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Curriculum Adaptations to Teach for Creativity Using a Published Language Arts Curriculum

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CURRICULUM ADAPTATIONS TO TEACH FOR CREATIVITY USING A PUBLISHED
LANGUAGE ARTS CURRICULUM

by

Barbara T. Prendergast

A Dissertation Submitted in
Partial Fulfillment of the
Requirements for the Degree of

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December 2022

ABSTRACT

CURRICULUM ADAPTATIONS TO TEACH FOR CREATIVITY USING A PUBLISHED LANGUAGE ARTS CURRICULUM

by

Barbara T. Prendergast

The University of Wisconsin-Milwaukee, 2022

Under the Supervision of Professor Nancy File

The purpose of this qualitative action research study was to examine a published language arts curriculum, determine how Anna Craft's possibility thinking framework could be integrated into the curriculum, and then observe how students responded to the implementation of lessons integrating the elements of possibility thinking. The findings revealed that a teacher can use the possibility thinking elements to encourage creativity while still teaching the objectives of a published curriculum. Creativity development can be encouraged by using a variety of supports that build possibility thinking. The data demonstrated a connection between life experiences and the curriculum through possibility thinking. The data also indicated that visual bridges in connection with writing can encourage the imagination. Flexible story structure and independent learning featured narrative as a tool to encourage the possibility thinking elements through dance, creating stories, and puppet plays. In addition, problem-solving played a key role when connected with narrative and collaboration to support the encouragement of creativity through the possibility thinking elements. Where students were engaged in collaboration, narrative, and problem-solving activities in connection with literacy instruction, it led to an increase in possibility thinking amongst students.

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To
my parents,
my sister,
my brother, and all the children I teach

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Chapter 1: Introduction

In this study, I conducted a content analysis of a mandated prescribed literacy curriculum (*Journeys* published by Houghton Mifflin Harcourt) through the lens of Anna Craft's view of creativity. Second, I adapted a unit of the *Journeys* curriculum using Crafts' view of creativity as a framework. Third, I taught the lessons using Craft's view of teaching for creativity, and examined the process as a self-study using teacher action research. This study aims to encourage creative thinking in students by integrating Anna Craft's theory into a published curriculum. In addition, I discuss my own learning through the study process.

Problem Statement

Scholars have pointed out that both in-service and pre-service teachers value developing and supporting creativity among young children (Eckhoff, 2011; Leggett, 2017). The importance of the role of the teacher in helping develop students' creativity is also well documented (Davies et al., 2014; Kampylis et al., p. 2009). Despite that, teachers have felt constrained by external factors of prescribed curricula, pressure to teach to the test, and having little time to plan and teach beyond those goals. Further, teachers have noted that the barriers that prevent them from engaging students in creativity include a lack of knowledge regarding creativity and experience implementing the same (Eckhoff, 2011; Leggett, 2017).

Reasons to support integrating teaching techniques for the development of student creativity include fostering social relationships, affirming identity, developing new understandings about the world, encouraging personal connections to academic content, engaging with that content, and developing imagination, creativity, and possibility thinking (Adomat, 2009; Ahn & Filipenko, 2007; Mountain, 2007; Rosler, 2008; Jeffrey, 2006; Kim et al., 2019). Children benefit from an arts-integrated curriculum, including storytelling, play, and

drama (Adomat, 2009; Ahn & Filipenko, 2007; Carpenter & Gandara, 2018; Drake & Reid, 2018) because “they can visualize new solutions to the problems of today’s and tomorrow’s workforce, social fabric, and wider environment” (Kessler, 2000, p.188). The climate in which creativity is nourished is often when freedom of inquiry is acceptable. However, in some educational institutions, teachers follow scripted curricula and ask questions listed in these curricula where only one answer is the correct answer, listed in the teacher’s edition. It can be challenging for teachers with such constraints to develop unique solutions to meet this professional challenge (Craft, 2002).

While creativity is recognized as necessary among early childhood educators, in urban American public school classrooms, the emphasis on teaching to the test often prevails over teachers’ motivation to find time to include creative activities for students. Teachers are so discouraged by curricular requirements, administration, colleagues, and proficiency testing that they fail to implement creative and imaginative teaching and learning practices in the classroom, even though they value these methods or, in some cases, have been trained in these strategies (Brill, 2004; Oreck, 2006; Ranz-Smith, 2007).

According to Kim (2011), creativity in young students has decreased statistically since the 1990s, a point also made by Hennessey (2015), who reiterates that creativity in schools has been deteriorating in the past thirty years. The increasing emphasis since the year 2000 on teaching the basics and on standardized tests in No Child Left Behind (NCLB) and the Common Core State Standards (CCSS) (Olivant, 2015) have too often resulted in teachers and schools being judged by scores which might determine whether they are using the mandated curriculum in the mandated way. Similarly, students are judged by their test scores to determine if they are learning the required information. Many directors of educational programs lament that the

accountability movement has sapped the creativity out of their programs (Bloom, 2012, p.10). Educators are directed to use pre-packaged curricula that require limited choice or creative ideas from the teacher (Au, 2011; Crocco & Costigan, 2007; Elliot, 2018).

Whereas creativity is not new to language arts classrooms, common core state standards for language arts do not emphasize creativity. Schuster (2010) states that:

the ability to confront and deal with reality by using the creative power of the mind, is a critical faculty in our world. And where better for it to be nurtured and to flower forth than in the writing classroom? Yet, if we examine the draft standards for English Language Arts from the Common Core State Standards Initiative, a project led by the National Governors Association and the Council of Chief State School Officers, we find imagination mentioned nowhere. In fact, most of the 18 proposed writing standards are singularly unimaginative. They are also woefully out of balance, in the direction of relatively noncreative forms of writing. (p.23)

There is a lack of agreement about practical solutions for incorporating creativity into schools and precisely how and if creativity can grow within the constraints of mandated curricula and standards (Au, 2011; Baer, 2017; VanSlyke, 2017; Elliot, 2018). Many researchers have found that in high-stakes teaching environments which include pre-packaged mandated curricula that prepare students for testing, fostering student creativity suffers because teachers lose the ability and motivation to plan lessons that encourage it (Au, 2011; Baer, 2017; Colin, 2017; Elliot, 2018; Olivant, 2015). Researchers maintain that student creativity is hindered if the curriculum is constrained, as is the case with implementing mandated scripted commercially packaged curricula (Bloom, E. & VanSlyke-Briggs, 2019). Therefore, the ability to try to plan and implement the kinds of lessons that would teach students creativity or “out of the box”

