative students and 2) student characteristics, behaviors, and attitudes that stunted the student's creative growth.

Characteristics of Creatives. One quality that all participants alluded to was that many of their creative students questioned norms. Classroom constructs such as rules and grades did not necessarily incentivize the participants' students. Beatrice observed that her more creative students were generally intrinsically motivated. Cordelia indicated that her most creative students were not especially focused on grades. Rosalind claimed that her creatives had at times challenged authority and Helena noted that some of her creatives would question rules. Cordelia also commented on rules:

> Creative kids, in terms of rules, they're not disrespectful. They're really good kids. They just have different ways of seeing things. . . . I'm probably more lenient than I should be. I'm not that person who says you're going to do as I say. That's not me. I feel like my rules maybe should be stricter than they are. But I'm just more focused on reasoning with them. That goes a long way in terms of a teacher and student relationship. . . . I feel if I reason with them, I get a better response and better reaction. That goes a long way with my creative kids, too.

Regarding their students' challenging of norms, the participants agreed with Cordelia's sentiments above—that most such challenges were not impolite or unmannerly, but rooted in a genuine curiosity of understanding why a process or policy existed. Also, one participant specifically acknowledged that her more creative students did not necessarily seek teacher approval regarding their work product.

Participants also tended to view their creative students as ones who sought novelty, were confident, expressive, and exhibited an appreciation of collaborative work and activities. Also, the participants noted an open-mindedness in their creative students, in regards to working with others, being confronted with new ideas, and being challenged with unconventional processes. Though some generalizations were expressed, Beatrice highlighted that variations among creative students most definitely exist:

> [My creative students] are not just satisfied with one concrete answer on a worksheet kind of thing, but students who really wanted to explore certain topics and truly understand the world around them. They are very curious. . . . To me, usually they're pretty outgoing and charismatic. I've had a lot of different types of creative students. I have some that work really well with others and I've had a few very creative students who were very kind of antisocial.

Limiting Qualities. The participants in this study identified the primary student quality that limited student creative development was that of apathy. Lack of motivation was also tied to comments of student apathy as a factor that squelched creative exploration and expression in the high school English classroom. Rosalind connected apathy with peer pressure, indicating that apathy toward creative growth can spread within a class section. She stated, "If it's a bunch of

students who just don't care and they have a poor attitude towards school and don't see any benefit from it [creativity], it's easier when everyone doesn't care as a group to be like 'Oh, we're not going to try more than we have to with creativity." Competing student interests also were tangentially connected with student apathy. Participants acknowledged that student interests outside of school competed for the students' time and attention with school work; however, the participants also established value in knowing their students and actively trying to connect their personal interests with class content. Participants acknowledged that when such connections could be effectively made, apathy diminished.

Freedom

The theme of freedom was a surprising theme that developed from the data analysis of this study as all participants referenced this notion multiple times. Participants found freedom of choice integral for both teachers and students in their journey of creative development. Another current coursing through the theme of freedom was a desire to be free of fear associated with failure. The discussion of this theme begins with freedom of choice.

Choice. The notion of freedom was at the core of Helena's definition of creativity. She claimed that creativity "happens when you just let it happen" and when the teacher is able to "let go of that control." Rosalind understood that freedom in the teaching and learning environment needs to be balanced with some limitations, which she expressed she was trying to find:

> If you don't give the students the ability to be creative, then they're never going to learn how to do that [be creative]. That's one of the many things I've struggled with in my class, is making enough requirements that my students have to be challenged and work at it, but not so specific they still have the ability to have some wiggle room.

Such "wiggle room" is the space of freedom and choice in which students may exercise academic decision-making. It is within this space that students begin to take ownership for their choices and ultimately their work. Other participants defined this space in more specific ways,

most frequently as student choice. Other terms associated with student freedoms were "experimentation," "exploration," and "student voice." Rosalind also shared that freedom in the form of student choice becomes a motivator for her students.

Cordelia defined creativity in terms of both her freedoms as a teacher and in terms of freedoms she affords her students:

> Being creative as a teacher, especially in English class [is] not searching for that one right answer, giving kids a little bit more freedom to figure out stuff on their own, allowing them to think in different ways, and differentiating your lesson. In terms of the student, just allowing kids to learn in different ways, whatever works with their brain, whether it's analytical or creative. I see creativity in a sense of giving kids the creative freedom to learn in different ways . . . just being creative in techniques and methods.

The above comment exemplifies the interconnectedness of the teacher-student relationship within the creative process. The teacher's pedagogical freedoms allowed her to explore and develop her professional creativity as it directly impacted her students' freedoms as they explored their creative development.

Beatrice shared her experience of how giving her students freedoms with their writing assignments afforded students the experience of diving deeper into their learning:

> I try giving students more freedom in their choices with topics they want to write about in certain genres. That's been really cool this year because I got to experiment with more workshops. That's been really cool to see when students have that freedom to write about things they care about. They're trying to seek out mentor texts and more information about this thing they're writing about.

Not only does this account exemplify the deeper learning of the students, the freedoms given the students proved to enhance their motivation regarding both the learning of the topic and the practice of writing. The students were also taking ownership of their learning.

Participants also mentioned other aspects of the freedom of choice in the creative classroom—the impact pacing guides and lesson plans. All four participants mentioned how such instructional planning tools have the potential to be confining and restrictive. One

participant confessed her love/hate relationship with them as her pacing guide limited some of the activities she wanted to do in her classroom, but understood and respected its purpose and specifically noted its usefulness as an early-career teacher. However, all participants reported that that they worked in schools or districts that respected the teacher's freedom to exercise their professional judgment. Beatrice succinctly stated:

> I'm lucky I work at a place that they give us teachers more freedom to do what we know is right. We aren't so adhered to a standardized curriculum that we aren't able to reach our students in our classroom. We're not too focused on teaching standards, more about teaching students, and I think that culture has really been promoted by our administration.

The freedoms given to the participants by their respective administrations serve as a form of support for both the teachers and their students. Such support can encourage liberate teachers to try innovative strategies and methods to further strengthen the teaching and learning process.

Failure. The category of failure within the theme of freedom was not as resoundingly present as other findings in this study, but was one worth addressing. The nature of learning involves failure, mistakes, and struggle, and yet present-day classrooms seem to repel this aspect of both the learning process and the creative process. When Cordelia was asked what skills are crucial for student learning, she began by listing, "Questioning, analyzing, collaborating with each other and being okay with—" and then she paused and reflected. "I guess this isn't really a skill. I guess it kind of is a skill. Failing; being ok to fail and learning from that. I guess you could consider that a skill, like the mindset of it's okay to struggle. Oftentimes when you're struggling is when you're learning," she said. Cordelia also went on to claim that teachers need to model mistake-making in their classrooms in front of their students so that the students see this is a real and legitimate part of the learning and creative process.

Helena's comments resonated with this line of thought as well, only she infused the notion of trust into the example she provided. She referenced her English Language Learning

students and complemented their bravery and the trust they have among their peers. Helena stated that students had to have "trust among themselves and with each other in order for creativity to be successful." She further claimed, "Especially with my ELL kids . . . they have more courage. They're a lot braver to make mistakes. I think that's part of creativity, too—putting yourself out there and allowing yourself the opportunity to be wrong." As presented in the Conceptual Framework for Cultivating Creativity in Chapter 1, welcoming mistakes and taking risks supports creative development for both teachers and students. If mistakes and failures are avoided, creative growth is stunted.

Spaces

The physical and emotional spaces within the teaching and learning environment influence the creative process. Participants in this study were asked to comment on the effects they observed, if any, of the physical and emotional spaces of the classroom on their students' creative development. Cordelia indicated that environment is important, especially regarding the impression students develop when entering a teacher's classroom. She wanted her room to be "welcoming" for students. Helena wanted her room to be "comfortable" for her students. When asked in general during the opening interview about factors that influence student learning, environment was important to Beatrice:

> I think it's also a lot about the environment that the teacher provides for the students, so an environment that is very student-centered where the teacher is giving students tools to kind of develop and refine their skills and their thinking, rather than me just talking at them. They're doing the talking, they're doing the learning themselves—so it's very active. Learning is active, it's not passive, so it has to be an environment that's conducive to that philosophy.

The classroom she describes is one where the teacher is a facilitator, students take ownership, and the overall environment is highly collaborative—all elements that cultivate creative development.

Physical spaces. Within the category of physical spaces, three primary areas emerged as influencing students' creative development: 1) room arrangement, 2) ornamentation, and 3) transient teaching or cart teacher.

Room Arrangement. Participants placed high importance on designing a physical layout of the classroom that enhanced student collaboration. Primarily participants achieved this by student desk arrangements. Beatrice mentioned seating arrangements and how the arrangement depends on a given activity's learning objective:

> I try to arrange the physical environment in such a way to foster creativity and we don't always have our seating like it is now, which is in these groups [small groups of four and five individual student desks]. I like using big circles a lot. A few weeks ago, we did tableaus and we did some other kinds of discussions, and we just had a giant circle with no desks, with just our chairs. So just changing the arrangement every once in a while, to kind of support the learning goals of certain activities and to promote creativity.

By varying the arrangement of classroom seating, the teacher provided students with differing levels of peer collaboration; from small group to whole class. The "big circles" set-up mentioned permitted a whole class discussion; however, the designed afforded a more effective collaborative experience by having all students face each other in a circle and by removing the physical barriers of student desks.

A space that allows students to physically move and be active during learning proved to be important to the participants. Even though Helena acknowledged that her classroom can "get cramped at times," she actively tried to "give opportunities for them [students] to get up and move around and make it fun, activate their learning." This approach to learning was noticeably different from her experience in high school:

> My learning background was your butt was glued in that chair for most of the day, and I didn't hate that but getting up and having a gallery walk or something in class is going to make it so much more meaningful and purposeful than just sitting and talking about thinks.

Beatrice also mentioned value in providing a space that allows students to move while learning and creating. She stated, “I think that having a physical arrangement where there can be a lot of collaboration and maybe even movement can contribute to creativity.”

Ornamentation. The word ornamentation was purposefully selected for this code. In the classic sense of the word, ornamentation was meant to enhance by adding something useful. In casual, modern usage, the aspect of usefulness is often absent. All participants at varying levels engaged in placing or displaying ornamentation throughout their classrooms. Some ornamentation was actively used to support teaching and learning, some was purely artifice, and other objects tended to have instructional potential, but remained dormant as to usage by teacher or students. This will be discussed in greater detail later in this chapter during each of the participants’ individual snapshots; however, this section of the chapter will convey the participants perceptions of the effects of the ornamentation in their classrooms.

Helena quickly commented on the ornamentation in her classroom; “I don’t love everything that I’ve got up on my walls because it’s a lot of stuff that I inherited. It can be expensive decorating.” Yet Helena emphasized that the ornamentation in her classroom supported a culture and space that is “motivational,” “comfy,” and “relaxed.” One way she attempted to do this was by creating an alternative seating space with a rocking chair and accent lighting. When asked specifically if physical space can assist with student creative development, she said, “I don’t think that physical space necessarily fosters creativity. I’ll be perfectly honest. . . . I mean I think little touches in the room can help make somebody feel more comfortable which in turn can make somebody more creative.” Helena’s perception of physical space’s influence on creative development seemed to fluctuate somewhat as she processed the idea, as she repeatedly connected the notion of students being comfortable with their creative activity.

Rosalind explained a comfortable learning environment in terms of freedom and safety for expression. She claims that students:

> . . . have to feel more comfortable in the classroom in order to feel free enough to be creative because, if you [students] are afraid you're going to get in trouble or be turned down or if you have a really bad relationship with the teacher, then they're not going to want to show that side. I think creativity is a lot more personal.

Cordelia indicated that the ornamentation of her classroom impacted her students' first impressions of her class. She stated that her classroom "needs to feel welcoming" and small details "from curtains, to a different lighting, to arrangement of seats" can impact student perceptions. Regarding the connection of physical space and creativity, Cordelia explained how she enhanced the physical space by displaying student work. She said:

> Physical space in a classroom contributes to creativity if you post a model displaying student work that has different viewpoints of one lesson or different interpretations of one lesson or product. Having that visible around the room so students can see they did it this way but [others] did it that way. There are different ways of thinking.

In this instance, the room ornamentation of displaying student work in Cordelia's classroom satisfies many of her professional objectives. The display of student work emphasizes a student-centered classroom that welcomes student ideas and at the same time showcases variations in student products and student thinking, all of which are efforts that support creative development.

Beatrice shared how she used the ornamentation of her classroom to inspire deeper understanding of content material for her students:

> It's important to fill the space, as an English teacher, with words, and so I have a giant classroom library. I think it's important to have that in the classroom. I have 800 books—I think that's how many I've collected up to this year. So filling the space with words that are in books, a variety of books that represent all perspectives, cultures, ability levels, everything.

Beatrice also shared that she and her students fill a portion of the classroom wall space with six-word memoirs, poems or prose passages that they find "really beautiful," and sentence stem to

assist with critical analysis. Beatrice said that she and her students look to this wall for "inspiration."

Transient Teaching/Cart Teachers. Although this particular code had few references throughout the interviews and only directly impacted one participant, it is important to acknowledge the impact of transient teaching, or in this particular case, a cart teacher, on teaching and learning in general and creative development specifically. One of the study's four participants was assigned to teach from the home-base of a cart her first year as full-time classroom English teacher. This work structure requires the teacher to move from room to room, teaching materials on a push cart, and teach throughout the day in different rooms, as opposed to a teacher stationed with materials and tools in one room for the entire day. Cordelia explained, "Last year I didn't have a classroom; I had a cart. So this year, having my own classroom, that's been exciting for me." When asked to explain how having her own classroom impacts her students, Cordelia said, "Well, I mean the simple—not simple, but things like classroom procedures; when they know what's expected and it's a routine, it makes things flow so much easier, they feel more prepared, I feel more prepared. And we just get more done within a day." This participant's experience indirectly highlights three elements crucial to cultivating creativity; novelty, flexibility, and resiliency. However, these elements should be used deliberately in the creative classroom; infused in content matter, the learning process, and student products, not experienced circumstantially as a byproduct of a teacher's lack of adequate resources, as in this case, space, time, tools, and equipment.

Emotional Spaces. Within the category of emotional spaces, four primary areas emerged as influencing students' creative development: 1) valuing multiple perspectives, 2) positivity, 3) confidence building/high expectations, and 4) trust/safety.

Multiple Perspectives. Valuing student opinions, challenging norms, and exercising individuality were some descriptors participants used to distinguish a teaching and learning environment that is focused on supporting creative development. These descriptors indicate the participants' understanding of the role of tolerance in the creative classroom. Beatrice indicated that students learn creativity by "challenging norms" and the status quo. She said that she wants her students "to reconsider what is normally accepted and should that be correct." Cordelia emphasized the importance of classroom culture and the value of diversity on students' creative development. She stated:

> Creating a culture having different ways of thinking or viewing something or interpreting something is okay as long as you can justify it and back it up with contextual evidence or some kind of justification for it and also just the attitude of the kids beginning from day one that we're going to respect each other. Everyone holds value. Everyone has something to bring to the table. You can learn from how this person thinks. You can learn something from it, especially in this district, the different cultures' we have represented.

Rosalind shared that with project-based learning activities, she incorporates creativity into the assessment of the project; she looks for "how creative you [the students] were." She also expressed that creativity in her students' work extends past the minimum requirements of the assignment. She asks her students:

> How did you go beyond what my requirements were? Some students just want to do the bear minimum. . . . I don't want all the projects, all the papers to be exactly the same; I want to see your individual mark on it. I mean telling kids I expect this [creativity] from you. I expect to see your voice in this. I think that helps some [students].

Though expressed in different ways, the study participants understood that a classroom welcoming of multiple perspectives supports students creative thinking and growth.

Positivity. Whether in the broader school culture, classroom environment, teacher-student relationships, or peer-to-peer relationships, participants noted that positivity, or the lack thereof, impacts students' learning and creative development. Positivity may manifest itself

physically, as previously mentioned, in the establishment of a comfortable classroom environment. Participants also expressed that learning activities can be instrumental in supporting a positive environment that is conducive to creative thought. Rosalind discussed having her students act out scenes from literature in addition to a more traditional approach of reading passages. She said that her students "had fun," "got really excited and chattery about it," and encouraged each other's performances; a class period with high, positive energy. This novel approach allowed students to showcase talents not often used in English language classrooms and allowed students to engage and understand the literary piece in a unique way. Rosalind stated that "I think trying to change the activities that I do in my class allows for some students who have different strengths and are creative in different ways to succeed more in my class." Rosalind also provided a counter example that exemplified how a lack of positive energy zapped student engagement and creativity. She recalled a teacher from her high school experience who she describes as "burnt out." Rosalind claimed, "She [the teacher] was good with her content. I think she was a good teacher, but she just didn't really seem to care that much anymore. . . . Not that she was ever mean or hateful or anything. It wasn't like she had that fire within her that I had seen with my favorite teachers." This lack of positive energy (an accurate definition for burn-out) manifested as a classroom where students copied notes and completed worksheets, according to Rosalind.

Cordelia noted the importance of a teacher's positive attitude toward creativity and its influence on students' creative development. She states, "When students don't see the value of creativity in a subject area, it stifles their own interest. When students have teachers that see the value of it . . . they [those teachers] bring it! Incorporate it into lessons and assignments. Students

understand that they can express themselves in unique ways." In this sense, Cordelia seemed to equate valuing creativity and implementing creativity as a form of classroom positivity.

Beatrice shared that classroom activities assist with promoting positive behaviors that reinforce their classroom values. She claims that "activities and classroom culture go hand in hand as far as fostering creativity." She explained a recent activity she facilitated with her entire class; a discussion activity called a Socratic Circle. The topic the students were discussing was focused on present day media. Beatrice expressed that the Socratic Circle approach to discussion supports students social-emotional growth, specifically "kindness," as well as assisting with their understanding of content. She states that in the Socratic Circle "criteria of a good discussion are things like questioning others in a civil manner and avoiding hostile language. So we [she and her students] talked about what that would look like. This is really important, especially considering . . . we were talking about the media and how toxic the media can be." For Beatrice, promoting positivity is supported through content and pedagogical choices as well as student learning outcomes.

Confidence/High Expectations. Based on the understanding of creativity, one needs to be able to explore novelty, tolerate ambiguity, willing to take risks, and be comfortable with the unconventional to practice and explore creative ideas and activities. These behaviors require, to some extent, confidence. Helena claimed that "Confidence, high levels of confidence. That's what I tend to see in my openly creative students." Beatrice conversely echoed this sentiment by indicating that "negative experiences, not feeling confident that they [students] can actually learn something" and "stifling curiosity" can limit students' creative development.

Teachers can help build student confidence in tackling creative tasks by establishing high expectations that include creative skill development. Closely related to student confidence levels

are teacher's expectations for high quality learning in their students. Specifically, in terms of creativity, Cordelia placed this responsibility squarely on the teacher. She reflectively observed that not all teachers prioritize creativity in their curriculum and because of that, some students have more support with their creative develop than others. Cordelia stated, "that teacher [one who incorporates creativity in the classroom] creates the expectation for creativity and how that creativity is adapted and incorporated into the curriculum. Some kids are just going to be maybe naturally more creative than others. But those who maybe are on the fence, the teachers they interact with will have an impact on it [creative development] either way." Cordelia seemed to understand that students who need more support with their creative development may or may not get that support based on the luck of the draw to which teachers they are assigned.

School Structures

School structures such as the master schedule, course offerings, professional development, testing schedules, extracurricular experiences, and the like impact teachers' teaching and students' learning. For the purposes of this study, school structures are limited to elements that are institutionally embedded and are beyond the realm of teachers' professional control. Participants were asked how, if at all, established school structures impact student learning and student creative development. Participants responded with comments regarding both structures that support and structures that limit the teaching and learning experience.

Supporting Structures. The structural element most commonly noted among participant interviews as supporting student creativity was the availability of a diverse selection of elective courses. Participants indicated that such structures provide opportunities for students to explore creative interests in more abundant ways than may be allotted in a core classroom setting. Rosalind indicated that elective classes allow both her as the teacher and her students to get

"outside of your core classes" and explore and develop their creativity; "I wish I could cover more in my [core] class, but I just don't have time." She further shared that she teaches a drama elective and that she actively recruits students who may have an interest in the course and who may need some support and encouragement to enroll. Rosalind claims, "I teach a drama class next semester, so if I see some students I think are dramatic and they want to get out there and show off, or maybe students I think are kind of quiet and need to break out from their shell, I'm like, 'Oh, you should take my drama class'. . . Yeah, I do feel like clubs and extra curriculars [support creativity]." Beatrice also indicated that elective courses support students in their creative exploration and noted that "we're lucky in our district—our students have a lot of opportunities to take a lot of different types of electives. They're able to kind of follow what interests them." Cordelia also indicated that elective courses support student creative development, specifically noting "TV productions with journalism, the yearbook, even the technical design. The elective the kids are passionate about really are art heavy and design heavy." Collectively, the participants expressed that extracurricular courses provided students with creative choices and the space and time to dive deeper into their creative expression and skill development.

Another school structure supporting creative development that three of the four participants noted was the actual structure of the master schedule, more specifically, the block schedule format. Three participants taught in schools with a variation of a block schedule format, which they claimed provided a greater concentration of time for students to work and complete classroom activities. Cordelia taught on a 45-minute period schedule, which was different from her internship experience on a block schedule. She states:

> Here it's 45-minute classes, which in a blink of an eye it's over. That, compared to block scheduling, which I experienced in my internship, I felt allowed for more [time]. . . . It

> [45-minute classes] does not allow for a lot of independent think time or work time. It's either me giving instruction with like ten minutes left in class, or it's strictly independent work. If it's group work, group work is hard in 45 minutes because by the time they get in here, get their Chormebooks up, get settled, and then you've got to pack up. So, it allows for a shorter window of time to really get creative.

The participants expressed a clear understanding of the value of time and its vital role in supporting creative development in students.

Limiting Structures. Resoundingly, participants noted the school structure most limiting to student creative development was the over emphasis of standardized testing and its role in the classroom. No participants indicated that students should not be tested, nor that standardized tests were valueless. However, their comments regarding standardized testing were connected in various ways to notions of excessiveness in the testing process. Cordelia captured this sentiment well with the following comments:

> Being over tested. Putting such importance on the test score when it's really—I mean it's a snapshot in time. It does not reflect how far they've [students] come, it does not reflect the improvements they've made, it does not take into account the diversity of students. And it's disheartening as a teacher whenever you tell your students, "Okay, we've got to do this test today." And it's just like a whole wide groan. It's hard on the teacher to stay positive. . . . Yes, it [standardized testing] does have a purpose and it has a place, but I think there's some over testing going on.

The participants in this study tended to view testing and test scores as ephemeral glimpses into their students' abilities. The participants seemed to view test scores as dynamic and having potential to change rather than as static, defining indicators of students' overall aptitude.

When asked, what stifles creativity in students, Cordelia stated, "Testing stifles that creativity. It stifles creativity when you narrow something down to a number. There's only one right answer, always one right answer, not differentiation, not modification of the question or of the assignment." She concludes by stating, "We're so focused on the score, just that outcome. They [students] don't see the value of the creative side when all they're working towards is one

score." Cordelia is indirectly indicating that testing in its current state does not allow for divergent thinking, which is a skill central to creative development.

Helena grappled with the notion of student remediation for failing standardized test scores, its lack of relevance to students, and lack of opportunity for creative development in the remediation process. Helena claimed that she was working with 25 10th-grade students on remediation for their score on the English portion of the ACT Aspire standardized test the students took the previous year. She stated that, "We are sending them [students] a message, 'You didn't do so hot on the ACT Aspire so now if you want to get your 9th-grade credit from last year, you're going to have to go through . . . a remediation. I don't think it fosters creativity." Helena explained that the remediation is taught as test preparation and, due to this prescribed format, is not conducive to creative teaching and learning. She also questioned the relevancy to the students as the remediation is for a test that has passed and they will not take again.

Beatrice seemed doubtful that the testing instruments currently used in public education are adequately assessing the creative skills, abilities, and knowledge students will need for future success. She also viewed test scores as a "snapshot" of students' abilities and not an overall assessment of their learning. She states:

> They're [students] going to have to be able to empathize and communicate with people who are different than them. They're going to have to learn how to live with technology and work with technology in different ways than we probably will have to. I've read that they're probably going to have jobs that don't even exist now. They're going to have to learn how to learn and unlearn and re-learn again probably throughout their lives. With the emphasis on standardized testing—being able to measure those 21st century skills with the types of tests that we're using—[the tests provide] a snapshot of the student learning. It doesn't provide a full picture. There's so much emphasis on those types of tests that I don't know if we truly are fostering creativity as a school system.

This response seems to reveal that the participant finds standardized tests limiting in the scope of their assessment capabilities, particularly in the areas of social-emotional learning and flexible

thinking skills, which both support creative development.

Misconceptions

In the interview portions of this study, three of the four participants expressed at least one misconception regarding creativity and its function in the teaching and learning process. Though these participants were on target with some of their ideas and practices about promoting creative skill development, they also provided evidence that their understanding of some basic aspects of creativity were contradictory to what research on the topic has proven. Three misconception surfaced.

Misconception #1—*Creativity is naturally found in some students and not others.* Two participants indicated perceptions that creativity is an innate quality. One participant stated that some of her students are "naturally more creative than others" and another participant indicated that creativity cannot be taught and that her students either have creativity or they lost it. When asked where students learn creativity, she stated, "I don't think they do, I guess. I mean I want my kids to be creative but I don't know at what point they lost a lot of the creativity." This response seemed to indicate that if creative abilities were lost, they could not be regained. Both of these responses may simply be speculative exploration on the topic, or more seriously may be evidence of a fixed mindset on behalf of the teacher in regard to cultivating creative abilities in students.

Misconception #2—*Information acquisition is the desired end to the teaching and learning process.* One misconception was not only a misunderstanding developing creative skill, but also revealed a misunderstanding of teaching and learning in general. One participant expressed several times that teaching and learning focuses on information dissemination and consumption. She stated that she wants "their [students'] brains to absorb more information" and

for her teaching to "lead students to consuming more information." She described her students as "empty vessels waiting to be filled" and explained that the primary responsibility of a teacher is to deliver information. Such a perception implies a teacher-driven environment where information is controlled by the teacher. She further supported this notion with regards to physical space as this participant expressed her ideal classroom arrangement that would best allow her to impart information; "Wouldn't it be nice if we just had a huge open room that I could present from the center?"

Another participant had similar misconceptions. She recalled a teacher from her high school experience, one whom she described as effective. She explained that this teacher was a master of content, which is a valid and desirable characteristic for teachers; however, she further expressed that this specific teacher's mastery of content was made evident through his ability to lecture; "He would just come up and talk for an hour about the subject. Sometimes he would have notes, sometimes he would have nothing, but he just knew it all. I just remember I'd be frantically taking notes, because everything he said was important." This teacher's primary approach of teaching, according the participant was an extremely teacher-centered approach where students passively engaged with the material regularly through note-taking. Information acquisition provides students with an important foundation to further build their learning and create meaning. However, both of these participants described the role of information as an end to the learning process and not the beginning of applying, synthesizing, and creating. Such approaches to teaching and learning have the potential of inadvertently limiting students' creative development.

Misconception #3—*Creative practices, activities, and skills are not essential nor integral to teaching and learning.* Two participants each indicated that creative activities were

not intentionally or regularly incorporated into their curriculum and that students needed to earn the opportunity to engage in creative activities in the classroom. One participant viewed creativity-enhancing activities as a form of a reward for desired behavior. She stated that, "Overall this year my freshmen are better behaved than they were last year, so I've done more [creative] activities and more hands-on things that I couldn't do last year because a lot of them were really wild and I didn't trust them to do the things I've done this year."

The other participant was simultaneously misguided and reflective in one response. She expressed her annoyance with a specific class:

> They've just been all over the place and where I want them to have the opportunity to be creative, I don't feel like they earned it. And that may be a problem within my own self that I need to realize that punishing them by not giving them an opportunity to be creative is not good teaching. Maybe I'm not there yet.

When asked if she thought a person needed to have creative skill to be successful in the 21st Century, she said, "No, I don't. I guess I just don't." She further described the discussion about "creativity" and "21st Century skills as "we're just talking about buzz words here."

Until teachers fully value and administrators support creative skill development as essential, ranked alongside reading, writing, and arithmetic and not as decadent or indulgent learning, students may not be cultivating their full creative capacity.

Data Analysis Process: Participants' Individual Pedagogical Practices that Support Creative Development in the Teaching and Learning Environment

The data gathering instruments used to examine the study participants' pedagogical practices that support creative development in students were photographs of the physical classroom, notes taken on the Data Collection Instrument B form, general classroom observation notes along with audio recording of observation, and copies of student assignment materials provided by the participants on the days they were observed.

Each participant's classroom was photographed either immediately before or after the first observations. Data analysis for photographic data began by visually reviewing each classroom photograph taken. Photographs of low quality, imperfections, or duplication were discarded, then photos were numbered in chronological order as they had been taken. Though intending to take photographs of the physical classroom space at all observations for all participants, photographs were only taken at the first observation, as no changes to the physical classroom spaces were made between observations.

Classroom observations were documented by taking notes in a composition book, writing observations on observation forms designed for this study, and reviewing audio recordings of observations. The analysis process for the field notes began with a preliminary review of the notes to check for accuracy and complete thoughts. Written adjustments were made as needed. Then field notes were reviewed while listening to the audio recording of the observations. This was done to further assure accuracy and completeness of the fieldnotes. Once all the observations for this study were reviewed, I began to analyze the data for each participant individually. I read the fieldnotes of each complete set of observations and noted key words and concepts in the margins. Initial notes and clarifying corrections were hand written in black ink; notes made during the analysis phase were taken in blue ink and/or highlighted.

Initially, I examined this data set by attempting to open code all observations for all participants and ultimately examine themes that developed from observing the participants in action. However, the participants approached their teaching practice in notably different ways, therefore the coding process did not reveal overall themes as did the opening and closing interview data sets had. It was at this point in the research study that I understood the participants, who were trained together and graduated as a cohort taking the same classes in the

same sequence, had a similarly cultivated conceptual understanding of teaching and creativity. However, the collective understanding that they shared through studying theory, manifested itself in different, unique ways in their individual teaching practice. Due to this new understanding, the data gathered for this set was used to develop individual examinations, or snapshots, of each of the four study participants (Merriam, 2009, p.49). Individually, each participant was analyzed in their snapshot regarding how their teaching practice reflected their conceptual understanding of how to effectively support creative development in students. This also begins to address a concern that most studies on teaching for creative development examine teachers' conceptual understanding; however, do not examine if their practice actually supports student creative development (Andiliou and Murphy, 2010). In other words, the current body of research has not explored the connection or disconnection between what teachers think about teaching to develop creativity and if their practice reflects their ability to assist students in developing their creative skills and thinking. This study begins to explore the relationship between theory and practice of teachers supporting student creative development.

For consistency, each participant's snapshot was divided into seven sections. First is the participant's definition of creativity as provided during their interviews. Second and third are the findings related to the physical classroom space; inherent features, which are aspects of the physical classroom that are beyond the control of the teacher, and teacher influence, which are aspects of the physical classroom that the teacher can and does control. The fourth section is assignments. This section examines the assignments students engaged in during the observations. The fifth section is pedagogical practice which examines the teacher's behaviors and decisions during the observed teaching sessions. The sixth section provides each participant's self-perception regarding their own creativity. And finally, each snapshot concludes with a collective

analysis of each participant's observations as it relates to the Conceptual Framework for Cultivating Creativity presented in Chapter 1 of this study.

Results

Snapshot—Rosalind

Rosalind's Definition of Creativity. Rosalind defined creativity in the following way:

> My most creative students . . . not only do they like whatever assignment or project that they might have to do . . . not only do they meet the requirements; they take it in a way that I never even thought of myself. . . . They're putting their own side in on it. When I can't predict what they're going to do, but they're still doing the basics of it [the assignment], then I feel like that's very creative. Creativity should always be surprising in a little way.

Physical Space—Inherent Features. The natural lighting in the room was generous. The classroom had two large windows with adjustable blinds that overlooked the parking lot (Figure 4.1). The room also had ample florescent lighting (Figures 4.1-4.6). The floors were polished cement which echoed as students entered, exited, or moved around in the classroom (Figures 4.1-4.6). Students sat in chairs at tables that accommodated two students (Figs 4.1-4.6). A Smartboard and projector system was available and located front and center of the classroom (Figs 4.1 and 4.6). This was flanked by two, square white boards, which were then flanked by two square bulletin boards (Figures 4.1 and 4.6). The classroom had ample storage space with a countertop spanning one wall with cupboards above and below the countertops (Figure 4.5). The classroom also had a walk-in storage closet (Figures 4.3 and 4.4). Two tall bookcase and on horizontal file cabinet were located on the back wall of the classroom (in addition to a shorter book case and four-drawer vertical file cabinet provided by the teacher) (Figures 4.2 and 4.3). The color scheme for the room was light and airy; medium grey floors, light grey walls and cabinetry, and white, acoustic tiled ceiling (Figs 4.1-4.6).

Figure 4.1. Rosalind's Classroom. November 1, 2016 (Photo by author).

Figure 4.2. Rosalind's Classroom. November 1, 2016 (Photo by author).

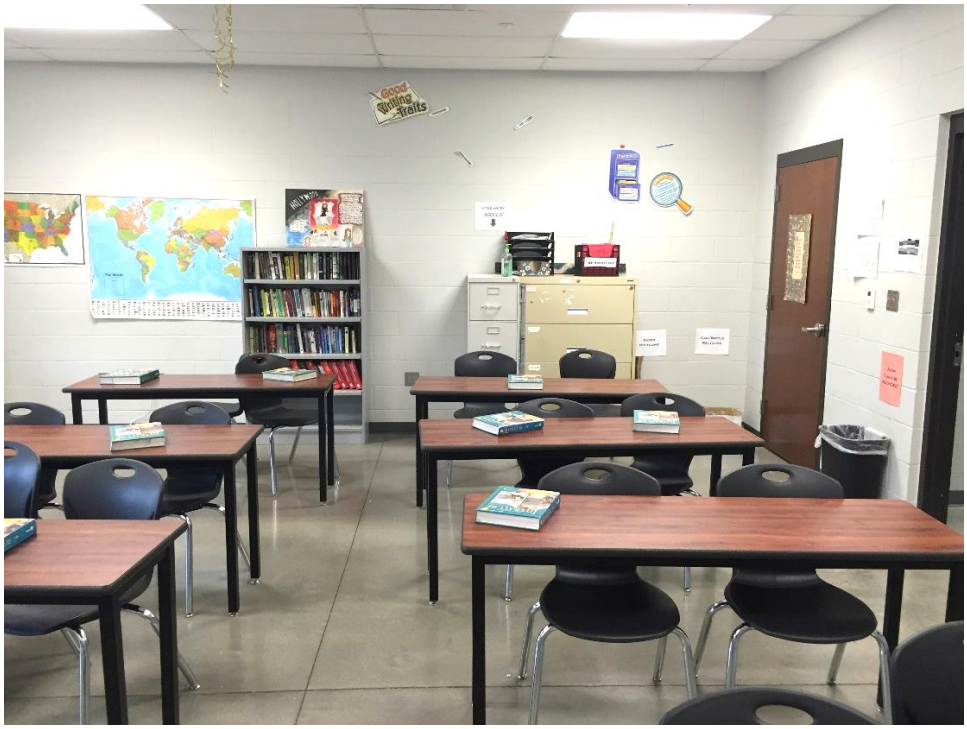

Figure 4.3. Rosalind's Classroom. November 1, 2016 (Photo by author).

Figure 4.4. Rosalind's Classroom. November 1, 2016 (Photo by author).

Figure 4.5. Rosalind's Classroom. November 1, 2016 (Photo by author).

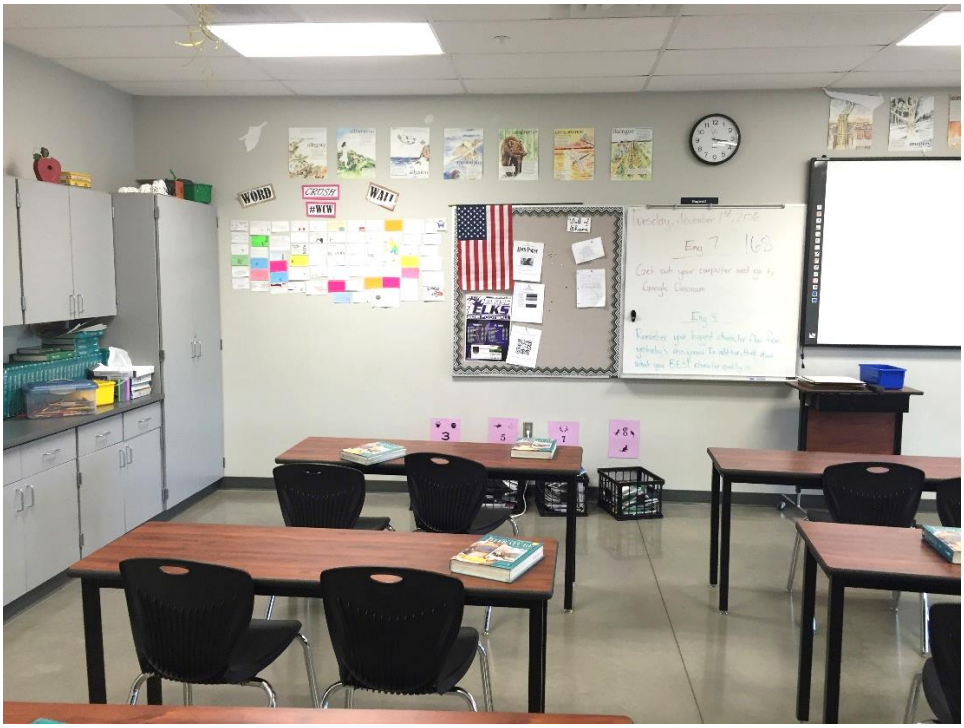

Figure 4.6. Rosalind's Classroom. November 1, 2016 (Photo by author).

Physical Space—Teacher Influence. The student tables were arranged in rows and ranks all facing the front of the class (Figures 4.1-4.6). Text books were pre-placed on the student tables at each student's place to maximize instructional time by avoiding time lost to students getting textbooks from a centralized location (Figures 4.1-4.6). The teacher's desk was positioned tightly in a corner at the front of the room and was not the center focal point of the learning environment (Figure 4.1). The three bookcases located at the back of the room were furnished with books for non-class reading. Most were books were fiction and a mix of adult and young adult titles. All of the books were provided by the teacher (Figures 4.2 and 4.3). The teacher had many instructional posters hanging around the room. Some she had purchased with her own money and some were provided by the school. These posters included world and national maps hung in the back of the room (Figures 4.2 and 4.3), a series of literary devices (allegory, allusion, etc.) hung on the front wall above the Smartboard screen (Figure 4.6), and parts of speech with definitions and examples hung above the windows (Figure 4.1). The participant had placed personal, teaching-themed decorative items above the cabinets in the classroom (Figure 4.5). Student work was displayed in two areas of the classroom; a word wall at the front of the room (Figure 4.6) and a collection of student created "zombie haiku" (Figure 4.2). On top of the bookcases the participant also displayed two individual student works (Figures 4.2 and 4.3). An American flag hung in the front of the room (Figure 4.6).

Assignments. *Observation 1*, September 22, 2016; 90-minute class session; morning class; sophomore students. The prompt for the students was, "Journal: Write about the most dangerous thing that has ever happened to you (that you would be comfortable sharing). Describe the event with as much detail as possible. (Instead of just saying it was dangerous, show us how dangerous it was and how you felt.)" Students wrote silently for approximately ten

minutes. After individual, silent writing, students were to select a partner and each read their writing to the other. Next, students volunteered to read their accounts to the entire class. Finally, students took turns reading aloud the short story, "The Most Dangerous Game," from their text books.