(Crocco & Costigan, 2006, p. 9) thinking is prevented (Bloom, E. & VanSlyke-Briggs, 2019; Crocco & Costigan, 2007; Olivant, 2015; Au, 2011). However, some researchers have suggested that creativity can be woven into various instructional approaches and prosper even with the constrictions and controls in public education in the United States (Beghetto et al., 2015) and that information about effective ways to incorporate creativity into environments with accountability constraints is needed (Au, 2011; Beghetto et al., 2015; Beghetto, 2019). There is a tension between responding to the creative needs of children and adhering to standardized curricula which requires the teacher to discover what is of value and find a healthy balance between these ideas (Colin, 2017; Elliot, 2018; Olivant, 2015; Von Heydebrand, 2004). Methods that teach for creativity are one way to meet the challenge of re-balancing pedagogy. Teachers can take a central role by “stepping between what is easily measured and what can’t be easily measured” (Burnard & White, 2008, p.677) to support students. This support will further the development of creativity, preparing students for their future (Craft, 2000; Craft, 2002; Kim, 2011; Lassig, 2021; Olivant, 2015). This study contributes to the literature supporting ways to build creativity into prescribed curricula by documenting the action research I undertook.

Study Purpose

The purpose of this study was to examine a published language arts curriculum to determine how Anna Craft’s possibility thinking framework could be integrated into the curriculum and taught to encourage student creativity in my second-grade classroom. The aim was to observe how students responded to lessons integrating the elements of possibility thinking. I also documented the changes in my teaching awareness and growth in the process.

Research Questions

The study focused on the following questions:

RQ1. What are the challenges and opportunities in the Journeys curriculum as identified through the lens of Craft's theory of possibility thinking?

RQ2. How can a teacher adapt the Journeys curriculum when looked at through Anna Craft's lens of possibility thinking?

RQ3. How does a teacher implement creative teaching and learning methods in order to teach for creativity in a mandated prescribed curriculum?

RQ4. How do students respond to lessons which integrate possibility thinking?

RQ5. How did the action research affect my growth as a teacher?

Significance of the Study

Encouraging young children to develop creativity is a complex task, and it is especially challenging to teach creativity to children within the constraints of the accountability movement within the public-school system in the United States. The related creativity literature often tends to use vague definitions of creativity (Colin, 2017) and includes very little empirical research on encouraging creativity with students learning from a mandated prescribed curriculum. Creativity in schools is marginalized because of the demands of time required to be spent on mandated curricula and assessments (Baer, 2016; Beghetto, 2005). Students who demonstrate creative behaviors are stigmatized because creativity is not valued (Robinson, 2015). Teacher autonomy and creativity are challenged because of the requirements of mandated curricula, including limited time to cover content (Barnes & Cremin, 2018), which undermines teachers' ability to encourage creativity in their students (Crocco & Costigan, 2007; Elliot, 2018; Oliviant, 2015). The significance of the study lies in my decision-making regarding curricular requirements and

creativity and students' responses to the curriculum's connection with creativity as an attempt to develop possibility thinking in students. I undertook this study to understand how, as a teacher committed to creativity, I can find ways to teach a prescribed curriculum that can encourage students to explore their own creativity and imagination.

Guiding Conceptual Framework

For my study, I used Anna Craft's (2002) lens of "little c creativity" (p. 1), which she calls possibility thinking: the driving force of creativity (Craft, 2001), to examine the Journeys second-grade literacy curriculum. I use the possibility thinking framework because creativity in that framework is considered ordinary, everyone is creative, creativity can be developed, and there is a focus on encouraging creativity in children in educational settings (Craft, 2001). To illustrate possibility thinking, Craft (2001) gives an example involving cooking a meal with minimal ingredients. A person engages in possibility thinking because the meal needs to change as there are only a few ingredients. The person cooking the meal must think of another possibility and consciously create something new. This example illustrates a challenge (Craft, 2001) requiring a new possibility to solve a problem.

This study will benefit teachers who value creativity and want to encourage students to develop possibility thinking to explore and experiment when problem-solving through creative activities while still navigating the constraints of curricula in the accountability movement.

Definition of Creativity in the Possibility Thinking Framework

Creativity is at the center of this study and is an important focus when educating children. I will use the following operational definition of creativity in this study, focusing on Craft's (2002) view of creativity. The central understanding is that all individuals can be creative; therefore, Craft (2002) calls this everyday creativity or little-c creativity. Creativity occurs when

an individual engages in an imaginative pursuit, resulting in original or innovative outcomes. Imaginative activity involves taking risks and may be observed when the individual engages in play (connected to narratives), being imaginative, or question-posing. Outcomes may include products, behaviors, or ideas. What is innovative or original can be original to the individual or the surrounding community but does not need to change a field or domain to be considered creative. Creativity can occur across domains and is not limited to the arts. At the heart of creativity is possibility thinking (Craft, 2002). Craft (2002) calls it “lifewide” (p.1) because the ability to think of possibilities will help individuals when they face challenges that they meet during their lifetime.

Organization of the Dissertation

This dissertation is divided into five chapters, including the literature review, methodology, study environment and findings, and discussion. Chapter 2, the literature review, makes a case for the importance of teaching for creativity while reviewing creativity literature, including an explanation of possibility thinking and empirical studies related to creativity in classrooms. This chapter also examines the literature on teaching for creativity while in the accountability movement. Chapter 3 describes the methodology used in the study and outlines how the content analysis and action research were organized. Chapter 4 describes students' responses to the lessons and discusses the findings related to students' responses to the lessons, including how their responses are related to possibility thinking. Chapter 5 discusses how this study relates to the literature in the field and describes the study's conclusions, implications, limitations, and the possibilities for future research.