Observation 2, November 1, 2016; 90-minute class session; afternoon class; freshman students. The prompt provided to students was, "What is your best quality? Remember your biggest flaw from yesterday's assignment. In addition, think about what your best character quality is." Students were to think about the prompt for a few minutes. Then, students were to find a partner and get one small wipe-board per team from the storage boxes in the front of the room. Students were then to read the instructions on the Smartboard, "With your partner, share out your best and worst qualities. Together, you will create a new character with the same qualities as you two." The students were then to make a detailed drawing of this character on the white board. Once completed, all the student teams explained their characters to the class while holding their drawings for the class to see. Finally, students took turns reading aloud "The Necklace" from their textbooks.

Observation 3, November 8, 2016; 60-minute class session; afternoon class; freshman students. Students were to write to the following prompt, "Describe an ironic situation or statement and explain why it is ironic. Use at least 3 sentences." Next, students were to find a partner with whom to share their journal entry. A lecture on the types of irony was provided by the teacher, followed by a worksheet of ironic scenarios of which the students were to identify each type of irony.

Pedagogical Practice. *Observation 1.* During the passing period before class started, Rosalind stood in the doorway outside her classroom and welcomed students with verbal

greetings and smiles as they entered. The school does not use ringing bells or any auditory signal to denote when classes begin or end, so Rosalind called the class to order verbally by reminding the students to read the prompt on the board. While the students were writing their journal entries, Rosalind walked around the student tables and monitored their progress. She answered one student's question and reminded another to set his phone to silence. Students remained quiet and on-task until Rosalind asked them to stop writing after about 10 minutes. Next, Rosalind asked the students to find at least one other person with whom to read their writing. This step took approximately ten minutes. After briefly introducing me to the class, Rosalind then asked the students if anyone would like to share his or her writing with the class. Students were allowed to volunteer and most stood in front of the class while presenting their work. The first student shared by reading a sentence or two from her writing, but deviated from reading the writing to telling about her experience. All the other students in the class listened and were attentive. When the student finished, Rosalind did not redirect the student to read what she had actually written, but let stand the student's verbally constructed experience. Rosalind next asks a specific student if she would like to share. This student replicated what the first student did by telling the account, as opposed to reading what she wrote. Once the student finished, Rosalind responds "I'd never think to do that. That's smart." Four more students, one at a time, stand in front of the class and tell their experience as opposed to reading their writing about the experience. One student received a round of applause from classmates after sharing. In between volunteers, the students were able to self-regulate the environment. A few students said "Shhhh!" when the student talking got a bit loud and the class responded by quieting. Another student volunteered and told of an experience riding his bike on a trail. The account ended with the student stating that he "rode off the mountain." The class laughed and Rosalind said, "Wait! You

need to describe this more." With this encouraged prompting, the student then described the situation with great, specific detail. The next volunteer did not want to stand in front of the class. Rosalind encouraged the student to tell her story, but also supported the student by stating, "You don't have to go up to the front if you don't want to." Though Rosalind indicated that was the last presenter, the students asked for one more. Rosalind indulged the class's request. The final and eighth student shared his account from the front of the room and his classmates applauded after he was finished. Rosalind did not redirect any of the students to read what they had actually written on their papers.

Rosalind instructed the students to return their writing journals to a designated shelf in the classroom. The students then returned to their seats and Rosalind told them to open their books to a specific page where they began reading aloud and in turn "The Most Dangerous Game." Two intercom announcements occurred during the last 10 minutes of class.

Observation 2. The bell-ringer prompt was written on the white board for the freshman students to begin once they were seated in class. The students were struggling to focus and begin working. Rosalind in a loud voice asked the students to think, not write, about the prompt for a few minutes. This helped to quiet the students and get them focused on the class. After giving the students quiet thought time, Rosalind instructed the students to find a partner and get one small wipe-board per team from the storage boxes in the front of the room. Once the student teams had their boards and reseated themselves, Rosalind posted instructions on the Smartboard. The partnered teams were to create a detailed drawing of a character that combines their best and worst characteristics. Rosalind told the students that they had 8—10 minutes to complete this task. The students started working on the task and Rosalind walked the classroom looking at the students' drawings and asking and answering student questions.

The students were on-task working when they were disrupted by two students at the door, one who was carrying a box. The classroom door was open, so she knocked on the door jam and asked, “Do you want to see my chicken?” Rosalind went to the door as did about four of her students. The students in the classroom who remained seated were off task and looking at the commotion at the door. After talking with the students briefly, Rosalind suggested that the girls come back after school. Many students were making comments and the room was loud with undecipherable chatter. The girl without the box at the door said, “Can we stay here? I don’t have anything to do.” Rosalind redirected the girls who stopped by, then got all of her students seated and back on task. The task initially planned for 10 minutes had turned into 20 minutes.

Two boys, who were working, laughed together out loud and call Rosalind over to their desk. They showed her their work. Rosalind stated tersely, “I don’t like that,” abruptly walked off, and went to work at her desktop computer. The boys laughed again, but then got quiet, erased their board, and began drawing again. The volume level of the room began to increase again. Rosalind resumed walking around the room looking at student work. She announced, “Two more minutes!” Only two of the nine teams were focused on the task; the rest were talking. The drawing portion of this lesson was to take 10 minutes, but ended up taking a total of 30 minutes of class time to complete.

Next, Rosalind asked the teams to explain their characters to the class and hold their drawings for the class to see. This portion of the lesson was completed in fifteen minutes. Teams voluntarily took turns going to the front of the class to share and explain their drawings. If students did not share a rationale for the characteristics they selected, Rosalind asked them to provide one. Most of the students were able to do so. At one point, Rosalind held up a white board and explained the character drawn on it. After class I asked Rosalind about the

presentation she made. She explained that the drawing was the creation of two girls who sat at the front of the room. Both girls had recently joined the class and each spoke a different native language other than English. While Rosalind was walking the classroom and checking in on the students as they worked, she visited with these girls who expressed that they did not feel comfortable presenting in front of the class yet. They had communicated their explanations to Rosalind, who agreed to present on their behalf. With hindsight, the rest of the students in the class seemed understand why their teacher was presenting a character; however, I, as an observer in the classroom, was unaware of this accommodation.

For the final portion of the lesson, Rosalind instructed students to open their textbooks as she began reading aloud an introductory passage about France. She paused and asked a specific student to show the class where France was located on the map that hung in the back of the room, which this student was able to do. She continued reading and paused to correct a student who was manhandling his textbook. “Be nice to my text books! They are falling apart,” she said and made eye contact with the student. The student complied. She continued reading for a few sentences and stopped on the word “aristocrat.” She asked the class if anyone knew what the word meant. None of the students responded, so she explained the term.

The lesson today was the introduction to the short story, “The Necklace.” Rosalind read the first paragraph of the story aloud to the class then stopped and asked, “What do we know about this character?” The intercom beeped with an announcement. This provided a brief disruption for the students, but they managed to refocused themselves quickly. One student asked, “What’s a franc?” and other students were able to answer as Rosalind allowed the students to manage the learning. Students took turns reading aloud and determined how much they wanted to read. Some read for a few paragraphs, others read just one; Rosalind allowed the

student to regulate themselves. The reading continued until the class period was over.

Observation 3. Rosalind experienced technical difficulties with her computer and its connection to the Smartboard. After 9 minutes attempting to troubleshoot the problem, Rosalind instructed the students to "get out your journals. You don't need your laptops." The unexpected transition caused a commotion among the students as the students seemed eager to use their laptops. One student exclaimed with agitation, "What do you mean?!" regarding not being able to use his laptop. As the students secured their journals, Rosalind verbally gave students the following prompt, "Describe an ironic situation or statement and explain why it is ironic. Use at least 3 sentences."

While the students are writing, Rosalind worked on her desktop-Smartboard connection. An intercom call disrupted the class; however, the students settle back into their writing with ease. About three minutes later, another intercom call disrupted the class and it was for the teacher regarding an email that was sent to her. Rosalind stopped working on the Smartboard to check her email. The students lost focus and were chatting. Rosalind reminded students that they should not be talking and if their cell phones were out, they need to be put away. Rosalind finished working at her desk computer (responding to the email question from the intercom) and returned to working on the Smartboard as the students continued writing. Again, a minute or two later, the intercom interrupted the class again, this time for a student to come to the office.

At this point in the class period, Rosalind asked students to share their writing with a partner. She again worked on the Smartboard while the students shared their ideas. Six of the eleven teams were on task and shared their writings about irony. One student said to his partner to look at the literary posters displayed in the front of the room (*Figure 4.5* and *4.6*). The posters had literary devices printed on them, along with definitions and examples. This team found the

poster titled irony, read the definitions provided, and then addressed their writings. Rosalind seemed to lose track of time as the students had more time to complete the task than was needed. As the students finished discussing their writings, the conversations careened off task and became personal in nature.

Twenty minutes into the class period, Rosalind regained control of the Smartboard. At this point she provided direct instruction about the different types of irony. During instruction, one girl was very disruptive with her talking to another student. Rosalind told the girl to relocate to another seat. The student mumbled angrily under her breath as she moved to her new seat. Rosalind ignored the student's hostel reaction. A boy, without being directed, moved to another seat. Rosalind either did not see this or chose to ignore the behavior. Students were talkative and the volume of the classroom rose. Rosalind continued with her instruction, and moved to discuss dramatic irony. Many students were not listening and she shhhh'ed the class. The students quieted for a bit. It appeared that the students were deliberately trying to sidetrack the teacher. One blurted out an example of verbal irony that was negative toward the class; "This is my favorite class!" was the example.

With 15 minutes left of class, Rosalind provided students with a worksheet of scenarios exemplifying irony. Rosalind instructed students to read the scenarios and identify the type of irony in each situation. Briefly, the students were quiet and worked on the worksheet, but in short order they were talking off-task again, as the teacher walked around the room. When she finished working with a team, she told the class that they needed to work on "something productive" for the last 10 minutes of class. Another intercom announcement interrupted the class and it was not for anyone in the class. With these last 10 minutes, the students regulated the volume of noise in the classroom so that it was not loud, but most of the students were again

socializing and off learning tasks; one was reading a book, two were working on the worksheet, one was playing a video game on his laptop, and the rest were talking and socializing.

Self-Perception—Do you consider yourself to be creative?

> Yes, I do think that I'm creative. Both a creative person and a creative teacher. But I think if you're a creative person, then whatever field you choose you're going to do your best to be creative with it. And I think especially since I chose a career that I'm passionate about, that I wanted to do, I'm going to do my best to be creative with it. I think I'd never like to be boring, and I think sometimes, especially somebody who's not creative . . . I think if I didn't try to be creative, then I wouldn't keep my students' attention like I need to have it.

Analysis. *Observation 1*. Examining Rosalind's practice through the lens of the Conceptual Framework for Cultivating Creativity, specifically point 1, Designing the Learning Engagement, reveals the following. The students were afforded choices. They were allowed to choose the instance about which they wrote, their partners for sharing their work, and if they wanted to voluntarily share their work with the whole class. The assignment provided opportunities to exercise critical-convergent thinking through the writing prompt, as the students had to select a personal experience from many personal experiences that satisfied the conditions of the prompt. Also, once the experience was selected, students had to make decisions on what information they included, as well as excluded that supported their writing of the account. The assignment, however, did not afford an opportunity for students to exercise creative-divergent thinking, as the assignment focused on recalling past experiences and not devising new outcomes or possibilities. Majority of the work students did during this activity was independent. Student did collaborate, but the collaboration was passive in that one student would read their work to another student who was listening. The student collaboration was not active as the student pairs did not engage in collaborative work or co-creative work where they jointly contributed to the creation of a product. Students and teacher seemed to exercise flexibility, particularly with

starting the class without the signal of a bell. Risk taking was limited to students selecting the personal experience to share. Playful attitudes (laughter and enthusiastic tones of conversation), positive behaviors (students applauding each other's work without prompting), and self-regulation (students displayed behaviors conducive to learning) were evidenced. Students produced original works, but did not follow the provided instructions as they told an account versus reading a written version of the account. This variation, though creating a narrative with words, did not specifically address the terms of the prompt and therefore would not be considered task-appropriate.

Observation 2. This lesson afforded greater opportunity for students to engage in creative-divergent thinking than the previous observation with Rosalind, as students devised many possible ways to represent their characteristics in drawings. There were elements of risk taking in this activity as some students expressed hesitancy in drawing and doubt in their ability to draw well. This activity allowed for collaborative co-creation of a drawing and also incorporated novelty into the English classroom. Students engaged in both individual (recalling a previous activity and mentally planning for the current activity) and collaborative work (planning, discussing, negotiating, and drawing one character). The tone of the class was playful, mostly on a social-emotional level, but with some intellectual playfulness expressed. Resiliency was evidenced in this observation as students drew, erased, edited, and revised their drawings. For the most part, students exercised control with self-regulation. Four students fell completely off task when interrupted by the two students at the door during the lesson, but did return to focused work once the teacher redirected them. With regard to fostering positive relationships and positive energy, this was best exemplified with the teacher's presentation of the two immigrant students' drawing and supporting ideas. The teacher respectfully supported and

encouraged the two students' work by assisting them with the oral presentation. What was exceptionally noteworthy was the support of their fellow classmates. They listened attentively to the teacher and seemed understanding of the situation. Throughout the lesson, the teacher provided adequate resources; during the drawing portion students had access to mini white boards and dry-erase markers, each student had access to textbooks for reading the assigned short story, and the map located in the back of the room was used to support student's understanding of the story's setting.

Observation 3. The teaching and learning during this observation was limited due to a lack of effective classroom management. Many of the interruptions that took students off-task were beyond the control of Rosalind, mainly technical difficulties and intercom interruptions. However, Rosalind's reaction to these interruption s did not assist in regaining control of the class. The assignment and activities did not permit students to engage in creative and divergent thinking, nor were the activities wones that were novel or allowed for original response or products generated by students. As with the first observation of Rosalind, this lesson incorporated collaboration among students, but did not have students engaging in collaborative work. A combination of assignment design, teacher practice, and lack of classroom management mad this lesson one that would not necessarily support creative development.

Table 4.4
Conceptual Framework for Cultivating Creativity Observation Checklist—Rosalind

Role	Behavior	Obs. 1	Obs.2	Obs. 3
Teacher	1. Design learning engagement			
	a. Content rich	yes	yes	no
	b. Elements of novelty and originality	yes (L)	yes	no
	c. Completed over a span of time	no	yes	no
	d. Student choice/interest/options	yes (L)	yes	yes (L)
	e. Student engages in creative-divergent thinking (multiple possibilities)	no	yes (L)	no
	f. Student engages in critical-convergent thinking (evaluation)	yes	yes	yes (L)
	g. Student engages in independent decision making/individual work	yes	yes	yes
	h. Student engages in dependent decision making/collaborative work	no	yes	no
	2. Provide adequate resources	yes	yes	yes
	3. Function as facilitator	yes	yes	no
Teacher & Student	4. Exercise flexibility	yes	yes	yes (L)
	5. Welcome mistakes and risk-taking	yes (L)	yes	no
	6. Remain curious and playful	yes	yes (L)	no
	7. Maintain resiliency	yes	yes	no
	8. Foster positive relationships and positive energy	yes	yes	yes (L)
Student	9. Exercise self-regulation; focus	yes	yes	no
	10. Produce original and task-appropriate products	yes (L)	yes	no
	11. Assume ownership for work and learning	yes (L)	yes	no

(L) = Limited

Snapshot—Helena

Helena's Definition of Creativity. Helena expressed her definition of creativity in these terms:

> Creativity happens when you just let it happen. That's kind of vague but like sometimes the most creative things happen when you, when the teacher who is usually a very type A person is required to let go of that control and just to see what happens and let creativity reveal itself. As somedays that's a good thing and some days that's a bad thing. But you learn from those days and you learn better on how to take that moment of creativity and make it work.

Physical Space—Inherent Features. The lighting in Helena's classroom was adequate. The overhead fluorescents were all turned on (Figures 4.8, 4.9, and 4.12) and about one-third of the longest wall in her class was a window that overlooked the school parking lot (Figures 4.11 and 4.12). A desk lamp and a floor lamp were also on (Figure 4.8). The window let in some natural sunlight; however, the blinds for the window were kept partially closed. When asked why, Helena shared that, as this classroom is on the ground floor, students and parents frequently pass the window on their way to or from the parking lot and the main entrance of the school, which often is disruptive to the students in her class. The floor of the classroom was finished in two colors of polished linoleum squares, a light cream and a medium tan (Fig 4.7). Students sat in chairs at individual tables (Figs 4.7-4.12). The chairs and tables could be separated and rearranged if needed. Helena did not have a SmartBoard available in her room, but did have a screen and center ceiling-mount projector system (Figure 4.12). At the back of the room (Figure 4.9) and in the front of the room behind the screen (Figure 4.12) were white boards, both of which had assignment announcements and information for students written on them. The room had generous storage space. In the back of the room, there were eight floor mounted cabinets with counter top and above that were eight top cabinets next to a walk-in closet (Figure 4.10). Helena also had a horizontal, four-drawer filing cabinet in the back of the room (Figure 4.10), an extra teacher-type desk set-up in back corner of the room opposite her teaching station (Figure 4.9), additional bookcases and shelving units (Figure 4.7 and 4.8). The color scheme created a sense of comfort through the use of warm, light, natural tones of ecru and tan, trim around doors and baseboards were dark gray, and the ceiling was white acoustic tile (Figures 4.7-4.12). An American flag was displayed at the front of the room (Figure 4.6).

Figure 4.7. Helena's Classroom. September 29, 2016 (Photo by author).

Figure 4.8. Helena's Classroom. September 29, 2016 (Photo by author).

Figure 4.9. Helena's Classroom. September 29, 2016 (Photo by author).

Figure 4.10. Helena's Classroom. September 29, 2016 (Photo by author).

Figure 4.11. Helena's Classroom. September 29, 2016 (Photo by author).

Figure 4.12. Helena's Classroom. September 29, 2016 (Photo by author).

Physical Space—Teacher Influence. Helena had the student desks arranged in pods of four (Figures 4.7-4.12). Student text books were located at the back of the classroom either on the counter top or in the cabinets underneath. (Figure 4.10). The teacher's desk was located unobtrusively in the front corner, opposite the door to the classroom (Figure 4.12). A rocking chair next to a bookcase on one wall held books that comprised the classroom lending library (Figure 4.8). The books and rocking chair were provided by Helena. Three white, stackable shelving units were provided by Helena and held some milkcrates, paper stacker, pencil sharpener, and other similar office supplies which were provided by Helena (Figures 4.7 and 4.8). Around the room Helena had displayed laminated ELA-related posters, two larger ones stating "Reading" and "Writing" (Figures 4.8 and 4.11) and smaller ones with headings such as "Organization," "Voice," and "Word Choice" with corresponding instructions and information that followed (Figure 4.11). Helena also displayed posters in the classroom with behavioral reminders such as "Be Responsible," "Be Honest," and "Be Prepared" (Figure 4.12), along with motivational posters with words such as "Believe," "Achieve," and "Imagine" (Figure 4.10). Helena shared that she inherited the posters she used in her room from her predecessor. Student work of magazine-image collage was displayed on the right end of the white board at the front of the class (Figure 4.7). An American flag was displayed at the front of the room (Figure 4.7).

Assignments. *Observation 1*, September 29, 2016; 90-minute class session split by lunch period; 27 sophomore students. As students entered the room for the first half of the class, Helena instructed that they would be working on the *Hiroshima* "work packets." Helena also advised students to get out their "evidence packets" and to take notes from the reading they would do during this class session. These notes would be used by students later in essays they

would compose over the text. Helena then read a section from the text to the students as they followed along in their books until it was time for lunch.

After lunch, students worked on their worksheet packets in groups of four as determined by the desk arrangement of their assigned seats; desks throughout room were arranged in pods of four desks (Figures 4.8 and 4.9).

Observation 2, October 17, 2016; 90-minute class session split by lunch period; seven students spanning 9th—12th grades; language acquisition English class (limited English-speaking abilities); a teacher aide assists with this class. As students entered the room, Helena verbally instructed students to get one of each of the three books from the back counter then sit at their desks. The books were a reading textbook, an accompanying writing textbook, and an Oxford picture dictionary. Once students were seated, Helena said that they would read a story aloud by taking turns. After the reading, students answered a series of questions about the reading. This was followed by a class discussion on customs. Students were dismissed for lunch. After lunch, the class worked through several pages in their English workbooks over the topics of nouns and adjectives.

Observation 3, November 11, 2016; 90-minute class session split by lunch period; 27 sophomore students. As students entered the room, their bell-ringer activity was posted and displayed on the projection screen at the front of the room. It stated, "Free write. Pull out a blank piece of paper. Fold it in half. On one side write 'Dreams' and on the other 'Fears.' Prompt: What are your dreams? What are your hopes? Write your thoughts. What are your fears? What scares you or worries you?" This exercise was followed by a questioning activity using the Kahoot app. Students then broke for lunch and upon their return, the students were instructed to

select one character from their reading and complete an analysis using the STEAL method (speech, thoughts, effects on others, actions, and looks).

Pedagogical Practice. *Observation 1*. Helena introduced me to the class, explaining that I was observing for a research project. One student asked if I was evaluating Helena. Helena replied yes, but that she could not lose her job based on this observation. Helena had students assist in passing out papers at the beginning of the class. After the bell rang to start class, one student tried to leave the classroom and Helena said that "Today, with Mrs. Jennings Davis here, we need to stay in the class." Seven minutes into the class period, the students begin in-class reading which consisted of the teacher reading aloud to the students as they followed along in their own books. Helena explained that this would be the format so "we can quickly get those pages read." Helena reminded the students to get out their "evidence packets" to jot notes as the teacher read.

Helena began reading aloud to the class. Shortly into the text, she paused and began to engage the students by asking if they knew a word from the text. "Do you know what retching is?" she asked, and then proceeded to define the word herself. Helena offered more commentary about the passage before beginning to read aloud again to the class. Occasionally, Helena would stop reading and offer explanations or reiterations of the passage to the students. Students were quiet and listened.

At one point in the story, a character with a bleeding wound went into the ocean. Helena paused and asked the students "What happens when you pour salt on an open wound?" One student replied, after being called on, that it burns. This instance was about 17 minutes into the class period and this was the first opportunity for students to give academic voice during the lesson. Helena agreed with the student and also explained that "pouring salt on an open wound"

is a common figurative phrase. Helena continued reading for a while then asked a closed-ended question to the class, to which one student replied. Helena then provided several minutes of commentary regarding the plot of the text. She began reading again to the students.

For the third time, Helena posed a close-ended question to the class and one student replied. Helena then again provided several minutes of summary of the text. One student interjected asking what "contusion" meant. Another student blurted out, "It's a bone bruise." Helena affirmed and then proceeded to tell the class a detailed story regarding how she attained a contusion the previous week when she entered her car. Helena returns to the text explaining that a character has broken ribs and other injuries. Some students interjected comments about broken bone injuries they had sustained. Helena returned to the text and read aloud a bit more, stopped and recapped for the students, then read again. She next stopped to explain how the Japanese characters in the book confused the German language they heard with the English language. Helena explained that during this time the United States and Arkansas had internment camps for Japanese-Americans. One student said, "Really? That's messed up." At this point, in the last 10 minutes before lunch, the students were engaged and asked pertinent questions, such as why was Hiroshima bombed, and made observations about characters in the reading. With two minutes left, Helena read aloud to the students until the bell rang for lunch.

After lunch the students returned to the classroom. The bell rang and Helena started to take roll. One student left the classroom saying he was still hungry and that he was going to get more food. Helena said no. The student said he would bring Helena food, too. Helena said that she could not be bribed with food. The student left the classroom and Helena continued taking roll with the assistance of the students, asking them who was gone.

Helena moved on to instruction and informed the class that she had read enough of the

book aloud for them to complete the worksheets she provided. She provided an overview of the worksheets and directions for completing the task in small groups; students worked collaboratively in their four-desk pods and could use their books to complete the task. To get the students started, Helena read the first question aloud to the class and asked them to answer the question in their groups. Most of the students worked; some were mimicking the teacher, of which Helena either ignored or was unaware. The students settled and worked. A student outside the classroom in the hallway passed by and waved to Helena. Despite most of the students being focused and working, Helena announced that "One of my students from last year just yelled do what I say." The students in the classroom became boisterous and Helena tried to quiet them by restating the question from the worksheet again. The students started working again in their small groups, when one student stood up and approached Helena to get her money for a fundraising purchase Helena ordered. Helena paid the student and the student returned to her desk.

Helena then asked, "Are we ready to share?" Two students volunteered to respond to the question. Helena called on each student. Helena also verbally reprimanded two other students to be quiet. The responding students gave two different answers, but both were correct. Helena acknowledged this to the class. Helena then focused on the two other students who were still not quiet and said, "You guys! If I hear you say the word Jap again, you will go to the Dean's office and I will happily walk you down there. That is, in my book, the equivalent of saying the n-word. Ok? Alright." Helena dropped that issue and began explaining a passage from the book to the class. She then read the second question from the worksheet packet to the class and asked the students to work in their groups to answer the question. The students worked. Helena told the students to work on the packets in their small groups for the rest of the class period. The

students did work on the worksheets, but they also engaged in off-task conversations. Volume level in the class was somewhat loud, but not excessively so. Helena worked at the computer at her desk for approximately ten minutes, got up and walked around the classroom monitoring the students' work, the returned to her desk for the remainder of the class period.

Observation 2. This class is a language acquisition English course consisting of seven students (six males, one female) who are limited English speaking. As the students entered the classroom, Helena told them they would focus on "catching up" today. The students did not understand this phrase. Helena took the opportunity to have an impromptu lesson on the meaning of this casual phrase and how it is used. In a few minutes, the students understood and Helena instructed them to get one of each of the three textbooks in the back of the room and return to their seats. The students complied. The students were provided time to complete the first page of their worksheet packets. One student reviewed his work and claimed that he was finished. Helena did not acknowledge. After approximately five minutes, the rest of the students completed their worksheets and Helena moved to the next portion of the class period, reading. Helena was very mindful throughout the lesson to speak clearly and slowly while enunciating her words as she provided directions and read the passage.

Students were provided dry-erase boards and markers to note words or phrases they did not understand as they individually and silently read a passage from the reading textbook. While the students read, Helena took roll on her computer. Once the students were finished, Helena announced, "That was a story all about Patricia," then continued by providing a summary of the passage to the students. The word "custom" appeared in the reading and Helena asked the students to write a sentence on their dry-erase boards explaining what the word "custom" means. The students quietly followed directions. All the students but one finished writing. Helena told

the student to complete his work quickly. This student was engaged in focused work in crafting his sentence. He erased part of the board, then rewrote. Helena reminded the student again to "hurry up," and the paraprofessional in the room, standing by the working student and looking over his shoulder, told the teacher that this student created a very thorough response. Once prompted, Helena paused, then praised the student by telling him that his sentence was well written.

Helena started to lead the students in a discussion about customs, but was interrupted by a knock at the door. Helena went to the door where there was a student who requested a pass to come to Helena's room later in the day. Helena provided the pass to the student, shut the door, then told the class, "I'm popular." Helena asked the class what customs or traditions were presented in the reading. One student responded and two others shared comments that added to the first student's reply. Helena nodded then shared how she has a tradition at her house. She explained that she has pets and that when she leaves her house, she says good-bye to her pets. Helena asked the students, "Do any of you do that?" This was 45 minutes into the lesson and the first time Helena gave an opportunity for the students to verbalize their thinking. The students started to talk, but the bell rang for lunch, marking the end of the first half of the class.

After lunch, the students returned to class. One student told Helena that he did not get enough to eat. Helena went to her desk and got a box of granola bars and gave the student one. Helena asked the other students if they needed a granola bar. One other raised his hand and was provided a bar.

Helena tried to have the students focus on the discussion of traditions prior to lunch, but the students were not cooperative. There were a couple of side-bar conversations. One student shouted out to another. Helena asked the students to write on their dry-erase boards about a

tradition they have and then the class would discuss. Helena went to her desk and checked her computer. The students chattered and wrote on their dry-erase boards for a while. The paraprofessional moved around the room looking at the students' work. After a few minutes, Helena walked around the class looking at the students' work and said that she is seeing a lot of drawing and not much writing; "I want more writing." It seemed that Helena was unaware that her students were off task.

Another knock at the door interrupts class and Helena goes to the door. It was a former student. The conversations that followed was of a personal nature and the student said she was just "stopping by." Helena talked with the student for about five minutes as the students in her class talked and drew on the dry-erase board. Helena finished the conversation with the former student and returned to class announcing, "People like me."

Helena abandons the writing on the dry-erase boards about the passage the students had read and has the students switch to working in their language workbooks. Helena read aloud the directions for the worksheet on nouns. The students began working quietly and individually, but then started talking among themselves and the volume in the class quickly elevated. A couple students started policing the group by trying to get them to be quiet. Helena abruptly told the students to be quiet and that "I control the volume. It is my job." The students quieted, worked for five more minutes, then Helena led the class in reviewing the worksheet. Helena asked for a volunteer to share what answer they had for a specific question. One student shared an incorrect answer. Helena asked the class "Why might that answer be right? Why might that answer be wrong?" The students discussed their thinking as a whole group. Helena listened, then told the students why the answer shared was not the best choice and what the correct answer was. Helena

asked another question, “What makes an apartment building?” One student shared that many people live in the building. Another indicated that people rent apartments and do not own them.

Helena asked the students to return their books to the back of the room then return to their desks. The students packed up their book bag, talked quietly, then the bell rang concluding the class period.

Observation 3. This observation occurred two days after the 2016 presidential election, which is referenced by Helena during this observation.

Students were allotted 8 minutes to individually write to the prompt posted on the screen (dreams and fears), but during that time there were several interruptions from both students and teacher. Helena first interjected by stating that, “I want sustained writing; however, the structure of this prompt doesn’t afford for that as well as it should. The prompt asks for a list.” She was silent for a moment, then continued by stating, “This will be a challenge for some of you.” A few minutes later a student asked, “Wait, this can be about anything?” Helena replied, “Yes. It can be about the presidential election, what you are worried about this weekend—whatever.” A moment later another student asked, “What are we doing?” to which a student next to him told the student the directions in a loud voice. The other students ignore this interaction. Another student asks if he could stop writing and Helena stated, “In three minutes this will all be over.” Helena stopped the writing by asking students to volunteer and share their work with the class. She reminded them, “I am going to limit the number of students who share.” A male student shared that he wanted to visit Africa and become an athletic trainer. Another boy stated his dream was “shooting an ISIS terrorist,” to which Helena said to the class, “If he wants to bring justice to the world, I’m OK with that.” A couple students groaned, others heckled, and several kept their eyes

fixed on their page of writing. Another student shared his dream of wanting to have a career in advertising and another wanted to be a doctor.

Next, Helena instructed the students to tear the "fear" section off their paper, crumple it up in a ball and throw it in the trash can. This caused a loud kerfuffle among the students and ended up taking about as much time as the students used to write. Two students complained about throwing their papers away and Helena replied, "My process, my show, my process." The students complied and threw their papers in the trash can. Once the noise level settled and the students returned to their seats, Helena asked the students if they saw any symbolism with the writing about their fears being torn away from their writing about their dreams. One student began to explain that with her fears gone from the page she could focus on her dreams. Helena offered no feedback on the student's contribution, but interrupted the girl by stating, "Let me give you a little philosophy here . . ." then said that as people age they become more rational about their fears. She attempted to engage me in the discussion by looking and pointing at me and stating, "I think Mrs. Jennings Davis will agree." I made no acknowledgement of this comment. Helena continued her commentary by referring again to the presidential election and stating that she was surprised by the outcome. At this point most of the students were disengaged from the learning activity, but were quiet and non-disruptive. Helena concluded her talk by claiming that there are both good and bad in the world and "you are part of the good in the world. You are not the best-behaved students, but you are great students. You really matter to me." Helena then asked the students to pick up the trash on the floor and place it in the trash can.

Instruction transitioned to the Kahoot activity, which Helena referred to as "my next torture device." Kahoot is a popular, interactive learning app. For this learning activity, Helena had pre-populated the app with content-related questions. To participate, students signed into the

app through their cell phone. Helena asked that the students use their first names so she knows who they are. A brief explanation of how the app works: once signed-in, participant identification is displayed on the projection screen. Once signed in, the teacher may display questions which appear on the projection screen and the students responded accordingly by using their cell phones to select the correct answer. The app indicates how many students respond, how many students select each possible answer, then eventually the program reveals the correct answer on the screen.

The students in this section were familiar with the app and did not need directions for signing in. One student asked if he could use an emoji and Helena agreed. Helena was ready to start the question sequence when she noticed there were more than 27 students signed into the app and one individual was signed in as the eggplant emoji (popular culture has accepted the eggplant emoji as a semiotic representation of a human penis). Helena was ready to reveal the questions when she noticed that more names were logged in than there were students in the class, as well as the eggplant emoji. Helena and her students simultaneously reached a moment of recognition and understanding regarding the emoji. An uproarious hubbub ensued in the classroom as Helena shut down the Kahoot app. In a loud voice, Helena asked the class, "Guys! Guys! What were the instructions?" Helena then lectured the students for about 5 minutes on inappropriate usage of cell phones. She told the students that if they could not use their technology properly, she would make them write "an entire class for a grade." The students settled and Helena opened Kahoot for a second time. Once again, more than 27 students signed into the app, to which Helena responded by shutting down the program again and gave another lecture on inappropriate use of technology. Helena told the students, "I had a plan. I'm disappointed. Why should we do the fun stuff I had planned?" She then addressed a specific

student and indicated he was inappropriately using his phone. He replied that he was not the culprit and that any student could sign in more than one time. Helena continued her comments regarding inappropriate use of technology and assigned the students two writing assignments; "Punishment for one or punishment for all." The writing assigned was for each student to select two characters from their reading and apply the STEAL (speech, thoughts, effects on others, actions, and looks) analysis approach. The students spent about five minutes writing these assignments before they were dismissed for lunch.

The students returned from lunch. Helena continues to discuss the misbehavior prior to lunch. One student offers a blank apology for whomever "messed up Kahoot." Helena tells the class that it was an instance of "guilt by association, my friends. At the end of the day, I'm the boss. I try to be benevolent and kind." She then referred to a disruptive instance from the week prior. Students sat quietly in their seats.

Helena instructed the students to complete their STEAL analyses on all the characters from their reading. This announcement rallied the students and they loudly groaned and made several, overlapping complaints. To quiet this disruption, Helena changed her instruction and told the students to select one character for which to write a STEAL analysis. The students continued to complain. Helena again adjusted her instruction and told the students they could work in teams of four to complete one STEAL analysis for one character. The students got into groups and began working. The students worked for 15 minutes and during that time a pink slip for a student was delivered to the classroom and an intercom announcement was made. Both caused brief disruptions to the working students.

The students completed their work and Helena led an all-class discussion with questions over the reading. However, as Helena posed the questions to the class, she responded with

answers to the questions herself. With a few minutes left in the class period, the students began to put away their materials. One student threw a ball of paper to the garbage can. Helena verbally reprimanded the student for his action the punished him with a "wall sit." Helena said, "I'm serious about the wall sit. Somebody start a timer of 3 minutes." Most of the students did not respond to this situation. A few laughed. The punished boy leaned his back against the wall and lowered his torso so that he looked as if he was sitting in a chair with no chair present. The bell rang and all the students exited.

Self-Perception—Do you consider yourself to be creative?

> I do. I mean despite my feelings that plenty of people can excel in this world without having that creative spirit, I do think of myself as creative. I think my humor makes me creative. I think that the way that I discipline my students within the legal rules and realms of this land—I go for creative punishments. "Want to throw something [in the classroom]? Think about that or do a wall sit instead." So, yeah, I try to be creative. It does not mean though—by no means am I creative every day with my teaching, but I want to be. Time doesn't always allow me to be.

Analysis. *Observation 1.* Helena's execution of the learning engagement for Observation 1 resulted in limited support for developing student's creative development. The learning was passive for the students for the majority of the class period. The activities planned for the class session had potential for students to exercise skills supporting creative development—reading the text themselves, connecting to the text and characters through empathy, exploring vocabulary, and reflecting on personal experiences. However, the teacher's voice dominated the lesson. Instead of the students interacting directly with the text by taking turns reading aloud, Helena was the only voice that read aloud. Helena used close-ended questions throughout the lesson, which limited student discussion. Instead of asking students probing questions about the text and providing space for them to think and respond, Helena frequently answered her own question and provided summaries and explanations of the text to the students. Three

unnecessary interruptions initiated by Helena occurred during the observation, all of which distracted students from their work and got them off-task. Both the questioning techniques and classroom management style did not afford students opportunities to engage in creative-divergent thinking (generating multiple possible valid responses) and only provided limited opportunities for critical-convergent thinking (generating evaluative responses) through the utilization of worksheet questions. Activities during this observation did not allow for student choice. When the students returned from lunch break and were instructed to work in groups of four, there seemed to be potential for engaging, collaborative work among the students; however, a lack of classroom management permitted students to be off-task for the majority of class time. Helena did not operate as a facilitator of learning, but as a disseminator of information.

Observation 2. The seven students in this class were at varying stages of learning the English language and relied on the support provided by the paraprofessional. In this observation, Helena had difficulties operating as a facilitator, which would have provided time and space for student voice and student ownership in the learning. Instead of having students answer questions or summarizing reading passages, Helena completed such tasks. At one point, Helena did attempt to connect the students to the text when the class discussed customs and traditions; however, she did so through the lens of her experience and her self-described tradition of saying good-bye to her pets when she leaves her home. She did not provide time or space for the students to share their traditions.

The most notable example of this was when the students were crafting sentences on their whiteboards prior to lunch. The student (previously mentioned in *Observation 2* Pedagogical Practice) was taking time and effort to craft his sentence well. Helena seemed more focused on the students completing the task on time rather than the quality of the student's work or effort.

With prompting from the paraprofessional, Helena provided praise to the student, which was a step in fostering positive relationships and positive energy in the classroom. Helena could have further supported the student by providing an opportunity for student to take ownership of his work by asking the student to share his sentence and his thinking to the class. Another instance that supported positive relationships in the classroom was when a student approached Helena indicating that he was hungry and she responded by providing a granola bar. Helena checked in with the rest of the class regarding their need for food, addressed the situation, then moved on to the activities after lunch.

Helena did welcome mistakes and risk-taking when the students were working on worksheets after lunch. One student volunteered his answer. Helena asked the class why might that be right and why might that be wrong. The students collaboratively discussed their thinking on this question. This situation also allowed students to briefly engage in critical-convergent thinking by evaluating the answer provided by a fellow student. After providing time, Helena told the students the correct answer and explained why it was correct.

Overall, the students exercised self-regulation by complying with Helena's instruction or simply by being quiet during exercises. The output produced by students were task appropriate, but were not necessarily original. In this observation there was no evidence that students took ownership for their learning.

Observation 3. This observation proved to be a battle of wills between Helena and her students. There were elements during this observation that had the potential to support students in their creative development; however, Helena's lack of preparedness in the design of her learning engagement and an inability to establish positive relationships and positive energy in the teaching and learning environment derailed the lesson. With the opening prompt, Helena

acknowledged to the class that the prompt itself was not aligned with her expectations of student outcomes. She did not modify the prompt after such an acknowledgement. Also, instead of encouraging the students in their attempt to address the prompt, Helena made an emphatic statement that some of the students would have difficulties with this work, implying that some would be unable to complete the task. The lack of clarity with the instruction did not support students in attaining the learning goal of the activity.

The potentially strong aspects of the lesson that could have supported student creative development included the opening writing prompt about students' dreams and fears, which could have connected students personally to course content; a class discussion about dreams and fears; and the STEAL approach to character analysis. The Kahoot app may have been an activity that supported the students' creativity, but the way in which it was implemented during this observation did not provide evidence of that. The students were unable to participate appropriately and instead of abandoning this strategy, make an effective behavior correction, or move on to one of the other, more potentially effective aspects of the lesson, Helena continued with it. She lost instructional time by not progressing in a beneficial manner with the Kahoot app and she did not make the decision to deviate from her lesson plan despite the clear, negative feedback from the students.