Chapter 2: Literature Review

The purpose of the study was to examine a mandated literacy curriculum and the extent to which it could be adapted to include activities that would encourage possibility thinking during literacy instruction. Chapter 2 provides a discussion of views of creativity, how possibility thinking fits with those views, classroom creativity practices, and a fuller explanation of the possibility thinking framework. The review of existing literature begins with a summary of the history of creativity research. Following this, I examine the Four P's model of creativity used in the creativity literature to organize multiple creativity theories (person, process, product, and press/environment). The differences and similarities between the possibility thinking framework and these views of creativity will be highlighted as well as possibility thinking's relationship with the Four C's. Next, I describe the possibility thinking framework as a model that could support and enhance teaching for creativity within a prescribed curriculum. I also review the existing literature on movement, drawing, puppetry, and creative collaboration connected with learning. In addition, since this study takes place in an urban setting with African American students, I will discuss how educators have used culturally relevant pedagogy in connection with creativity and learning.

Historical Overview of Creativity

According to Runco & Albert (2010), a systematic study of creativity began in the nineteenth century. At the beginning of the twentieth century, creativity research moved from theoretical discussions by philosophers and psychologists to empirical studies in psychology (Runco & Albert, 2010). Runco & Albert (2010) explain the four major emerging areas that informed future creativity models. The areas can be categorized as psychoanalytic, cognitive, behavioristic, and humanistic. In the psychoanalytic tradition, psychologists such as Freud held

that creativity resulted from the unconscious biological drives of the individual determined to seek pleasure. Behaviorists also believed creativity was connected to the unconscious (possibly memory); however, it was impossible to see or study the impulse to be creative because the unconscious cannot be observed. Therefore, researchers held that the only way to determine the characteristics of creativity is to study what can be observed, even though the origin of creativity is in the unconscious. The cognitive tradition involves approaching problem-solving with unique solutions (Mayer, 1989). The humanistic tradition includes the belief that the self, through the creative process, becomes aware and creates or actualizes itself. “Self-actualization means experiencing fully, vividly, selflessly with full concentration and total absorption” (Maslow, 1976, p. 44), meaning the individual must be connected to the present moment to be creative (Maslow, 1976). Maslow drew on psychology and philosophy to create his theory of creativity. As this illustrates, there are many different views of creativity, and no agreed-upon definition or theory exists in the literature.

In the 1950’s Guilford connected creativity with divergent thinking. Creativity research moved from theoretical discussions to empirical studies which targeted various factors, such as how the environment affects creativity, what characteristics a creative person has, and the process a person goes through when creatively solving a problem.

The Four P’s Model of Creativity

Mel Rhodes (1961) collected forty definitions of creativity and sixteen definitions of imagination and examined how these definitions overlapped. When he analyzed the ideas, he found that they fell into four categories or strands, out of which he developed the model of the Four P’s. The first of the Four P’s is the Person, defined as the individual creator's personality, temperament, and values. The second P is Process which includes mainly internal factors

involved in creating, such as motivation, learning, and thought. The third element is Press, the relationship of the person with the environment, including the individual's ability to form ideas through imagination, sensations, and perception. The final P is Product, which embodies the idea formed into an artifact representing the new idea (Rhodes, 1961). Researchers have used this Four P Model of creativity to organize their concepts of creativity within the creativity literature.

The Four P's will be used to illustrate how Craft's view of creativity fits within this model of the Four P's to further describe Craft's view in an organized and accepted model within the field of creativity.

The Creative Person

The Creative Person in the Possibility Thinking Framework. The possibility thinking framework (Craft, 2000) further develops previous models of the creative person. Previous models focused on personality traits, including openness to experience, self-confidence, and a willingness to take risks (Barron & Harrington, 1981; Russ, 1993). The possibility thinking framework explains inner activity concerning the identity of the creative individual and includes relationships as an essential component. Creative people have a sense of mastery and agency over their environment, enabling them to actualize their choices to build their identity. An individual has the disposition to be creative, but creativity can also be developed. In Craft's view, one unique aspect of the creative person, which separates it from many other models, is that every individual can be creative. Another element that distinguishes this view is the humanistic belief that there are two selves: the conscious I aspect which is conscious and rational, and the Me aspect, which is unconscious and intuitive. The conscious I (transcendent) transcends the Me and can make choices (Craft, 2000). The 'I' can choose to be creative—the 'conscious I' can choose to focus on a creative goal or the imagination. The 'conscious I' transcends and chooses

to be creative, drawing on aspects of the unconscious Me. One aspect of the self has a choice, and the other aspect of the self does not have a choice because it is unconscious and cannot make conscious choices or decisions.

The relationship element is another aspect of the creative person that separates the possibility thinking framework from the other models. Although not explicitly stated in the possibility thinking framework, the studies on possibility thinking indicate that the relationship with oneself, others, and the domain (environment) in which one works is crucial. If an individual has a healthy relationship with oneself (i.e., openness to one's ideas free from debilitating criticism), this can help lead to creative action. The better the relationship is with those with whom one works, the more likely collaboration will be creative. Empathy towards others can be an example of an outcome of creative collaboration. Intelligence and creativity are related; however, creativity is more than a narrow set of rational abilities. For example, Craft (2000) wrote about the unconscious intelligence that belongs to the individual and supports the ability to access the unconscious to feed possibility thinking.

The possibility thinking framework includes the seemingly paradoxical qualities of divergent and convergent thinking as aspects of the creative individual. Divergent thinking is “thinking from ‘what if,’ association, intuition and possibility; beginning from questions -why? how else? Instead of thinking in a linear fashion” (Craft, 2000, p. 30). Convergent thinking is “finding possibilities which fit a set of needs; this is how the end stage of problem-solving is completed” (Craft, 2000, p. 30).

Another element not featured in other creativity models is an emotional state. The feeling as though one is “under siege” (Craft, 2000, p. 29) while engaging in creativity. This pressure does not need to be connected to creative work. For example, a parent or teacher might feel

tremendous pressure from others while engaging in a significant creative task. This pressure (even though it is not connected to the creative endeavor) seems to energize the creator, which furthers her creative achievement. The possibility thinking model includes agreed-upon characteristics of the creative individual in the research and enlarges the view of the creative person by adding new traits that the creative person possesses. The next feature of the Four P's model of creativity is the creative process.