For this observation, the climate of the teaching and learning environment was not one of positive energy or positive relationships. Eleven negative and/or controlling statements from Helena were evidenced during this observation (e.g. "my process, my show," "you are not the best behaved students," "my next torture device," "at the end of the day, I'm the boss," commanding a student to do a "wall sit" for a behavior infraction) which worked against establishing an environment supportive of creative development. Such comments did not assist

in positioning Helena in the role of facilitator, allow students to take ownership of their learning, nor support an environment that welcomed mistakes or risk-taking; all of which are vital to supporting creative development.

Helena's implementation of this lesson proved to be its downfall. Critical to the demise of the lesson was: 1) the learning engagement design, though potentially effective, was unclear to the teacher and therefore the students and 2) the teacher was unable to establish positive relationships and energy in the classroom.

Table 4.5
Conceptual Framework for Cultivating Creativity Observation Checklist— Helena

Role	Behavior	Obs. 1	Obs.2	Obs. 3
Teacher	1. Design learning engagement			
	a. Content rich	yes (L)	yes (L)	no
	b. Elements of novelty and originality	no	no	no
	c. Completed over a span of time	yes	no	no
	d. Student choice/interest/options	no	no	yes (L)
	e. Student engages in creative-divergent thinking (multiple possibilities)	no	no	no
	f. Student engages in critical-convergent thinking (evaluation)	no	yes (L)	yes (L)
	g. Student engages in independent decision making/individual work	no	yes	yes
	h. Student engages in dependent decision making/collaborative work	yes	yes (L)	yes
	2. Provide adequate resources	yes	yes	no
	3. Function as facilitator	no	no	no
Teacher & Student	4. Exercise flexibility	no	no	no
	5. Welcome mistakes and risk-taking	no	yes (L)	no
	6. Remain curious and playful	no	no	no
	7. Maintain resiliency	no	yes (L)	no
	8. Foster positive relationships and positive energy	yes (L)	yes	no
Student	9. Exercise self-regulation; focus	yes (L)	yes (L)	no
	10. Produce original and task-appropriate products	no	no	no
	11. Assume ownership for work and learning	no	no	no

(L) = Limited

Snapshot—Beatrice

Due to scheduling conflicts, Beatrice was observed two times instead of three as was the protocol for the other three participants in this study.

Beatrice's Definition of Creativity. Beatrice expressed her definition of creativity with the following comments:

> So, creativity to me is not necessarily seeking definitive answers, definitive concrete answers for things. But being kind of intrinsically curious to learn and understand the world, which oftentimes means not having a definitive answer, but having lots of questions and seeking out new understandings and trying to connect things with each other. Collaboration with other people. Not necessarily doing things the way they've always been done, but finding new ways to do that, may be foraging your own path.

Physical Space—Inherent Features. Beatrice's classroom had one large window in the back of the room (Figure 4.16 and 4.17). The horizontal blinds were drawn which limited, but did not completely conceal, the sunlight. The overhead fluorescents were turned off (Figures 4.13-4.17). The flooring of the classroom was square linoleum tiles, a medium neutral shade in color (Figures 4.16 and 4.17). Student seating consisted of an individual sized table with a separate chair for each student (Figures 4.14-4.17). On one wall of the classroom hung a Smartboard with ceiling mount projector and on each side of the Smart board was a dry-erase white board (Figure 4.14). Storage included a closet, a tall freestanding cabinet, a countertop and four undermounted drawers and cabinets, a four-drawer vertical filing cabinet (Figure 4.15). The wall opposite the Smartboard had four tall bookcases with six shelves each (Figure 4.17). Off to one side of the bookcases was a reading corner with 4 chairs and an area rug. The reading corner and bookcases served as the classroom library. The color scheme for the classroom was based in neutral earth tones; tan-grey colors, light walls, medium floor, and dark trimmed baseboards and shelves (Figures 4.13-4.17), which assisted in creating a calming sense in the space.

Figure 4.13. Beatrice's Classroom. October 5, 2016 (Photo by author).

Figure 4.14. Beatrice's Classroom. October 5, 2016 (Photo by author).

Figure 4.15. Beatrice's Classroom. October 5, 2016 (Photo by author).

Figure 4.16. Beatrice's Classroom. October 5, 2016 (Photo by author).

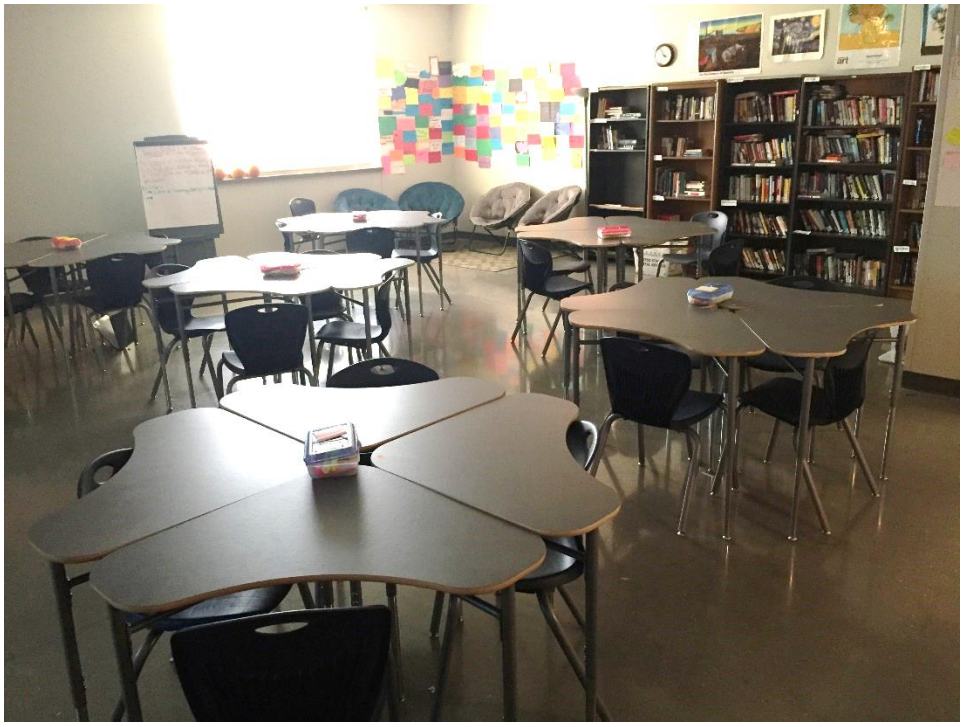

Figure 4.17. Beatrice's Classroom. October 5, 2016 (Photo by author).

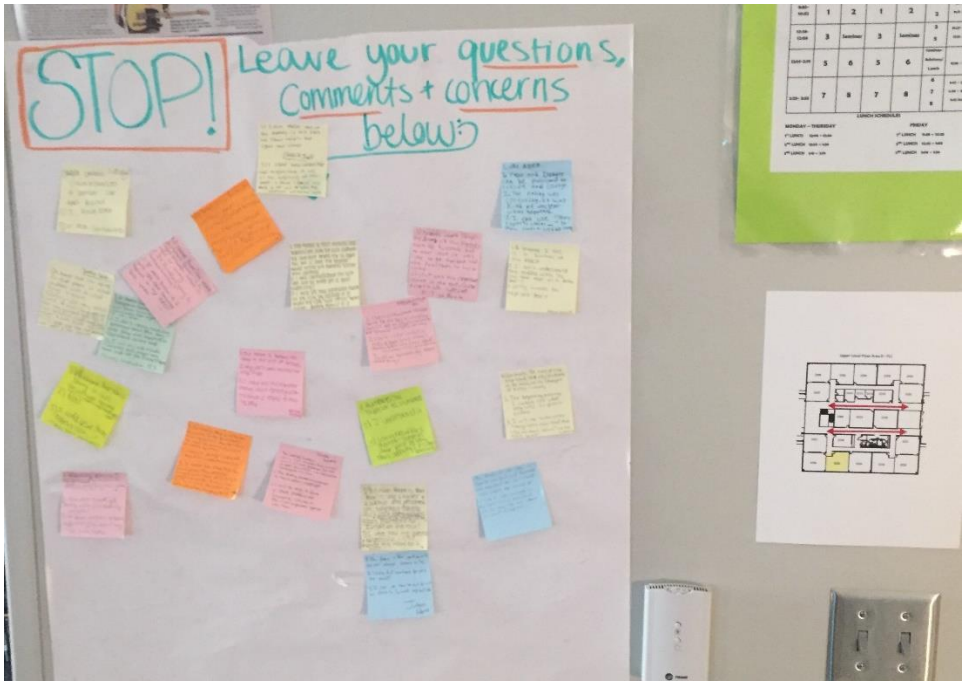

Figure 4.18. Beatrice's Classroom. October 5, 2016 (Photo by author).

Physical Space—Teacher Influence. Tables and chairs were arranged in pods of four with students facing inward toward each other (Figures 4.14-4.17), which resulted in students facing varying directions in the classroom. At each four-student pod was a plastic box of supplies (Figures 4.14 -4.17). Each supply box consisted of pens, pencils, highlighters, post-it note, and other basic student supplies. Students had individual reading materials assigned to them, which they brought to each class. The teacher's desk was unobtrusively positioned in one corner of the room (Figure 4.14) which conveyed a learning environment that was student-focused. Dispersed around the room were four lamps to supplement the room's lighting along with a festive string of holiday, multi-colored lights atop the Smartboard (4.13-4.16). A table positioned close to the door had handout materials for the day placed on it. It also was divided in three sections: 1) "Absent Binder," where students could retrieve materials from any days they were absent, 2) "Late Work Tray," for students to submit work that was past due, and 3) "Turn In Tray," which was a stack of several trays, one for each teaching period, where students turned in the work either due or completed in a given day. Also on this table were a stapler, tape roll, and hand sanitizer, all for student use (Figure 4.13). One of the whiteboards at the front of the room was divided into a grid noting each class, the essential question for the class, the agenda, and the homework assignment (Figure 4.14). Also next to the door was a homemade poster stating "STOP! Leave your questions, comments, concerns below." As students exited the classroom, they would leave sticky notes with such feedback for the teacher (Figure 18). Four round, cushioned chairs positions on area rugs were located in a back corner of the classroom for a reading corner (Figure 4.17) and next to it were four tall bookcases books available for students to check out. During our introductions prior to Beatrice's first observation, she shared that she has purchased all the books in her classroom library (Figure 17). Dispersed around the room

were posters and artwork with literary themes and/or references (Figure 13-17). Beatrice had student work from a previous creative writing exercise posted on the walls in the reading corner area (Figure17).

Assignments. *Observation 1*, October 5, 2016; 90-minute class session; afternoon class; Pre-AP freshman students. The content for this class session was the short story, The Most Dangerous Game. The essential question the students considered was: How can I understand the theme of a story? The big question specifically connected to the text was: Are humans superior to animals? Students engaged in silent reading time for about 15 minutes, a book of their choosing, at the beginning of class. Then, students moved to working on their writers' notebooks where they spent time revising their written responses from a previously assigned quick write prompt. Next the students participated in an activity Beatrice called "four-corner discussion" which had a follow-up activity called "Silent Discussion." The class closed with students completing and exit slip prior to leaving the classroom. The three questions on the slip were: 1) What are seeing as the theme?, 2) What questions do you have?, and 3) How could you use one of the sentence frames/stems in your TED Talk [final student project for this unit]?

Observation 2. November 2, 2016; 90-minute class session; afternoon class; Pre-AP freshman students. Content for this observation was Brent Staples essay, Black Men in Public Spaces. The essential question for this class period was: How do stereotypes and/or discrimination have power? Students engaged in silent reading with a book of their choosing for approximately the first ten minutes of class. The next series of activities centered around the use of artwork and connecting artwork to literature. Beatrice guided the students in learning to "read" a painting, followed by and exercised called "See, Think, Wonder." The painting studied during this class session was Jacob Lawrence's "Migration Series, Panel 22." The final activity

of the observation was an analysis of the Maya Angelou poem, Caged, and the Paul Laurence Dunbar poem, Sympathy, using the TPCASTT approach to analysis (title, paraphrase, connotation, attitude, shift, title again, theme).

Pedagogical Practice. *Observation 1*. Students entered the classroom chatting and laughing. They each knew, as they entered, to pick up a handout on a table positioned close to the door. By the fluidity of their actions, it was clear that this was a standard procedure with which they were familiar and practiced regularly. As the students sat down, Beatrice referenced their homework assignment. She explained that one of the questions was not clear; "I forgot to specify which paragraph. So, if you didn't answer that, it's completely fine." The students took the comment in stride and finished getting their materials out of their book bags. Beatrice introduced me to the class as a visitor then instructed the students that it was individual reading time. All students but one began reading. The lone student went to the classroom library at the back of the room, selected a book, then returned to his seat and began reading. Students were fully engaged; no students were off task and the room was quiet.

After about 10 minutes, Beatrice asked the students to find a stopping point in their reading and then get their writer's notebooks out. In a previous class period, the students had written to the following prompt/big question: Are humans superior to animals? Beatrice asked the students to spend some time rereading and revising what they had previously written. She also asked them to consider "adding new evidence" to support their claims. Beatrice also referred the students to the handout they picked up on the way in to class, as well as drew their attention to a poster in the room. Both the poster and the handout were the same lists of sentence stems (e.g. Based on ___, I predict ___. or I disagree with ___ because ___.) to support the students in their writing claims. Beatrice remined the students that this writing was going to be

the basis of their TED Talk (the final project for this unit where the students present a compelling speech on the topic). While the student worked on revising, Beatrice walked around the class, looking at students' work and responding to individual questions as they arose. The room was quiet and students were once again engaged in their work.

After approximately 10 minutes, Beatrice asked the students to finish their revising and proceeded with presenting a 5-minute book talk to the class. The book was titled *Monstromologist* and Beatrice provide a short, verbal synopsis of the text. While doing so, she mentioned to the class that she was not sure how to pronounce the name of the main character; "I will say that the main monster that's in this book . . . I don't really know how to pronounce it, so if I sound really awkward saying it, that's why." The students were not fazed by this admission.

The revising activity focused the students' thinking and proved to be an excellent segued into the Four-Corners activity. The four-corners activity focused on the same big question as the revision activity: Are humans superior to animals? Beatrice numbered each corner of the room: 1) disagree—animals are superior, 2) somewhat disagree—animals are usually more superior, 3) somewhat agree—humans are mostly superior to animals, and 4) agree—humans are superior to animals. The students had participated in this activity with the same big question a few days prior to this observation. Beatrice acknowledged that since then the students may have changed their minds. She assures the students that it is permissible to be in a different corner today than they were previously. She gave the go-ahead and the students sorted themselves into the corners based on their opinion on the big question. Once in their corners, the students formed circles and took turns explaining why they selected the answer they did. Every student had an opportunity to share their thinking and all students had the opportunity to listen to their peers. Beatrice encouraged students to try to include evidence from the story in their reasoning.

In each of the corners, I heard students offering rationales and citing supporting textual evidence. In one corner I heard the group work together and develop four reasons for their answer. Beatrice walked around the room, listening to the students express their ideas. She offered encouragement with phrases like, “I heard some good ideas here.”

Beatrice calls the students attention. She announces that after hearing the rationales in their current groups, students now have the option to change corners. Some students do, but most stay in the corner they initially selected. Beatrice announce the next phase of this activity, which was to find a person in a different corner with a differing opinion. The students were instructed to discuss the question focusing on counter arguments and rebuttals. They were also encouraged to add new evidence if they could. Again, Beatrice drew the students’ attention to the sentence stem poster in the room to support their thinking. Before the partner discussion begin, a student asks Beatrice her opinion on the question. She says there will be an all class discussion later and that “I like hearing y’all’s thoughts. Go!” And the students began discussing energetically. Beatrice walked around the classroom listening and complementing students on the arguments and rebuttals she heard.

The final activity of the period was silent discussion. Beatrice had placed 7 poster-size pieces of butcher paper around the room. Each paper had a different question that helped students think about theme. The students were instructed to go back to their seats (arranged in pods of four), read the question on their paper, and each write a response to the question. Once everyone had written a comment, the papers pass to the next group. Then, each pod is to read the question, read the responses, then write their comments on the paper. This process repeated until the big papers were passed to all pods. Before the activity started, Beatrice asked if the students had any questions on the procedure. Two did and were provided clarification. Two other students

had not finished the reading and they were allowed to sit in the hall to read. This was not a punishment, but an option for them to get caught up. At the end of the silent discussion, Beatrice told the class, "It was cool seeing your ideas form and how you built understanding from each other."

The student mentioned earlier came back again and asked Beatrice what her answer to the essential question was. She smiled and told the class she would eventually tell them, but not now. To wrap up the class, Beatrice said, "I want to check in with you individually," and handed out exit slips for the day. Students completed them and turned them in as they left the classroom.

Observation 2. As students entered the room, they took two handouts from a table located close to the door. This seemed to be a very automated process. Students sat at their assigned seats and got materials for class from their book bags. Once the bell rang, students engaged in silent reading from a book of their choosing. As in Observation 1, a student went to the classroom library, selected a book, and returned to his desk to read. All students were quiet and on-task. As the students read, Beatrice made some changes to her PowerPoint presentation for the period. After silent reading, the students were instructed to get their writer's notebooks out. Beatrice told the students that they will continue exploring the essential question of how stereotypes/racism have power. She also told the students that they would be reading paintings.

After dimming the lights for better viewing, Beatrice posts the painting on the Smartboard, "Migration Series, Panel 22" by Jacob Lawrence. She asks if any of the students have ben to MoMA in New York City. No one raised their hand. She shared that she had been the previous summer and saw this painting there. Beatrice instructed the students to look closely at the painting and write down everything they see in their writer's notebooks. One student asked if she could write bullet points. Beatrice said she could and that students could write

descriptions, too; “However you want to do this.” After about 5 minutes of writing, Beatrice had the students share something they saw by going around the room. Every student shared something they saw. As the students shared, Beatrice took on the role of scribe and wrote the comments on the white board. Students provided a wide variety of observations. After this first round of comments, Beatrice asked the students, “Hearing everyone’s observations, does this cause you to notice something else?” Five students shared additional observations which Beatrice added to the list she was taking.

Beatrice moved to the next phase of the activity. She said, “I want you to start analyzing. Write in your writer’s notebook what you think about what you see.” Beatrice gave the students about five minutes to write their ideas, then went around the room again having each student share their thoughts. Some of the student thoughts shared were that the painting might be connected to slavery, that one of the three figures in the painting has “the strongest mindset” based on his posture being the straightest, and that the three men who are handcuffed together are not representing punishment, but solidarity. Beatrice commented, “I haven’t thought about it like that,” then praised the student for the observation. One student made a connection to the Brent Staples essay by stating that the three men in the painting are “being held back by stereotypes like [Staples stated] ‘an unwieldy inheritance’.” Beatrice enthusiastically nodded.

As a formative assessment, Beatrice asked for a show of hands, “How many think this is a hopeful piece?” No hands were raised. “Bleak?” Many hands were raised. “Mixed?” Several hands were raised. Beatrice then offered more background on the artist by reading the painting’s caption, which included information on the Great Migration for African Americans. After reading the caption, Beatrice instructed the students write more about what they think about the painting. After a few minutes, she asked for a few volunteers to share their comments. Three

students shared.

Beatrice guided the students to the last portion of this activity by asking them to wonder about the painting. She asked the students to write questions that they still have about the painting. Seven students shared questions and Beatrice also shared a question she had with the class. All the students were very quiet and seemed to be very engaged with their thinking. No students were distracted or off-task.

Next Beatrice calls the students' attention to the handouts the picked up as they came into class. The handouts feature the poems "Sympathy" by Paul Lawrence Dunbar and "Caged Bird" by Maya Angelou. Beatrice reads a short biography of each poet from the textbook as a means of some background for the students. She acknowledges that "some of the language is not language of today," and encourages the students to use their dictionaries as they read and analyze the poems. Beatrice reads each of the poems aloud to the students and she recommends that they keep the painting they read in mind as well as they complete the worksheets. The students engaged in highly focused work for approximately 25 minutes until the bell rang.