The Creative Process

Stage theories and componential theories divide creativity into components or stages that describe the individual's internal creative process. These stages or components primarily focus on internal elements which describe an individual's process and the traits of the creative person. Various stage theories explain the creative process by listing and defining stages of creativity that an individual might experience internally, and componential theories examine the social and psychological components needed for a person to be creative.

While there are various stage theories, the classic four-step process of creativity includes preparation (analysis of the problem), incubation (taking a break, letting the unconscious take over for internal associations to take place), illumination (the idea comes to consciousness), and verification (developing the idea) (Baer et al., 2015; Lubart, 2001). However, the classic stages also turn creativity into an internal process without explaining how the internal process connects with the external components. In other words, the external process related to the social environment (e.g., collaborative work) and the construction of a product is not made explicit in the four-step view of creativity (Glaveanu, 2013). Another theory is called the Componential Theory of Creativity. The features of the componential theory are primarily internal and include expertise in a domain, cognitive processes that influence innovative thinking, and an individual's

motivation that encourages interest and engagement in challenging activities (Amabile 2013). The one component that is outside the individual is the social environment.

As illustrated in the explanations, both stage and componential theories of creativity emphasize understanding the internal creative process while omitting explanations that would illustrate a balance between internal and external factors in the creative process. Craft's theories of creativity focus on this balance between external and internal processes.

The Creative Process in the Possibility Thinking Framework. The interdependence between internal and external components allows teachers to identify strategies that promote students' creativity. The connection between possibility thinking as a driver of creativity is demonstrated through the internal and external components of Craft's (2000) "creativity cycle" (p. 31), which consists of five stages.

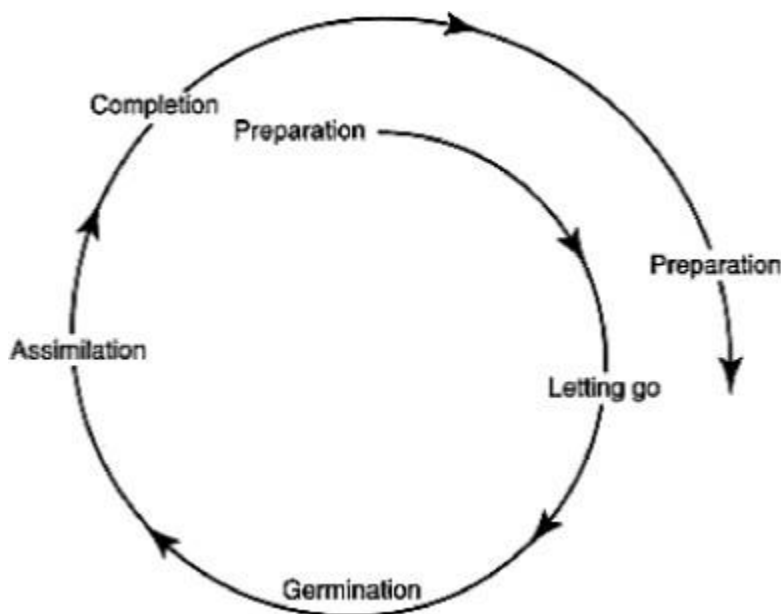


Figure 1. The creativity cycle. Reprinted from *Creativity Across the Primary Curriculum: Framing and Developing Practice* (p. 31), by A. Craft, 2000, New York, NY: Routledge. Copyright 2000

In Craft's (2000) view of creativity, the creative process does embody a powerful internal impulse as its foundation. However, this internal foundation transforms as it spirals outward and eventually reaches the external processes. This creativity cycle, which looks like a spiral when drawn, shows the dynamic relationship between internal and external forces. The inward part of the spiral is the internal aspect of the process of creativity, and as it turns outward, it reaches the external processes. The spiral can move out into the world and back into the individual's internal process (Craft, 2000).

The creativity cycle has five components that demonstrate a connection with possibility thinking. The first stage is the Preparation stage, which involves an emotional attitude (Craft, 2000). Craft (2000) explains the second stage as Letting Go, which is internal; however, it can be triggered by external events such as play, which can involve exploring many possible scenarios. Germination involves insight and decision-making when a new idea is chosen from various possibilities and takes root. Following the Germination stage is Assimilation, an internal unconscious stage when ideas or possibilities are completed or built upon without the individual being aware of the process (usually when engaged in another activity). During teaching, this may mean that students take a break, have a snack, or engage in another activity before coming back to the creative activity.

The final stage is Completion, when individuals actualize their creation's product (idea, invention, or behavior) out into the world. For example, the child writes a final draft of a poem, editing and illustrating it. The foundation of possibility thinking is laid by examining how the opposite poles of internal and external processes integrate into an exploration of imaginative activities (e.g., imaginative play, problem-finding, and problem-solving). Craft (2000) holds that the impulse to be creative comes from internal processes such as the unconscious, intuitive,

spiritual, and emotional elements and is externalized through imaginative play. The individual is not necessarily aware of the internal creative impulse but may be aware of the emerging problem and solutions that connect with the imagination. The unconscious self works on the possible solutions to a problem, and the conscious self, the I, chooses the solution from the possibilities (Craft, 2000).

Furthermore, it may be that rather than being given a problem to solve, individuals find problems to solve while imagining various possibilities through play (imaginative play, acting out a skit, exploring and experimenting with materials). Giving students opportunities to engage in creative processes allows them to work collaboratively, discover problems, apply what they know, persevere through challenges, find innovative solutions, and lead their own learning (Glaveanu, 2013). Recognizing the relationship of imaginative activities to internal and external processes of creativity allows for a vehicle through which practical investigations of possibility thinking can occur.

The Environment of the Possibility Thinking Framework

The environmental characteristics that support personal creativity (rather than creativity that only experts in the field can recognize) are positive, supportive feedback; time without the worry of constant evaluation and monitoring; encouraging exploration; and the integration of personal interests, perspectives, and experiences into learning. An environment where individuals can learn from mistakes rather than be penalized promotes creativity. Comparing one's creative work with one's previous endeavors rather than competing with others also promotes creativity. Allowing students the freedom to be messy with ideas, take intellectual risks, allow for emotional expression, and encourage meaningful options, choices, and opportunities are all practical suggestions that the teacher can implement when trying to build an environment

where creativity can flourish (Baer et al., 2015; Craft, 2000). A creative environment might involve a commitment to conceptual space and physical space in the classroom. For example, conceptual space might include more time given to students for projects (Craft, 2002). The classroom must include various materials available to students and space to collaborate in groups and pairs. It is essential to allow for personal styles of creating, fostering self-worth and self-esteem, and setting achievable challenges to build confidence. The relevance of learning activities to students and discovering student perspectives regarding what they are learning is also essential. How to negotiate the gap between public knowledge of standardized curricula and the students' knowledge is essential for teachers to encourage a creative environment (Craft, 2000).