Self-Perception—Do you consider yourself to be creative?

> Yeah, I would say I'm a creative person. I guess I would consider myself creative because I am a very curious person. I'm always seeking out new information or new ways of thinking about things. I'm always trying to shift my perspective and trying to draw connections between really complex things. I feel like I'm always—I'm intrinsically motivated to learn. I'm not really sure why. I just always have been. Especially being in college, being an English major in an MAT program really pushed me. Yes, I would consider myself creative.

Analysis. *Observation 1*. This observation provided evidence supporting all points on the Conceptual Framework for Cultivating Creativity Observation Checklist. Beatrice was highly effective in executing her responsibilities presented in this conceptual framework. The design of the learning engagements for the class period were content rich, novel, were completed over a

span of time, afforded student choice, permitted students to exercise both creative-divergent and critical-convergent thinking, and allowed students to engage in both individual and collaborative work. Students also had access to adequate resources to accomplish the learning objectives for the day and above all, Beatrice deftly facilitated the learning for the full 90-minute session. As a facilitator, Beatrice kept the students focused on the learning. The strongest example of this was when one of Beatrice's students asked her opinion on the essential question. In a very natural and organic way, she turned the question around saying she wanted to learn about her students' thinking on the question. She expressed this in a positive and energizing way. The student asking smiled at her reply and went back to working with his group. This interaction did a couple things; it supported positive relationships and energy, both between the student and teacher, as well as contributing to the overall classroom environment, and was expressed in a playful, inquisitive manner. It also served as a gentle cue for the student to return to his work with his team, thus maintaining student-focused learning.

Creating and supporting a space that welcomes mistakes and risk-taking seems to be the most challenging for the participants in this study. Beatrice not only supported such an environment, but modeled mistakes in two instances. The first was when she announced to the class that she was not specific with her directions for a portion of the homework assignment and due to that it was alright if students did not complete that part of the assignment. The second instance was admitting she did not know how to pronounce the name of a character in the book for the book talk. In both cases, the students were not phased. There was no back talk or snickering that the teacher did not know or do something. This also connects to the notion of fostering positive relationships and energy within the learning environment. Beatrice and her students have clearly established a supportive environment that supports creative thought.

The students in this observation also upheld their responsibilities as presented in the conceptual framework. The students exercised self-regulation, produced original and task-appropriate products, and assumed ownership of their work. At one point during the observation I noticed a cellphone on a student's desk. It was not being used and was not a point of distraction. I then noticed a few more cellphones on desks and again, they were not distracting students from their work. This evidences their ability to self-regulate, as well as take ownership of their learning. The work the students completed during the class activities generated productive thinking. Beatrice reviewed the silent discussion posters after the students had left and commented on some of the fresh ideas presented and also mentioned how the students' conversations stretched their thinking. Another instance of students taking ownership of their learning was towards the end of the observation when two students, on their own accord, went to the hallway to finish their reading while the other students participated in the silent discussion activity. The two students took appropriate action to get caught up with their work; they knew what they had to do and they knew what they needed to do to get it finished.

Observation 2. Again, in this observation, Beatrice executed a well-developed learning engagement. It was particularly rich in content and challenged students to think both in creative-divergent (the "think" portion of the see-think-wonder exercise) and critical-convergent (the TPCASTT exercise with the poems) ways. Student choice was supported by allowing students to determine how they wanted to write in their writer's notebooks, as well as what they selected to share with the class about their writing. The students engaged in both individual and collaborative work and learning.

Beatrice did an excellent job of using collaborative work as a foundation for students to construct new knowledge. This was exemplified during the first round of students sharing their

writing. After the students wrote what they saw in the painting, then went around the room sharing and listening to what each other saw, Beatrice highlighted, and indirectly assigned value to, their work of listening to their classmates. She asked if someone's observations caused the students to notice other aspects of the painting, which did happen for several students. Not only was Beatrice able to facilitate effective collaborative learning, she also reinforced a teaching and learning environment of positive relationships and energy—she reinforced an environment that valued and appreciated understanding and learning from many voices.

The students exercised risk-taking during the discussion of the painting, particularly when sharing what they thought about the painting. Expressing what one sees in a painting is a bit more concrete and somewhat safe; there are either three men in the painting or not. However, I was impressed by the willingness of the students to share what they thought about the painting. That evidenced more abstract and flexible thinking from the students. The fact that the students shared without hesitation and that no one in the class laughed or acted inappropriately when others shared their ideas not only attests to the positive learning environment established, but also to the students' ability to self-regulate.

Students also assumed responsibility for their learning as they stayed focused and engaged in the learning activities. They made meaningful, appropriate comments that evidenced higher order thinking in most cases. They took full advantage of the time provided at the end of class to complete the TPCASTT analysis of the assigned poems.

Table 4.6
Conceptual Framework for Cultivating Creativity Observation Checklist— Beatrice

Role	Behavior	Obs. 1	Obs.2
Teacher	1. Design learning engagement		
	a. Content rich	yes	yes
	b. Elements of novelty and originality	yes	yes
	c. Completed over span of time	yes	yes
	d. Student choice/interest/options	yes	yes
	e. Student engages in creative-divergent thinking (multiple possibilities)	yes	yes
	f. Student engages in critical-convergent thinking (evaluation)	yes	yes
	i. Student engages in independent decision making/individual work	yes	yes
	j. Student engages in dependent decision making/collaborative work	yes	yes
	2. Provide adequate resources	yes	yes
	3. Function as facilitator	yes	yes
Teacher & Student	4. Exercise flexibility	yes	yes
	5. Welcome mistakes and risk-taking	yes	yes
	6. Remain curious and playful	yes	yes
	7. Maintain resiliency	yes	yes
	8. Foster positive relationships and positive energy	yes	yes
Student	9. Exercise self-regulation; focus	yes	yes
	10. Produce original and task-appropriate products	yes	yes
	11. Assume ownership for work and learning	yes	yes

(L) = Limited

Snapshot—Cordelia

Cordelia's Definition of Creativity. Cordelia defined creativity in the following explanation:

> Being creative as a teacher, especially in English class, is not searching for that one right answer, giving kids a little bit more freedom to figure out stuff on their own, allowing them to think in different ways, and differentiation your lesson.

Physical Space—Inherent Features. The lighting source in Cordelia's classroom was primarily from the overhead ceiling fluorescents (Figures 4.19-4.23). In the back corner of the room was an ample window with horizontal blinds, but did not provide much light past the back

corner. The door was located at the back of the classroom, and near the door was a wall-mounted phone, thermostat control, and light switches (Figures 4.19 and 4.23). The floors were carpeted with a medium gray, short pile, commercial grade carpet (Figures 4.19-4.23). This greatly assisted with the acoustics for the room, absorbing sound and eliminating echoes. The desks were traditional, one-unit pieces with desk and chair attached and wire book shelf underneath seat (Figures 4.19-4.23). A Smartboard was centered and mounted on the front wall of the room (projector mounted on ceiling) and was flanked by white, dry-erase boards, which were each flanked by a square bulletin board (Figures 4.21 and 4.22). The back wall and one of the side walls each had long white boards attached to them (Figures 4.19, 4.20, and 4.23). One tall bookcase was located at the front of the room and held textbooks (Figure 4.21). At the back of the room was a freestanding, two-door cabinet for storage (Figures 4.19 and 4.20). The teacher's desk was located in the back corner of the room, near the room's one window. Three of the cinderblock walls were painted a light cream color (Figures 4.19-4.21) and the remaining accent wall was painted a medium steel blue color (Figures 4.21 and 4.22). This wall was the one where the Smartboard was located.

Figure 4.19. Cordelia's Classroom. October 26, 2016 (Photo by author).

Figure 4.20. Cordelia's Classroom. October 26, 2016 (Photo by author).

Figure 4.21. Cordelia's Classroom. October 26, 2016 (Photo by author).

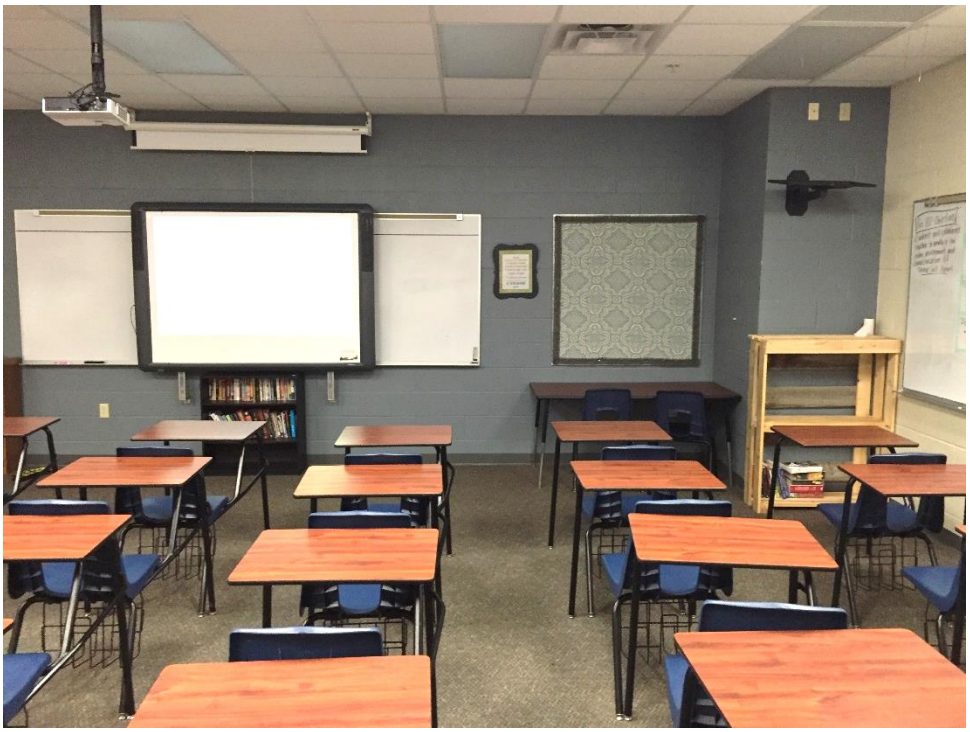

Figure 4.22. Cordelia's Classroom. October 26, 2016 (Photo by author).

Figure 4.23. Cordelia's Classroom. October 26, 2016 (Photo by author).

Physical Space—Teacher Influence. Cordelia arranged the student desks in traditional rows and ranks facing the front of the room (Figures 4.21 and 4.22). The teacher's desk was located in the back corner of the room and was not the focal point of the space. The tall bookcase in the front of the room held textbooks and in two smaller bookcases were also books, mostly paperbacks, that held the classroom library (Figure 21). The smaller bookcases, along with the books comprising the classroom library, were provided by Cordelia. Personal and educational decorations were limited. Some decorations connected to the students' study of the Holocaust were located on the tall bookcase in the front of the room (Figure 4.21). On the back wall was a poster explaining the SOAPSTONE method of analyzing a piece of literature (Figure 4.20). Also in the back of the room, draped across the top of the white board was a string of holiday lights (Figure 4.20). Next to the window hung and Arkansas Razorback flag (Figure 4.21). Both of the bulletin boards in the front of the room were covered in patterned cloth, but did not have

anything else displayed (Figures 4.21 and 4.22). There was no student work displayed in the classroom.

Assignments. *Observation 1*. October 26, 2020; 45-minute class; morning class; 29 Pre-AP sophomore students. Cordelia posted the bell-ringer activity on the Smartboard as the students entered the room. This was completed on their Chomebooks. The next activity was an AP style multiple choice worksheet of Chapter 1 of the novel, Things Fall Apart. Cordelia posted instructions on the Smartboard for the students to read as she passed out the worksheets. And the final activity of the day was for the students to work in small groups, previously established, and continue their work on their group slide and presentation, which also allowed the students to use their Chromebooks.

Observation 2. November 3, 2020; 45-minute class; afternoon class; 27 Pre-AP sophomore students. Objective for this class session was written on the whiteboard, "Students will evaluate their close reading skills by collaborating together to analyze AP multiple choice questions/answers." Cordelia posted the bell-ringer on the Smartboard. It read, "All you need on your desk when the bell rings is a pencil. Today will be fast paced so be ready to get to work right when the bell rings." The learning engagement for the day was titled "Chapter 7 Multiple Choice Group Activity" and was comprised of three, interrelated activities. Cordelia had preassigned the students to groups of threes. The groups were posted on the Smartboard and students were given 90 seconds to get in their groups. The overall learning engagement was divided into three phases that required the students to work together in their groups to successfully complete each phase. Cordelia handed out a small packet of worksheets to each student to complete these activities. Before progressing from one phase to the next, each group was required to get the teacher to sign-off on the group's accuracy and quality of work. Phase

one was an eight-question, AP style multiple choice answer work sheet (similar to the worksheet in *Observation 1*). Phase two challenged each group to be an expert on one of the eight questions from phase one. Once Cordelia approved the question number, the groups proceeded to construct justifications for the answer for their approved questions. And phase three required the group to make a word wall poster from a word Cordelia provided the group from a word bank. The words in the word bank came from the Chapter 7 reading assignment.

Observation 3. November 9, 2016; 45-minute class; afternoon class; 21 Pre-AP sophomore students. The students began developing their final essays for the unit on Things Fall Apart. Cordelia had the prompt posted on the Smartboard. It read, "Write an essay in which you analyze how Achebe [the author] uses literary devices to convey Okonkwo's complex reaction to his son's abandonment [an incident in the text]." The whole class worked together on a pre-writing activity in the form of a chart. This chart would later be used by the students to complete the writing of their individual essays.

Pedagogical Practice. *Observation 1*. The bell-ringer activity was displayed on the Smartboard as the students entered the room. It stated, "Log on to Google classroom and review the journal entry options for chapters 7-13. Journal entry is due Sunday the 30th at 11:59. Expect a reading quiz on Monday over chapters 7-13." The students seated themselves at their assigned places, got their Chromebooks and other materials out of their bookbags, and began working. The transition from passing period to working was smooth and seemed to be a regularly occurring procedure. This bell-ringer provided four options for the students. Students worked on this activity for about five minutes, while Cordelia took roll. Cordelia then went to the front of the room and asked a specific student to answer the first option, which the student was able to do. She then called on another student for option two, and the same for options three and four.

Each of the students she called was able to provide a correct response. This portion of the lesson was very efficiently completed.

Next, the multiple-choice worksheet. As Cordelia handed out the worksheet and the scantron form, there was a bit of a grumble from the students. Though it was a series of multiple-choice questions, Cordelia told the students that it was not a quiz and it was not for a grade. She said, "These are AP style questions and this will help you practice your multiple-choice skills." Cordelia provided ten minutes for the students to individually answer the eight questions. Once the time expired, she grouped the students in teams of three (grouping students with others next to them, which saved time) and the groups discussed and analyzed the questions by determining if the question requires inference and if so, developed a justification for the answer. After approximately ten minutes of small group work, Cordelia asked the students to leave their groups and straighten their desks. She asked the students to reflect on whether they thought the quiz was easy or difficult and if they felt like they were prepared. She asked them to write their response on the back of their scantron sheet. The students were focused and completed the task. Once all the scantrons were passed to the front of the room, Cordelia asked the students what they thought. This opened a class-wide discussion. A few students spoke to the class, while a few others had sidebar discussions.

For the remaining 23 minutes of class, Cordelia had the students work in their established groups (4-5 students per group) on a presentation project over the text. Cordelia posted the instructions on the Smartboard. It read: "For your group slide you will need: 1) A one sentence summary of the chapter. 2) One quote to support the thematic idea of masculinity + commentary. 3) One quote to support the thematic idea of tradition/culture + commentary. 4) One example of a literary device (metaphor, imagery, symbolism, etc.) + commentary." The students took

advantage of this time. They rearranged their desks in groups and used their books and Chromebooks to complete this task. The students self-managed their groups and stayed on task. Volume of the class increased, but was not overly loud or boisterous. While the students worked, Cordelia roamed the classroom, monitoring the students' work and answering questions the teams had. As the class came to an end, Cordelia reminded the students that the teams would present their slides on Friday. The students packed their materials in their book bags and straightened the desks in rows and ranks. Cordelia used the last few minutes of class to return graded work to the students.

Observation 2. Cordelia opened the class by announcing, "Ten days until Thanksgiving Break!" The students cheered. Cordelia handed out a small packet of worksheets for each student so they could complete the activity in the day's lesson. As Cordelia posted the slide with the assigned team members, an all-call announcement was broadcasted over the classroom speaker. It was a call for yearbook group photos for clubs. The students were talkative as they organized in their groups; they rearranged the desks from orderly rows and ranks to small groupings of three desks. Once in their groups, Cordelia posted the next slide on the Smartboard. This slide was the "rules and explanations" for the work the student would engage in for the class period. Another all-call announcement came through the classroom speaker. This time it was an administrator giving a warning to the entire school about inappropriate parking. Cordelia told the students they could begin once they read the rules. Some of the teams finished reading the rules, while other began working on the worksheets. The noise-level in the classroom was loud, but not distractingly so.

The class had been divided into 9 groups and as the groups worked collaboratively, Cordelia walked around the class and observed each of the nine groups. One group was not

focused on the work at hand, but was discussing personal matters (another student not in this class and what he did or did not do the previous day). Cordelia was aware of this situation and walked over to observe the group. The students were aware of the teacher and refocused on the work. Cordelia remained standing next to this group while she visually monitored the other groups in the class. This physical proximity helped the students to stay on task.

A third all-call announcement came over the classroom speaker, requesting students for group photos for other clubs. At this point, it is 15 minutes into the observation. Cordelia announced to the class that only one person from each team could bring their sheets to her for approval.

Each of the phases of the class session's learning engagement were timed, which gave the students a sense of urgency to complete the work and stay focused on the task at hand. It also promoted a positive energy in the classroom as the lesson had a gaming quality to it. The students were playful in their attitudes and comments while completing the work. As the students completed the phases of the lesson, they would approach Cordelia with their sheets for her to review and approve. One group did not follow directions and started with the last phase instead of the first. Cordelia reminded the group to follow directions. They handled the redirection with a good attitude, laughing at themselves, and quickly scrambled to read the directions thoroughly and complete the work as instructed. Other groups showed Cordelia their work and she initialed and shared positive comments such as "good job" or "nice work."

A fourth all-call came across the classroom speaker. This time it was a request for any student needing photo retakes.

The group previously mentioned as being off-task once again was distracted. Cordelia noticed and again walked to the group and stood next to them. This time she asked them to keep

working. One student in the group feebly said they were working. Cordelia did not argue, but just looked at each student. The group shuffled materials on their desks and appeared to reorganize and focus on the worksheets. In actuality, they kept gossiping and did not complete the work. This group was not disruptive to the other groups, but they were not working as directed.

The rest of the groups worked at a fast and energetic pace and completed the entire lesson. Cordelia asked that the students gather their worksheet packets for the group and that each group bring their packets to her. All of the groups turned in packets except the group that was repeatedly off task. The members of that group had surprised expressions on their faces and seemed to be embarrassed that they were the only group that did not complete all three phases. Cordelia asked them to hand in what they had completed.

The students then put away their materials, straightened the desks into rows and rank, and left the room when the bell rang.

Observation 3. Upon my arrival for this observation, Cordelia pulled me aside. She shared that the day was "going horribly." This was the day after the 2016 U.S. Presidential Election. I specifically asked if this was in connection to the election results. She affirmed and said that tensions in the school were high. Cordelia indicated that she knew of at least one instance that took place during passing periods; a Caucasian student told a Hispanic student to "pack your bags." The principal had called a faculty-staff meeting prior to the start of the school day and instructed all staff that if any confrontations occurred, they should be stopped immediately.

During this observation, students were beginning to create their final essays for their unit on *Things Fall Apart*. The students seemed exceptionally subdued as the entered the room, took

their seats, and prepared their materials for class. The prompt and planning chart for the essay was posted on the Smartboard and students had access to the same document on the Chromebooks. The planning chart was to be completed by students and would later help guide their thinking when they began to write their essays. One student asked in a worrisome tone if they would be writing the essay in class. Cordelia clarified and said students would be working collaboratively on the chart only today. Many of the students appeared relieved by Cordelia's response. Cordelia did not divide the class into smaller groups, but used the entire class as one group to work together on completing the chart.

Cordelia provided a photocopy to each student of the text passage the class would analyze for the prompt and chart. She placed the passage under a document reader and read the passage aloud to her students. As she read, she made marks and notes on her copy. Some of the students did, too, as they read along. Next, Cordelia asked a series of guiding questions to the students. For example, one question was "What is the main character concerned with in this part?" Another example was after a student identified a literary device in the text, Cordelia asked the class, "Why did the author use this device?" After each question, two or three students would respond. Sometimes Cordelia called on students by name to answer a question and other times students freely offered their thoughts. The students were attentive and focused on participating in discussion and completing their work.

During the last fifteen minutes of class, the students quietly and individually wrote while Cordelia walked around the room looking at students' work and answering questions or discussing writing options. With the last few remaining minutes of the class, Cordelia checked-in with her students. She asked if they needed some more time to work on this during their next class period. The students said they did. With that information, Cordelia worked with the

students to establish the final due date for the paper, to which all agreed. The bell rang and the students left the room.

Self-Perception—Do you consider yourself to be creative?

> Yes, I do. I write. I read. I try to be. Creative in the sense of how can I make this lesson not boring. That takes some creativity. I do try to think of things in different ways. That's a hard question. . . . Yes, I think I am creative but I'm struggling with it. I see the value in it.

Analysis. *Observation 1*. Cordelia ran this class session with exceptional efficiency by maximizing the time students spent on learning. She provided the students with many activities that were content rich, some of which were completed by the students over a period of time (the slide presentation project). In this 45-minute class period the students engaged in both independent and collaborative work and they also engaged in critical-convergent thinking. However, the activities in this learning engagement were not especially novel, nor did the students engage in creative-divergent thinking. Cordelia did provide adequate resources for her students and she functioned as a highly effective facilitator by keeping the focus of the class session on student learning.

The activities were executed smoothly; no time was wasted transitioning from one activity to the next. Such fluid transitioning provided evidence of flexibility for both the teacher and students. Flexibility was also evidenced as Cordelia moved around the class and worked with the student-teams on their presentation slides. She did not directly answer student questions in most cases, but responded with a question for the group to consider, which pushed the students to be flexible with their thinking. Welcoming mistakes was somewhat present when the students individually worked on the multiple-choice worksheet, then worked in small groups to select and analyze the correct answers.

The students exercised self-regulation during all of the activities in the class period. They

were on-task, utilized their time well, and were focused on their work. These students assumed ownership of their work, which is supported by the fact that the students were productive and that none of the work they accomplished during this observation was for a grade. Most of the work the students accomplished during this observation was part of a longer and bigger project (chapter journal entries and slide presentation projects) with grades that would be assessed at a later date. The work I observed the students doing was task appropriate; however, based on the design of the activities, they did not afford the students an opportunity to produce original products.

Observation 2. Cordelia exercised her creativity in the design of this observation's learning engagement. Two of the three phases, the multiple-choice questions and the answer justification, of this activity were observed in *Observation 1* and were executed in a traditional, straightforward fashion. However, the way in which Cordelia designed the lesson in this observation made the same tasks playful and energized the students' work. The students maintained cheerful attitudes while participating in the activity. There were moments of laughter and encouraging comments to peers. Cordelia also demonstrated impeccable skill in facilitating student learning by keeping student voice and work the focus of the class period. Student exercised resiliency by completing sections of task, sharing their work with Cordelia, and correcting their work if it was not approved by Cordelia. The structure of the activity also supported students taking ownership for completing the work and the quality of the work. The pacing of the instruction kept the students highly engaged for the entire class period.

Another example of student ownership was when Cordelia afforded space to the group that chose to be off-task. Cordelia attempted to assist the students in being successful by respectfully reminding their group twice to work on the assignment. Both times the group

ultimately ignored the requests. Cordelia did not make an issue of their choices; she gave them freedom to make them. After this observation, I asked her about the situation. She indicated that the group was not interfering with the other students' learning and she knew that their lack of work would be reflected in the grade for the assignment. This also allowed the students of the group to engage in making mistakes in a safe environment.

Observation 3. Due to the disruptive influence national events had on this school on this particular day, Cordelia keep closer control of her students during this observation than in previous ones. By keeping the class as one group and working together on the chart that would eventually form the outline of their essays, Cordelia could better monitor and prevent, if needed, any negative behaviors unrelated to classroom content. In this observation, Cordelia did function as a facilitator, but there was more teacher presence and teacher voice than in the previous two observations. However, due to the circumstances, this seemed to be an effective decision. Students did have voice in this class period, yet it was in a more structured manner than the previous observations.

The learning for the day was content rich, but not particularly novel. The students did develop a product over a period of time, which supports sustained thinking. Students had some options regarding about what they chose to write, engaged in individual decision making, but had limited opportunities to engage in collaborative decision making. Though the students participated as a large group in discussion, the nature of the assignment did not afford collaborative decision-making.

During the question and answer in the whole group discussion, sometimes Cordelia called on students by name and other times students freely contributed their answers. This free offering of ideas seemed to evidenced that the students felt the classroom was a safe space for

taking risks, both in what they shared and how they expressed it. They seemed to feel comfortable in the room as they sat relaxed in their chairs, yet remained focused on the work. The interactions they had with each other indicated ease and comfortability.

Cordelia exhibited flexibility on a few accounts. One was modifying the overall structure of the lesson. After the observation, she mentioned that she had anticipated having the students work in smaller groups instead of the whole class as one big group. She made that decision so that she could keep a better watch on any sidebar conversation that might arise due to the tension in the school that day. She also was flexible with her expectations of the student; one asked about and aspect of his written response. Cordelia replied, “As long as you can clearly explain and justify [your answer], I’ll take it.”

The students during this observation self-regulated well and remained focused on their work; there were no outbursts or inappropriate comments. A most satisfying example of the students taking ownership of their work came in the last three minutes of class when Cordelia asked the students if they needed more classroom time to work. The students were earnest in their affirmative replies. They also responsibly determined, with the guidance of Cordelia, the due date for their final paper. This evidences a maturity among the students and a desire to do well with their work.

Table 4.7
Conceptual Framework for Cultivating Creativity Observation Checklist— Cordelia

Role	Behavior	Obs. 1	Obs.2	Obs. 3
Teacher	1. Design learning engagement			
	a. Content rich	yes	yes	yes
	b. Elements of novelty and originality	no	yes	yes (L)
	c. Completed over a span of time	yes	yes (L)	yes
	d. Student choice/interest/options	yes	yes (L)	yes (L)
	e. Student engages in creative-divergent thinking (multiple possibilities)	no	yes	yes (L)
	f. Student engages in critical-convergent thinking (evaluation)	yes	yes	yes
	g. Student engages in independent decision making/individual work	yes	yes	yes
	h. Student engages in dependent decision making/collaborative work	yes	yes	yes (L)
	2. Provide adequate resources	yes	yes	yes
	3. Function as facilitator	yes	yes	yes
Teacher & Student	4. Exercise flexibility	yes (L)	yes	yes
	5. Welcome mistakes and risk-taking	yes (L)	yes (L)	yes
	6. Remain curious and playful	yes (L)	yes	yes
	7. Maintain resiliency	yes	yes	yes
	8. Foster positive relationships and positive energy	yes	yes	yes
Student	9. Exercise self-regulation; focus	yes	yes	yes
	10. Produce original and task-appropriate products	yes (L)	yes	yes (L)
	11. Assume ownership for work and learning	yes	yes	yes

(L) = Limited

Summary

The purpose of this study was to explore how early career English teachers supported the development of creative skills and thinking in their students through both the teachers' professional understandings and professional practices. This chapter was divided into four major sections which were a review of the research questions and data collection procedures, an overview of the educational environment in which the study took place, the collective results of the participants understandings of effective teaching and creative development, and finally, an

examination of the individual participants' teaching practice. The data for the third section of this chapter were coded to reveal themes and categories across the participants. The data for the fourth section were analyzed to develop a snapshot of practice for each individual participant regarding how they support creative development in their classrooms.

CHAPTER V

Discussion

Introduction

This study's findings illuminated teachers' conceptual knowledge and educational practices for cultivating creative development in students. This study specifically examined four secondary English teachers in their second year of professional teaching to begin understanding how teachers' perceptions of creativity either align or deviate from their teaching practice. This study also attempted to identify elements and behaviors present within the teaching and learning environment that support creative growth. The data supporting these findings were presented in Chapter IV. This chapter will provide a summary of the study including research questions, key findings and discussion of the data, general conclusions as related to the existing body of literature, practical and theoretical implications of study, and suggestions for future research.

Summary

This study was conducted as a multiple case study and explored the concept of creativity in the teaching and learning environment through the bounded system of employed graduates of the University of Arkansas' MAT English Language Arts 2015 cohort (Merriam, 2009). The data collection instruments used in this study included opening- and closing-study interviews with each participant, classroom observations of participants teaching, and activities participants assigned their students during observation sessions.

Through opening and closing interviews, participants' conceptualizations of creativity in the teaching and learning environment were examined through a cross-case analysis as a means to "build abstractions across cases" (Merriam, 2009, p. 204). The opening- and closing-interviews were coded using Merriam's (2009) five step process for data analysis, which

involved open coding and axial coding of the participants' responses regarding their conceptualization of creativity and effective teaching (p. 178-193).

I then explored how the participants' classroom actions and decisions related to their conceptualizations of creativity. As each participant had a very distinctive approach to teaching, individual case studies for each participant proved necessary to understand the ways each participant supported their students' development of creative skills and thinking. The individual case studies were developed by examining each participants' practice through the lens of the Conceptual Framework for Cultivating Creativity (Figure 1.1), then a cross-case analysis among participants' data were conducted to determine if generalizations or patterns could be identified regarding the early-career English teacher participants in this study and furthermore, could inform future studies of creativity in teaching and learning environments (Merriam, 2009, p. 204).

Discussion of key findings will be in terms of the research questions guiding this study. They are noted below.

Research Questions

1. *How do early career English teachers conceptualize creativity as it relates to teaching and learning?* Participants in this study believe that creativity is a skill that can be taught and cultivated in students and that the teacher's role in this development can be transformational. They also agreed that creativity in the teaching and learning environment can be present in both the teacher's practice and in the students' learning outcomes. The participants collectively understood that creativity involves novelty, uniqueness, and unpredictability. These acknowledged characteristics further connected the participants' understanding of creativity to the notion of freedom, choice, and a

transference of control from the teacher to the student. And finally, participants conceptually understood that creativity involves elements of trial and error, which ultimately involves risk-taking and failure.

2. *How do early career English teachers support creative development and the creative process through the use of the classroom environment, in both physical and social-emotional spaces?* Regarding physical space and its role in creative development, the participants expressed value in arranging their rooms in ways that promoted collaboration as well as provided space for individual work. Ornamentation, lighting, and furniture in addition to standard school issued furniture was utilized by participants for both academic growth and/or creating and environment with positive energy. Participants also revealed that providing adequate tools for students to work and create was important to their pedagogy.

    In terms of emotional space, participants expressed that a teaching and learning environment that welcomed and valued multiple perspectives and viewpoints was imperative to supporting students' creative development. The theme of positivity, which included fun, energy, kindness, and civility, was also perceived as vital to supporting student creative development. Participants also claimed that building confidence in students and maintaining high expectations assisted students in engaging in creative-divergent thinking.

3. *How do early career English teachers cultivate creative development in students through choice, design, and implementation of assignments?* Relevancy and richness of content was evidenced as being valued by the participants and through teaching content, participants were able to engage students in work that supported their creative

development. Participants afforded students time and space to work both individually and collaboratively, as well as engage in activities that promoted student choice and voice. Participants also expressed value for flexibility in the teaching and learning environment, with specific acknowledgement to differentiated instruction that maintains a student-centered classroom.

Key Findings and Discussion

This study revealed four interconnected findings, which are noted and discussed below.

1) **Teachers were able to identify some aspects of creative theory and supporting pedagogy with limited misconceptions, despite not experiencing direct instruction or professional development on creative theory.**

The most prevalent theme that emerged regarding the participants' collective understanding of teaching for creative development was the value and importance of teacher pedagogy. Participants clearly understood and agreed that creativity cultivating strategies needed to be successfully implemented by the teachers to fully assist students in their creative development. The participants were able to correctly express that relevancy of academic content, active student engagement in learning, novelty, collaboration, positivity, and flexibility are all aspects of creativity theory and pedagogical practices that support creative growth in students. Equally important, the participants were able to identified passive, repetitive, non-student-centered activities and strategies as practices that curb creative development.

However, despite internalizing the importance of these aspects of teaching for creative development, when asked to identify specifically where they learned about creative theory or how to directly support creative development in their students, the participants struggled to do so. The participants expressed that their training prepared them for supporting students' creative

development, but were challenged to pinpoint where in their program of study they formally learned about creative theory. The participants expressed that they learned from their MAT instructors and peers strategies and activities (i.e. tableaus, Socratic circles) that facilitated creative expressions and products from their students. Two participants also referenced they learned activities supporting creative development from their mentor teachers during their teaching internships.

Participants revealed another source for learning about practice and pedagogy supporting creative development—former K-12 teachers from their schooling experiences. Participants shared both examples and non-examples of teaching that supported or detracted from their creative development based on their experiences with previous teachers. Such practices as developing positive relationships and maintaining an enthusiastic attitude toward learning were commonly noted. Helena shared an experience when one of her high school English teachers connected a passage from a text studied in class to a personal and difficult situation she was managing. Helena said the connection proved to be a lasting "lesson" and that the classroom learning was made especially relevant in that moment.

Participants also recounted strategies that inhibited creativity. Beatrice emphasized the repetitiveness of daily test-prep in one of her high school English classes. The teacher taught a rigid format in which to analyze the writing prompt and an equally rigid way of composing the written response. Beatrice also remembered this teacher referred to her as her test score on a four-point scale, as being a three, "almost a four." Beatrice said it was a "horrible" learning experience. During the classroom observations, Beatrice worked deliberately to establish positive relationships with her students through encouraging comments and questions and by keeping students focused on their thinking and not a grade.

Absent formal instruction on creativity theory, three of the four participants expressed at least one misconception regarding creativity and its function in the teaching and learning process. This study revealed three major misconceptions among these teachers: 1) creativity is naturally found in some students and not others; 2) information acquisition is the desired end to the teaching and learning process; and 3) creative practices, activities, and skills are not essential nor integral to teaching and learning.

2) **"Untrain their brains for creativity to feel normal." The type of learning educational leaders demand students master predominately focuses on critical-convergent thinking skills, so much so that creative-divergent thinking skills seem somewhat foreign to both teachers and students.**

There's an old adage in business that claims what gets counted gets done. This sentiment parallels education in that what gets assessed, or more directly, gets tested gets done. Standardized testing's current role in American education is ubiquitous. High-stakes tests are used to assess many aspects of education, especially in public education. Test results are used to account for the level and quantity of student learning, caliber and quality of teacher ability, effectiveness of building and district leadership, and determine the amount of financial support from local, state, and federal levels. Admittedly, these tests wield massive power.

Because of the massive power behind these tests, teachers understandably spend many hours and days preparing students to successfully complete these exams. However, these tests predominately assess thinking that requires an elimination of options and a narrowing of ideas to one correct or best answer. Beatrice stated:

> Now curriculums are becoming very standardized as a way to hold us accountable for teaching these very kind of narrow ways in order for students to do well on these tests that end up being a reflection of the school. . . . The emphasis on standardized tests and

> accountability has been probably the biggest force that has impeded learning from what I've seen.

By their nature, high-stakes, standardized testing requires teaching and learning that is abundantly focused on exercising critical-convergent thinking. The result of which is little room or time for teaching and learning that cultivates creative-divergent thinking.

The limited presence of creative-divergent thinking was clearly evidenced in this study by examining the assignments and activities participants used during observations along with statements provided in their interviews. A total of eleven observations were made during this study and eleven sets of assignments were analyzed through the lens of learning engagement design presented in the Conceptual Framework for Cultivating Creativity (Figure 1.1). Of the eleven assignments, ten focused on skills that developed and cultivated critical-convergent thinking, while only five incorporated elements supporting creative-divergent thinking. Furthermore, of the five assignments supporting creative-divergent thinking, two did so in very limited ways, such as students drawing a picture from a predetermined prompt selected by the teacher and students selecting a textual example that supported the teacher's selected prompt.

Cordelia expressed that she believed creativity can be taught, but with the caveat that "you're going to have to untrain their brains in order for creativity to feel normal or to feel right." She touched on an interesting notion that exercising creativity feels out of the norm for many students. The same can be said for teachers. Both students and teachers spend considerable time engaged in teaching and learning that focuses on critical-convergent thinking skills due in large part to the demands of high-stakes testing. Because of this focus, learning that cultivates creative skills, specifically creative-divergent thinking, feels foreign to students and teachers.

Another consideration regarding standardized testing is not only does it assess limited types of thinking, but it also requires teachers to devote educational time to technical, procedural

aspects of completing the exams, further consuming time that could be used to support creative skill development. Beatrice stated that such test prep is "very stifling of creativity." She clarifies by explaining that "it's almost like I have to teach the kids how to take the test . . . you have to fill in the blanks in a certain way if you want to answer that question correctly. So, I see that as stifling."

3) Some currently existing school structures enhance student creative development, while others distract from such growth.

Participants in this study identified elective classes and block scheduling as school structures that assist in supporting creative development. Three of the four study participants specifically mentioned students having access to a diverse selection of elective courses as means for students to explore areas of personal creative interest in a more robust way than is allotted in a core content course. Electives further support student choice as well as students taking ownership of their work and learning. Rosalind shared that elective courses helped her to develop positive relationships with students in addition to encouraging their exploration of the arts. She recruited students from her core English class by watching for students who "are dramatic" in addition to students who are "kind of quiet and need to break out from their shell." Beatrice expressed gratitude for elective course offerings by stating, "we're lucky in our district—our student have a lot of opportunities to take a lot of different types of electives. They're able to kind of follow what interests them." And Cordelia also valued the availability of electives for her students as the students enroll in electives that they "are passionate about."

The other school structure that participants in this study found supportive of creative development was that of block scheduling. Three of the four participants taught on some variation of a block schedule during the observations for this study. Cordelia taught on a

traditional 45-minute period schedule; however, she did teach on a block schedule during her teaching internship. She discusses the difference between the two in terms of supporting creativity:

> Here it's 45-minute classes, which in a blink of an eye it's over. . . . It [45-minute classes] does not allow for a lot of independent think time or work time. It's either me giving instruction with like ten minutes left in class, or it's strictly independent work. If it's group work, group work is hard in 45 minutes because by the time they [students] get in here, get their Chromebooks up, get settled, and then you've got to pack up. So, it allows for a shorter window of time to really get creative.

The participants clearly were aware of the valuable role time plays when supporting students' creative thinking and work.

There is yet another creative-supporting school structure observed during this study that could easily have been overlooked and that was the quality of physical classroom space. Though no participants specifically mentioned this structure in their interviews, it became clear during observations that all participants in this study had quality spaces to engage students in learning that cultivates creativity. The rooms were clean and modern. All were well lit and all had access to natural lighting. The rooms provided teachers and students with ample space to engage in physically active learning, as well as arrange student desks in configurations that supported collaboration as well as individual work. The rooms also afforded teachers space to create centers such as reading corners, classroom libraries, and student supply and tool areas. Student and teacher seating and work spaces were adequate in number and quality. The quality of the physical classroom space greatly assisted in supporting an environment of positive energy and positive relationships.