According to some researchers, there is a relationship between the creative environment and the creative process. If the environment encourages creativity, it can influence the creative traits of the individual. For example, according to Baer et al., (2015),

a conducive environment for creativity can support autonomy and intrinsic motivation and promote a wide array of adaptive learning behaviors, including self-determination, curiosity, sustained engagement, positive emotions, positive self-worth, optimal challenge seeking, deeper understanding, self-regulated learning, better academic performance, and general well-being. (p. 51)

The connection between the creative environment and the creative process is a relationship that is an essential aspect of Craft's view of creativity.

Craft's (2002) view of the creative environment is a part of the Preparation stage of her creativity cycle. There are many possible ways in which an individual prepares for the creative process, both internally and externally. For example, an individual might need a physical space

to work that encourages creativity, a particular emotional attitude, time, or the opportunity to collaborate with others. The connection with the environment, allowance for time, and engagement in collaborative work are helpful considerations when planning lessons to enhance creative thinking (Craft, 2002).

Constraints on the Environment. Some aspects of the environment in the accountability movement might deter individuals from accessing their creativity. Some of the elements that may constrain creativity in individuals are factors that are determined in advance, such as time pressures, over-supervision, competition rather than collaboration, restricted choices in terms of the instructional and learning approach or resources, or where evaluation (e.g., assessment) is expected (Amabile & Pratt, 2016). These components are constraints in the environments under the umbrella of the accountability movement in public school systems in the United States. Commercially packaged curricula play a part in these constraints through time restrictions (pacing guides, mandated schedules) and limited choices (limiting learning styles).

For example, the Journeys language arts teacher's manuals, student editions, and curriculum books potentially tie teachers and students to one way of thinking, learning, and teaching. Curriculum books are a "one-size-fits-all product" (Lent, 2012, p. 4) since they need to focus on specific areas to address state mandates. For example, Journeys differentiates by ability rather than learning style. Regardless of where students live, who they are, or their background, all students learn academic content the same way using a standardized curriculum such as Journeys. According to Journeys, knowledge is built and activated (Houghton Mifflin Harcourt, 2015). The kind of knowledge that is central to the publishing company is conceptual content knowledge. There is room for prior knowledge; however, the expectation is that if the child has little prior knowledge, the teacher builds that content knowledge for the child (Houghton Mifflin

Harcourt, 2015). This view hints at a rationalist abstract view of knowledge. It opposes the view that students need to explore and discover knowledge. It leaves little room for the freedom, independent thinking, and learning choices that can lead to creativity.

Even when some publishers of standardized curricula update student and teacher editions, they add pictures and technological pieces rather than improving content and instruction (Jobrack, 2012). For example, when examining the Journeys curriculum published before and after the common core standards, many elements were the same except for the references to the standards at the bottom of the pages.

Even though mandated curricula have constraints, Craft (2002) offers suggestions for activities that might stimulate thinking which encourages possibilities. Her suggestions include story-telling, simulations, dramatic play, open-ended scenarios, role play, fantasy modeling, puppetry, and improvisation (Craft, 2002).

The constraints researchers describe in organizational theory (Amabile, 2013) can be illustrated further in the educational environment. For example, assessment is expected and an integral part of all aspects of standardized curricula. Students come to expect assessments, and therefore the creativity with which they might be able to engage is stifled through this expectation. Unannounced observations and district walkthroughs are examples of over-supervision. This type of over-supervision may deter teachers from letting students engage in activities that promote creativity because they appear to deviate from the expectations of the standardized system (i.e., standardized curricula, standardized assessments, standardized procedures, the common core state standards, and time on task). Over-supervision can promote an environment of fear, and fear plays a part in suppressing teachers' creativity, affecting students' creativity. Students do not have the opportunity to engage in activities that may

support their creativity if teachers do not provide those activities. Rewards determined in advance may not necessarily be a part of the standardized curricula; however, many teachers give external rewards to motivate students to work because students may not be motivated by the activities in the standardized curriculum. Rewards may also encourage students to make an effort on standardized assessments. Competition is integrated into standardized assessments within the curriculum. For example, assessment scores are compared with other students' scores to rate proficiency. Competition with others rather than self-evaluation is encouraged in some schools. As illustrated, the environment of the accountability movement deters creativity on many levels.

Creativity Thrives within Environmental Constraints. The view of constraints and creativity is quite different when examining the literature on organizational creativity research. Constraints on creativity are often portrayed as problematic in educational research since they often appear to obstruct freedom, as has been noted. Some creativity researchers in the field of organizational creativity welcome the use of constraints because the constraints highlight barriers that must be crossed to maintain inventiveness, providing a respite from the ordinary and the unimaginative (Amabile, 2013). In organizational creativity, research hindrances (for the researchers) and obstacles are not undesirable; instead, they are often weapons the creative individual uses to defend the imagination (Amabile, 2013). The view is that creativity not only exists within constraints but thrives within constraints. The balance between constraints and freedom allows individuals to engage in the creative process (Amabile, 2013). Constraints guide decision-making to ensure an objective is reached. Individuals need to know the limitations of materials and ideas in order to expand ideas.

Understanding the constraints can help to guide progress. The pressure of time limits might

encourage the individual to think of inventive solutions. The belief is that constraints are not the boundary of creativity but its foundation. Constraints can sometimes stimulate individuals toward creativity (Kamoche et al., 2001). The limits allow other avenues to be explored which might not have been examined. This view helps to support the idea that creativity can be taught within the constraints of standardized curricula. Working within limitations can be easier than when the options for solutions are so expansive that it can be challenging to narrow down those solutions.

Creative Product

The fourth and final component examined is the outcome or product of creativity. Some researchers believe that the product is the essential element of creativity. They define creativity based solely on the product. Halpern (2003) states that the only thing that matters to be creative is a creative product. She dismisses the other elements of creativity that some researchers believe are essential. Mumford (2003) states that researchers have agreed that creativity depends on the innovation and usefulness of the product. Some researchers believe that creating a product is essential to creativity and that the product needs to be useful for it to be creative (Andreasen, 2005). Runco (2007) describes the significance placed on products as “a view that is biased toward products and biased against individuals who have potential but are not yet expressing it or not expressing it in widely recognized ways” (p. 385). Some researchers in creativity research hold that the final product can be an idea, a behavior, or an act rather than a tangible material product; however, there is disagreement about who determines if a product is creative (i.e., the individual, the surrounding community, or experts in a domain). Many researchers accept that a product is determined to be creative if it is new and innovative within the social structure; however, there is disagreement about which aspect of the social structure decides whether a

product is creative.

The Creative Product of the Possibility Thinking Framework. According to Craft's (2000) view of creativity, a student who creates a new and innovative product within the classroom's social structure can be considered creative (even if it may not be new to a domain). For example, imagine a student poses a problem (a lion has fallen in the moat surrounding its enclosure at the zoo). The student must build a contraption to rescue the lion using a small representation of a lion and materials (e.g., Legos, pulley, and string). The student builds a model to rescue the lion which the teacher and student determine is an innovative solution in that classroom community, so the product is labeled creative. However, Craft (2000) also holds that there is such a thing as personal creativity, meaning that if something is unique to the individual, it can be called creative. In contrast, some theorists believe that an object is creative only if experts in the field decide that the product changes the domain, which would mean the student's solution for the lion would not be creative (Csikszentmihalyi, 1996).

The Four C's Model of Creativity

A more recent model of creativity is the Four C's model of creativity (Baer et al., 2015), which expanded studies of the creative personality and creative product. Baer et al. (2015) divide creativity into four categories: mini-c: personal creativity; little-c: everyday creativity; pro-c: professional creativity; and big-c: legendary creativity. All individuals are capable of being creative; however, the degree to which they are creative is mainly determined by the creative product and the influence of the product on the individual and society. They added mini-c, or personal creativity, to recognize students who build their world knowledge through learning. "Mini-c is the novel and personally meaningful interpretation of experiences, actions, and events" (Beghetto & Kaufman, 2007, p. 73). Mini-c recognizes the importance of students'

creative insights while learning a new subject matter. When students gain knowledge, they bring interpretations and insights from their society, cultural backgrounds, and personal experiences (Beghetto & Kaufman, 2007). The idea of mini-c creativity attempts to recognize these interpretations as part of the creative process when an individual learns; however, Beghetto and Kauffman (2007) do not claim that learning is creative. The recognition of mini-c acknowledges that interpretations in mini-c creativity are the beginnings of future expressions of little-c and big-c creativity.

According to Baer et al., (2015), little-c or everyday creativity is unique to an individual and might occur daily (for example, a child's drawing). Pro-c or professional creativity is assigned to professionals who have not yet made an impact over time but are still deemed creative in the field. Big-c or legendary creativity is reserved for individuals who impact their field (for example, Leonardo Da Vinci influenced the field of painting, and Agatha Christie influenced the field of mystery writing). In the Four C's model, the source of intrinsic motivation for the individual is seeing the value of a task and focusing on improvement.

The possibility thinking framework focuses only on little-c or everyday creativity; however, little-c creativity in the possibility thinking framework is different from little-c creativity in the Four C's model of creativity. The view of creativity in the possibility thinking framework connects with the Four C's view of mini-c creativity; however, the possibility thinking framework expands on this model. Craft (2002) proposes "little c creativity, as a way of conceptualizing creativity" (p. 39) and provides a rationale for the case of "ordinary creativity as a desirable learning outcome in the education of children aged three to eight" (Craft, 2002, p. 39). The following section will explain this conceptualization of creativity and the rationale for everyday creativity.

Little-C Creativity According to the Possibility Thinking Framework

Possibility thinking “can be understood as being at the heart of little c, or every day (as opposed to big c, paradigm-shifting) creativity in enabling the transformation from ‘what is this?’ to ‘what can I or we do with this?’” (Craft, 2013, p. 128). As the attributes of little c creativity are explained in this section, the definition of possibility thinking is constructed. According to the possibility thinking framework, little c creativity is available to all individuals and can help students with some of the challenges they might encounter. Craft (2002) examines the context in which early childhood education is set and identifies key challenges that are a part of society and which may make creativity necessary in education. Students need to be prepared for the unexpected in our society (Craft, 2002). She cites changes in technology and a globalized marketplace that calls for individual agency, which she identifies as self-determination. Students need to develop the skills to make decisions and choose pathways in life courageously.

In the possibility thinking framework, the answer to these life challenges is little-c creativity, also described as “personal effectiveness” (Craft, 2002, p. 43). Little-c creativity is the ability to “route-find throughout the many choices to be confronted in life” (Craft, 2002, p. 44). “Personal effectiveness” (Craft, 2002, p. 44) is the ability to act successfully while still being connected to “the wider, social, economic, and ethical framework of society.” (Craft, 2002, p. 45). Little-c creativity means “life-wide resourcefulness” (Craft, 2002, p.44). Life-wide resourcefulness means being aware of options in one’s life and removing barriers to those options (Craft, 2002). Little-c creativity helps the individual navigate through life. Creativity is the ability to “route-find, successfully charting new courses through everyday challenges. It is the sort of creativity, or ‘agency,’ which guides route-finding and choices in everyday life” (Craft, 2002, p. 56). According to Craft (2002) little-c creativity

involves being imaginative, being original/innovative, stepping at times outside of convention, going beyond the obvious, being self-aware of all of this is taking active, conscious, and intentional action in the world. It is not necessarily linked to product-outcome. (p. 56)

The problem with not fostering little-c creativity is that individuals might not have the drive to cope with challenges and discover solutions as they move through life (Craft, 2002).