However, on the flipside of the coin, excessive, rigid, high-stakes testing preparation was noted as an established school structure that distracted from students' creative development. Building on comments presented earlier in this chapter regarding standardized, high-stakes

testing, the participants in this study understood the gravitas of such testing and the rippling impact high or low scores have at the student, teacher, school, district, state, and federal levels. The participants took their responsibility of preparing students for such exams seriously. However, participants noted the school structure most limiting to student creative development was the over emphasis on standardized testing, test preparation, and its role in the classroom. Cordelia expressed her thoughts this way:

> Being over-tested. Putting such importance on the test score when it's really—I mean it's a snapshot in time. It does not reflect how far they've [students] come, it does not reflect the improvements they've made, it does not take into account the diversity of students. And it's disheartening as a teacher whenever you tell your students, "Okay, we've got to do this test today." And it's just like a whole wide groan. It's hard on the teacher to stay positive. . . . Yes, it [standardized testing] does have a purpose and it has a place, but I think there's some over-testing going on.

Helena addressed the issue of time spent on test prep, specifically mandated time for remediation of students who performed poorly on the exams. Helena taught a remediation course for 25 students who failed the high-stakes test. She expressed that the teaching and learning for the course was based on a scripted curriculum, lacked relevancy for the students, and lacked opportunities for creative development. She stated, "We are sending them [students] a message, 'You didn't do so hot on the ACT Aspire so now if you want to get your 9th-grade credit from last year, you're going to a remediation. I don't think it fosters creativity." Not only is there concern regarding the amount of instructional time spent on remediation, but also the timeliness of such interventions. In this cited instance, the remediation occurred in the following academic year and was punitive in that non-compliance to remediation resulted in a loss of credit for the previous year's English class.

Cordelia also challenged the message that the field of education and its supporting for-profit industries are sending to students. She stated, "We're so focused on the score, just that

outcome. They [students] don't see the value of the creative side when all they're working towards is one score." So even though industry leaders express a need for creatively skilled employees, the systemic message students receive is contradictory. Beatrice echoed this same sentiment:

> They're [students] going to have to be able to empathize and communicate with people who are different than them. They're going to have to learn how to live with technology and work with technology in different ways than we probably will have to. I've read that they're probably going to have jobs that don't even exist now. They're going to have to learn how to learn and unlearn and re-learn again probably throughout their lives. With the emphasis on standardized testing—being able to measure those 21st century skills with the types of tests that we're using—[the tests provide] a snapshot of the student learning. It doesn't provide a full picture. There's so much emphasis on those types of tests that I don't know if we truly are fostering creativity as a school system.

Participants found standardized testing was limited in the scope of fully assessing student learning, specifically skills that support growing in creative development.

However, on a closing note, despite the required emphasis on high-stakes test prep with its many limitations, Beatrice expressed, "I'm lucky I work at a place that they give us teachers more freedom to do what we know is right. We aren't so adhered to a standardized curriculum that we aren't able to reach our students in our classroom. We're not too focused on teaching standards; more about teaching students, and I think that culture has really been promoted by our administration."

4) Some teachers have a disconnect between their conceptual understanding of creativity in the teaching and learning environment and their actual pedagogical choices they implement in the classroom.

All of the four participants were able to accurately express a conceptual understanding of various elements of creative theory and all participants expressed value in implementing teaching strategies and methods that supported creative growth and thinking in their students during the

interview portion of this study. Evidence of the participants' conceptual understanding of cultivating creativity in the teaching and learning environment was presented in Chapter 4, Part III of this study and was summarized in Table 4.3. However, cognitively understanding and valuing theories and pedagogies supporting creative development and being able to actively implement such strategies proved to be more challenging for one participant than the others.

The first phase of understanding whether the participants connected or disconnected theory from practice regarding creative development was to examine the design of the participants' learning engagements used with students during each of the observations. The learning engagements implemented during Beatrice and Cordelia's observations consistently incorporated all the elements noted in learning engagement design in the Conceptual Framework for Cultivating Creativity (Figure 1.1). Their assignments and activities were soundly rooted in the content, were completed over a span of time, incorporated both individual and collaborative work, and most significantly, incorporated work that required creative-divergent thinking. Rosalind and Helena were able to incorporate some of the elements that cultivated students' creative development, but not as many as Beatrice and Cordelia. Two elements of the Conceptual Framework for Cultivating Creativity (Figure 1.1) that Rosalind and Helena repeatedly omitted were work and thinking that took place over a period of time and work that required creative-divergent thinking. Additional elements that Helena consistently lacked in her observed learning engagements were the incorporation of novelty and originality into the assignments and allowing for student choice in their work.

The second phase of understanding whether the participants connected or disconnected theory from practice regarding cultivating creativity was examining the classroom behaviors of the teachers and the students. In addition to designing the learning engagement, teachers

supporting creative development in their students also are responsible for providing adequate resources to students and for functioning as facilitators during the lesson. All participants in this study were able to provide adequate resources that supported student learning during the vast majority of the observations and three of the four participants were able to consistently function as facilitator during the observed class sessions. Helena, however, struggled to facilitate student learning during each of her three observations and functioned more as a commander of information, directing both student learning and behavior. More broadly, Helena did not turn over the learning to the students. For example, in each of the three observations, there was a portion of the lesson that focused on reading. Instead of allowing the students to read, Helena read the passages aloud herself. In similar fashion, when a question was posed, either by her or a student, Helena did not look to her students to pursue an answer, but consistently answered the questions on behalf of her students.

The shared responsibilities of teachers and students presented in the Cultivating Creativity Framework (Figure 1.1) include exercising flexibility during the teaching and learning process, welcoming risk-taking and mistakes, remaining curious and playful, maintaining resilience, and fostering positive relationships and energy. Student responsibilities in the process include exercising self-regulation, producing original and task-appropriate products, and assuming ownership for work and learning. Rosalind, Beatrice, and Cordelia, to varying degrees, were able to exercise the shared responsibilities for teachers and students; for example Rosalind fostered positive relationships by supporting and praising the work of two newly assigned English language learners to the rest of her class as the class cheered their work, Beatrice welcomed mistakes by trying to pronounce, in front of the class, a character name she did not know how to say, and Cordelia supported a curious and playful environment by making an

engaging game out learning that simultaneously addressed content and AP test prep. Rosalind, Beatrice, and Cordelia were also able to afford and support students engaging their responsibilities in the creative teaching and learning process in the majority of observations.

Not only did Helena struggled with both the shared teacher and student responsibilities and supporting her students with their sole responsibilities, but her actions in the classroom did not align with her comments in her interviews regarding her understanding of creativity. For instance, regarding flexibility, Helena stated that teachers "have to be creative enough to flip the script" when activities do not go as planned. She continued by saying, "I think I do a good job of that . . . So that is creativity, but I also think that is flexibility." However, during the three observations, Helena struggled to remain flexible with her students or her schedule. In Helena's Observation 2, one of her English language learning students was conscientiously working on crafting a written sentence. He wrote, proof-read, erased, and edited his work, while Helena encouraged the student to "hurry up." Instead of being flexible with her lesson plan and acknowledging that the student was owning his work and his learning, Helena was concentrating on time allotted for the activity.

General conclusions

Participants in this study were able to conceptualize some foundational aspects of creative theory and pedagogies used to develop creative skills in students. When asked to share their definition of creativity in the teaching and learning environment, the participants accurately expressed the following concepts: unpredictable, surprising, passionate, letting go of control, not seeking definitive answers, intrinsically curious, lots of questions, new understandings, collaboration, forging your own path, connections between complex things, intrinsically motivated, not one right answer, giving a bit more freedom, figure out stuff on their own, think

in different ways, and not boring. These aspects are in line with many of the major creativity researchers and theorists, but specifically, the study participants align well with Ken Robinson's definition:

> Being creative does usually involve playing with ideas and having fun; enjoyment and imagination. But creativity is also about working in a highly focused way on ideas and projects, crafting them into their best forms and making critical judgments along the way about which works best and why. In every discipline, creativity also draws on skill, knowledge and control. It's not only about letting go, it's about holding on (2011, p. 5).

Each of the participants were able to grasp some of the elements of this definition; however, none included all of these elements.

This study revealed that none of the participants, nor members of their pre-service collegiate cohort, had participated in specific, formal instruction regarding creativity theory and pedagogy, but did learn a few specific methods that embody elements of creative theory. The elements of creativity they did learn were in a larger context of effective teaching methods, for example, developing positive relationships, creating a student-centered environment, and providing adequate resources. Such strategies are key to supporting students' creative development, but such strategies are also key for effective teaching practice in general.

Without targeted, direct instruction on creativity theory and pedagogies, the participants missed some critical aspects that could greatly benefit their teaching and learning environment; for instance, understanding the types of creativity as developed by Kauffman and Beghetto (2013). Participants could work with student to develop their command of "mini-c" creativity which is primarily to satisfy the individual; "little-c" creativity, which focuses on every-day kinds of creativity and is appropriate for high school audiences of the classroom or student organizations; or preparing students to grow into "Pro-C" which begins creating at the level of an expert or professional. By understanding the different types of creativity, teachers may be more

firmly positioned to better develop lessons and activities that effectively support a targeted type of creativity. Other aspects of creativity theory that would be beneficial for teacher preparation and professional development include possessing an awareness of student behaviors during the creative process (Westby and Dawson, 1995), and appreciating the impact and role of the physical (Hetland, Winner, Veenema, and Sheridand, 2013) and social emotional (Amabile, 1996) environments in creative learning. A deeper understanding of such concepts could lead to more effective classroom implementation resulting in greater creative skills development in students.

Also, Andiliou and Murphy (2010) in their review of research on conceptualizations of creativity note that "no direct links were made in most of the reviewed studies between teachers' espoused beliefs and their enacted classroom practices" (p. 216). This study examined both the participants' conceptual understanding of creativity and the participants' enacted pedagogical practices that supported creative development in their students.

The World Economic Forum (2015) established a list of sixteen global, 21st Century skills that will be highly sought after, if not required, for success in the current and future workforce. Creative skills were in the top portion of this list. Other professional organizations and collectives across the world (including, but not limited to The P21 Partnership, The Change Leadership Group at Harvard, National Center on Education and the Economy, and the Great Schools Partnership) also called for human capital in the form of creative ability. But what research is currently showing is that creativity, along with other 21st Century skills are not being learned in schools, but are learned in the workplace after graduation (Gallup, 2015).

This study aligned with those findings. As discussed above, the teaching and learning that the participants prepare for and their students engage in predominately cultivated critical-

convergent thinking. According to the body of research currently existing on creative theory, assisting students in developing creative skills requires both critical-convergent and creative-divergent thinking. The need for cultivating both creative-divergent and critical-convergent thinking was first evidenced with Guilford's (1959) Structure of the Intellect (SOI) model. This model was the first not only to incorporate, but value the idea of divergent thinking, as prior models of intelligence focused solely on convergent thinking that concentrated on determining a singular, best answer (Starko, 2014). Teaching and learning that supports creative development in America has lagged ever since. The notion of creating multiple, varying, and sometimes even outlandish, yet valuable, outcomes and possibilities is central to the work of creative theorists such as Csikszentmihalyi, Amabile, Robinson, Sternberg, Gardner, Weisberg, Beghetto, and Kaufman.

However, the primary type of thinking skills taught by the participants in this study was critical-convergent thinking. Such teaching is supported by textbook corporations, professional development providers, and ultimately, testing companies. Standardized testing and its focus on critical-convergent thinking has become the lingua franca across educational entities to the exclusion of creative-divergent thinking. Creative-divergent teaching and learning is both challenging to implement and to assess, and therefore, is easily neglected regarding standardized testing. As Amabile states from her research, creative thinking and work "does not have a clear and readily identifiable path to solution" (1996, p. 35). It is understandable that the teacher participants in this study focused on methods, strategies, and activities that at their core cultivated critical-divergent thinking, as that is the primary skill that is tested.

Educators, researchers, and theorists who understand the personal and economic benefit of cultivating creative thinking skills and abilities for students are skeptical of such high-stakes,

standardized tests. Standardized tests, by their nature, focus on finding the best answer (convergent thinking) and may not be assessing properly for creative, digital-age skills (divergent thinking) we know are necessary for 21st century success. According to Sternberg and O'Hara (1999), "conventional tests of intelligence most often require convergent operations to produce a single correct answer to multiple-choice questions" and therefore exclude assessing for divergent thinking (p. 252). Gardner (2006) states that "assessment can be much broader, much more humane than it is now" and that "psychologists should spend less time ranking people and more time trying to help them" (p. 23). The industrial education complex is promoting an obsessive test culture that generates a tremendous amount of money despite the overwhelming understanding of and need for productive members of the 21st Century citizenry who will be required to fluidly exercise divergent thinking skills. It is not an issue between which is better—creative-divergent or critical-convergent, but a call to consider deliberate integration of creative-divergent teaching and learning in American public schools. A balance of both skills is needed, not a focus on one at the expense of the other.

Implications

1. Formal instruction regarding creative theory and pedagogies may be lacking in pre-service teacher preparation programs and in professional development for career teachers. To eliminate misconceptions regarding creativity and to strengthen student learning outcomes regarding creative skills, teachers need focused study on creative theory and pedagogies accompanied by professional development that helps teachers connect theory to practice.

Formal instruction on creativity theory and supporting pedagogies can fill in gaps of understanding and practice for many teachers attempting to support creative development in their

students. Such instruction can also clarify misconceptions regarding creativity in the teaching and learning environment. A misconception commonly held among participants in this study was that creative development is not essential to teaching and learning and furthermore is viewed as an additional teaching task. Effective instruction and professional support could assist teachers in understanding that creativity can be an integrated way of thinking, not an extra activity, and further implement teaching and learning practices that support such skill development.

Such formal instruction during pre-service training and professional development for career teachers can help education professionals to connect their understanding of effective, broad-based best-practices in pedagogy to specific elements and strategies that enhance creative growth in students. Teachers can use their current best-practices to scaffold their understanding of teaching and learning for creative development. Another professional support to consider is that of coaching. A creativity coach could work alongside a teacher supporting pedagogies for creative development. Co-teaching, observations and reflections, and model teaching could further assist teachers in connecting their conceptual understanding of creative theory to their actual practice of cultivating creativity in students.

2. Teaching and learning that supports creative development has been so neglected at the secondary level that such thinking and work feels foreign to both teachers and students. A balance of instruction that supports the development of both critical-convergent thinking and creative-divergent thinking is needed.

Business leaders know the value of creative skills. Teachers know the value of creative skills. However, significant barricades impede the path from classroom to workplace. These barricades come in the forms of instruments, tools, and training that support the industrial education complex's obsessive and lucrative fixation on standardized testing. The findings of

this study indicated that teachers spend a significant amount of time on test preparation, which aligns with the body of existing literature confirming standardized testing focuses on assessing critical-convergent thinking while neglecting assessment of creative-convergent thinking (Sternberg and O'Hara, 1999; Gardner, 2006). In American education, an inflated and systemic value has been placed on these high-stakes test results. Because of such an inflated value, teaching that supports anything other than critical-convergent thinking is sidelined.

However, the extensive focus on this singular cognitive skill is limiting in that it is not fully preparing students to best tackle the world's problems, or at least the problems of their daily worlds. Students may be set-up for future personal and professional failures if not assisted in developing cognitive skills that allow them to exercise creative-divergent thinking. Students, as they transition into their adult and professional lives, need to be able to find a myriad of possibilities in vast, unknown situations. One may even argue that neglecting to support such cognitive development is academic malpractice.

Over the past decade, business leaders' calls for employees with creative skills has intensified and grown louder. And, as this study evidences, teachers call for freedom to teach in ways that support creative development. However, these calls will not be satisfied until there is a reckoning and quite possibly a dismantling of the hyper-inflated value of standardized testing. Teachers may find business leaders as allies in such an effort.

3. School structures and practices that support teaching and learning for creative development are needed and appreciated.

This study found that in addition to the work students and teachers do in the classroom, there are inherent school structures that contribute to students' creative development. Three structures emerged from this study; a robust selection of elective courses, adequate class time (as

in a 90-minute block schedule), and quality, well-kept, and appropriately-outfitted teaching learning spaces. Though these structures fall to the management and purview of the building and/or district leadership, they are tools that further support classroom teachers in their creative work with students. Other school structures and practices could be identified and possibly implemented with continuous communication and collaboration between teachers and administrators. Some structures and practices would probably be unique to a given school or district based on many factors and realities; population, socio-economic factors, mileages, location, and the like.

Recommendations for future research

As this study was a case study, the conclusions drawn from the data provide a snapshot of four, second-year, high school English teachers in a limited geographical location, during one academic semester. Further research on this topic on a broader scale would provide valuable insight and understanding regarding the topic of teaching and learning for creative development.

The participants in this study had a foundational understanding of creativity theory and its application in the teaching and learning environment. They were fortunate that they had instructors who valued and supported methodologies such as arts integration and multi-media communication. However, the participants had some misconceptions about creativity and additional gaps regarding their understanding of the theory supporting some methods and practices. A broader exploration of teacher preparation programs could provide insight into how pre-service teachers are being trained to teach for creative development. A comparative study between programs that provide formal instruction on creative theory and practice and programs without such structured instruction would be a valuable contribution to the current body of literature on the topic.

As this study focused on the secondary English classrooms and teachers, it would be interesting to learn how other content areas incorporate pedagogies that support creativity development. More research is needed regarding specific practices that cultivate students' creative thinking in other content areas, specifically in areas outside of the humanities. Anecdotally, it seems that there are misconceptions as to content areas that are creative and non-creative. A formal study of instructional practices that support creative-divergent thinking in secondary mathematics or science classrooms, for instance, would benefit the body of research.

Though this area of study is growing, additional work in examining assessments of student learning that incorporates creative skills and abilities is drastically in need. Currently there is a disconnect between what skills are formally assessed and what skills are needed for success in personal and professional life. As discussed above, not only are creative skills not being formally assessed on a broad, national basis, limited teaching that supports such skill development is being implemented in classrooms. Further examination of this could have important economic impact.

Conclusion

This study examined early-career English teachers' conceptual understanding of and classroom practices related to cultivating creativity skills among students. The teachers participated in opening interviews, were subsequently observed three times (with the exception of one participant who was observed two times), and then completed closing interviews.

The data gathered during this study revealed that these teachers had a basic, foundational understanding of creative theory despite not experiencing direct instruction on creative theory in their teacher preparation program. This foundational awareness provided support for three of the four participants in implementing pedagogical practices that cultivated creative skills in their

students. Participants indicated that their understanding of creative theory and pedagogy came from their work with teacher-preparation instructors, their peer cohort members, and former teachers they had during their K-12 schooling.

The data for this study also indicated that the vast majority of learning in contemporary secondary English classrooms focuses on cultivating critical-convergent thinking skills, with limited, if any activities focused on developing creative-divergent thinking skills. The root cause of such a focus is the potential ramification of high-stakes, standardized testing results.

This study also revealed that in addition to the teaching and learning environment conditions under the control of the classroom teacher, there were inherent school structures that supported students in developing their creative skills and inherent school structures that detracted from creative skills development. All participants agreed on two beneficial, inherent structures, which were extended time block scheduling and a robust selection of elective courses. All participants agreed on one inherent structure that detracted from cultivating creative skill, which was an extensive focus on standardized testing preparation

The final finding of the study revealed that three of the four participants had alignment between their conceptual understanding of creativity and their pedagogical practices that supported creative development in their students. One participant struggled to incorporate pedagogical practices that supported her understanding of creativity.

Overall, this study provided a rich exploration of secondary English teachers and their conceptual awareness of creative theory. How their understanding manifested in their professional practice was insightful to observe. The data and subsequent findings of this study open the door for additional, deeper, and broader examinations of the topic.

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APPENDIX A

UNIVERSITY OF ARKANSAS

Office of Research Compliance
Institutional Review Board

March 1, 2016

MEMORANDUM

TO:	Jennifer Jennings Davis Christian Goering
FROM:	Ro Windwalker IRB Coordinator
RE:	New Protocol Approval
IRB Protocol #:	16-02-497
Protocol Title:	*Cultivating and Developing Creativity in Secondary Students: A Multiple Case Study of Early Career English Teachers' Perceptions*
Review Type:	☐ EXEMPT ☒ EXPEDITED ☐ FULL IRB
Approved Project Period:	Start Date: 02/25/2016 Expiration Date: 02/24/2017

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (https://vpred.uark.edu/units/rscp/index.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 6 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

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