Craft (2002) states that little-c creativity involves not only coping with challenges but also the ability to identify “new problems (as well as solving existing ones)” (p.57) and “creative thinking can be applied across contexts” (p.57). As well as having the ability to identify problems, the attributes of little-c creativity are self-creation (formation of the self and abilities through the choices made in life), know-how, self-expression, self-determination (agency), intentionality, innovation, play, narrative, intelligence, being imaginative, and a questioning attitude (including question-posing and question responding). For example, how an individual poses questions may help the individual navigate away from barriers. What if? questions encourage possibility thinking (Craft, 2002). Possibility thinking is the heart of little c creativity and is needed to overcome obstacles (Craft, 2002). Without possibility thinking, individuals will not be able to navigate when they encounter challenges in life. Craft (2002) believes that schools need to educate students to inspire little-c creativity.

According to the possibility thinking framework, students need to develop confidence and skills to shape themselves and their own lives (Craft, 2002). The framework focuses “on the width of ordinary life” (Craft, 2002, p. 47). Little c creativity is not just about the arts. It is not just a skill used in thinking when applied to curriculum content. It is transferable across domains. It is about “fostering creativity across the school curriculum” (Craft, 2002, p. 47). “Little c

creativity is about surviving in life” and “generating ideas and practical outcomes” (Craft, 2002, pp. 47-48). It is not “tied to a particular pedagogy” (Craft, 2002, p. 48). For students to develop little-c creativity, they need to be allowed to engage in activities that promote possibility thinking.

Contrasting Big and Little-C Creativity

It may be helpful to examine little-c creativity compared with big-c creativity which Craft (2002) calls “high-c creativity” (p.51). This comparison may clarify the attributes of little-c creativity according to the possibility thinking framework. Craft (2002) expresses her rationale “for understanding little c creativity and high c creativity as distinct concepts” (p. 51). High-c creativity is seen as a product that is “publicly acclaimed” (Craft, 2002, p.52) and that “fundamentally changes knowledge” (p. 52) or creates “new domains of knowledge” (p. 52). For example, Freud, Einstein, Picasso, and Stravinsky are all seen as high-c creators because they changed their domains. However, according to the possibility thinking framework, all individuals can be creative.

Craft explains that high c creativity and little c creativity are on a continuum. “Little c creativity may be seen as occupying the opposite end of a continuum to big c creativity” (Craft, 2002, p. 59). The other end, with little c creativity, is “personal agency, which is likely to involve working in small steps, and where innovation is judged at a local level” (Craft, 2002, p. 59). “The judge may range from the agent to their peers, to their wider context” (Craft, 2002, p. 59). On the other end are “acts of creativity that change the world” (Craft, 2002, p. 58). A “field of experts judges them” (Craft, 2002, p. 59). The two significant differences between little-c and big-c creativity are that in big-c judging is by experts instead of peers, while little-c creativity focuses on personal agency. The possibility thinking framework is significant because

it is one of the few theories that includes the development of creativity in children in the context of educational settings and with the individual's personal life.

Possibility Thinking and its Relationship to Creativity

According to Craft (2007), possibility thinking is at the core of creativity. It enables a “transformation from ‘what is this?’ to ‘what can I or we do with this?’” (Craft, 2013, p. 128). It can involve finding and solving problems (Craft et al., 2007). Possibility thinking brings together the attributes of little-c creativity (imagination, intelligence, self-creation, self-expression, and know-how) and expresses them through creative acts and ideas (Craft, 2002). It supports all fields of knowledge and all areas in life, including convergent and divergent thinking. Craft (2002) believes possibility thinking can be demonstrated in any area of life, which is why possibility thinking, just as little-c creativity, is perceived as “lifewide” (p. 123). By lifewide, Craft (2002) means that,

possibility thinking is what drives the capacity of individuals to find their way through the life experiences which they meet with a creative attitude and approach, enabling them to make the most of situations, even those which appear to pose difficulties. (p. 113)

Possibility thinking is the theoretical method for all creative action that encourages an individual to move forward in life finding creative solutions to all problems, whatever the field of application.

“Possibility thinking encompasses an attitude which refuses to be stumped by circumstances, but uses imagination, with intention, to find a way around a problem” (Craft, 2002, p. 111). The attitude involved in possibility thinking is evident when the individual refuses to be stopped by difficult situations and instead uses her imagination to find creative solutions to a challenge. Possibility thinking encompasses skills such as developing questions to solve issues

and discovering and resolving problems. While Craft emphasizes using possibility thinking to solve and explore problems, she notes that possibility thinking can be used to speculate about the world rather than just to confront challenges. Possibility thinking can also range from formulating questions (Craft, 2002) to trying to solve “nagging puzzles” (Craft, 2002, p. 111).

Possibility thinking can also involve problem-finding. By problem finding, Craft means finding additional possibilities, identifying questions, investigating areas, examining mysteries, and possibly discovering new opportunities (Craft, 2002). Both convergent and divergent thinking have possibility thinking in common. Possibility thinking is at the heart of creativity (Craft, 2015)

Characteristics of the Possibility Thinking Framework

This section will examine the seven elements of Craft’s theory of creativity which will be the focus of this study. While Craft cites ten possibility thinking elements, for this study seven of the elements were most likely to be found in both a content analysis and when observing students. These elements will be reviewed concerning the components that need to be present to encourage possibility thinking. In the research, seven aspects are paramount for Craft, namely,

1. Question posing: investigative behavior (question framing, question degree, and question modality), verbal and nonverbal
2. Question-responding: respond through investigative behavior
3. Innovation: the creation of an original or unique outcome or behavior
4. Self-Determination: learner-agency
5. Intentionality: make decisions that help individuals follow through on their actions to attain their goal
6. Being imaginative: ‘as if’ thinking

7. Play: being in an ‘as if’ space, improvising, narrative

Each of these elements will be explained in their corresponding section:

Question Posing and Question Responding

The first two elements, according to the possibility thinking framework, are question-posing and question responding, which “involves the shift from asking ‘What is this and what does it do?’ to ‘What can I do with this?’, particularly in relation to identifying, honing and solving problems” (Jeffrey & Craft, 2004; Jeffrey, 2005 as cited in Burnard et al., 2008). It is vital to ask why, how, and what-if questions to inspire creativity. Students need to reply to ideas, inquiries, tasks, or problems using an unusual approach unique to that individual (Burnard et al., 2008). Creativity is accomplished through “asking unusual questions; challenging conventions and assumptions” and “thinking independently” (Burnard et al., 2008, p. 284). When engaging in question-posing, there is a transition from ‘what is’ to ‘what might be.’ Asking what can be done with something refers to productive thought, which concerns the individual influencing the knowledge of the domain to engage in changing circumstances using possibility thinking. The teacher’s job is to move students’ thinking along the continuum.

Innovation

When engaged in creative activities that allow students to ask questions and respond to those questions, possibility thinking has a chance to flourish and grow. Possibility thinking is being developed when innovative and unique outcomes develop. By innovation, Craft means “strong playful connections between ideas triggered, scaffolded, and extended by thoughtful adult provocations” (Chappell & Craft, 2016, p. 408). Students develop the ability to create new links between known concepts to create original outcomes.

Self-Determination and Intentionality

By self-determination and intentionality Craft means “autonomy and agency” (Craft, et al., 2013, p. 540). An individual can act with purpose and intention independent of outside influences. The learner is provided the space and time to act creatively, engaging in actions of her choice and creating her own goal to allow for creativity. While self-determination has more to do with the individual's independence to make choices and create goals, intentionality has to do with making decisions to follow through on those goals.

Being Imaginative

Being imaginative is central to Craft's theory. Craft's view of the nature of imagination in little-c creativity includes imagining and being imaginative, but not necessarily imaging (seeing images in one's mind). Being imaginative for Craft means “going beyond the obvious” (Craft, 2002, p. 81). Analyzing things in ways that are not the traditional way of interpreting is being imaginative.

Being imaginative involves producing an outcome but not necessarily a material product. A product might be a book, a story, or a drawing. An outcome that is not material might be an idea or behavior. According to Craft (2002), “it may be that teachers cannot make people be imaginative, although they may guide them in ways which support their imaginativeness and do not suppress it” (p. 87). Creating a classroom climate where children's ideas are valued and heard encourages imagination.

Play

Play in the possibility thinking framework can mean imaginative play, role play, improvising, exploring, experimenting with material objects, being in an ‘as-if’ space, and displaying ‘as-if’ behaviors (pretending) (Craft et al., 2012). According to Craft, McConnon, &

Matthews (2012), play can be individual, communal, collaborative, child-initiated, adult-initiated, and imaginative (Craft et al., 2012). Play in connection with little-c creativity can involve co-construction and “co-creation” (Craft, 2012, p. 182) with others. Play can be driven by a narrative and involves imagination, including encountering and solving problems and experimenting with ideas.

Important features of imaginative narratives included in children’s play episodes are connected with possibility thinking. Not all play is creative or connected with possibility thinking. For example, if a child pretends to bake, the child is merely imitating. Suppose the child only imitates a daily activity without connecting it to something she has imagined (like a narrative she created and is acting out). In that case, this play episode is not connected with creativity according to the possibility thinking framework. The child is not being imaginative. While students engage in play, the narratives they are engaged in include features such as characters, a plot, a sequence of events, and emotional and aesthetic meaning to children (Chappell et al., 2013). Narratives can either be initiated by the teacher or the child (Chappell et al., 2013). They can be constructed individually, collaboratively, or with the whole class and might include the teacher Narratives can include fantasy, everyday occurrences, or historical events (Chappell et al., 2013).

There are many links between possibility thinking and play. Students who engage in imaginative play can test different possibilities and options for individual expressiveness. Students explore self-agency and collective agency through self-expression (Craft, 2002). Essential to the encouragement of play is time and space provided to children to allow students the opportunity to immerse themselves in play (Hamlyn, 1971).

In this section Craft’s possibility thinking elements have been explored and their role in

Craft's educational philosophy has been described. We have examined how Craft holds that the concept of being imaginative is an integral part of the creative process. However, today, schools lean towards rationalism and the belief that reason is how we acquire new knowledge. The teacher-text relationship dominates the classroom and isolates the learner, deterring the student from contributing to the classroom (Tjedvoll & Welle-Strand, 2003). Creativity and imagination are believed to be a distraction from academic learning; however, it is possible to expand learning to embrace creativity and imagination.

Possibility Thinking Model in Empirical Studies

This section focuses on what empirical research has discovered about the possibility thinking model in teaching. Few teachers and districts utilize possibility thinking as their instructional model in the United States; however, empirical studies have documented using the possibility thinking model in the United Kingdom.

A review of this empirical research highlights several essential critical points about the possibility thinking model, supporting the scholars who have defined possibility thinking. These key points fall under the two themes examined in the literature on possibility thinking. The first theme covers studies that examine the definition, features, and characterizations of possibility thinking. The second theme in the possibility thinking literature examines how teachers can foster possibility thinking using pedagogical practices.

Characterizations Of Possibility Thinking In Empirical Studies

The first study that identifies characteristics of possibility thinking to build a framework that can be used as an identification process for Craft's theory took place in three early years settings. According to this study, posing what-if questions emerged as a central feature of possibility thinking. "The posing of questions, in an 'as if' space, was evidenced through children

making connections through prediction, compensation, improvisation and testing” (Burnard et al., 2006, p. 255). The rest of the elements of possibility thinking were also evident in the study (play and immersion, self-determination and risk-taking, being imaginative, and making connections). The study helped the researchers to determine what fell into the different categories. For example, they realized that risk-taking also falls into the process category rather than only the outcome category. The two elements that did not emerge from the data, or for which there was very little data, were development and intentional action. Intentional action was difficult to identify, as the children did what the researchers called “invisible thinking” (Burnard et al., 2006, p. 256). The researchers also stated that the definition of intentionality was not clear. Also, innovation was challenging because what may have been innovative in one setting or at one time may not be innovative in another setting or another time.

The second empirical study that examines characterizations of possibility thinking occurred seven years after the first study, with children ages nine to eleven. The focus of this qualitative study examines the research question, “What characterizes possibility thinking as manifest in the learning engagement of children aged 9–11?” (Craft et al., 2013, p. 538). Research was carried out in two state schools (the English equivalent of public schools in the United States) in England. Two classrooms were involved in the study. One difference between this study and the previous study was that the results focused more on question-posing and question-responding. This study also revealed new characteristics in all the elements of possibility thinking. The one exception was risk-taking which was absent in the observations. Collaboration was a feature not previously listed as an element in possibility thinking but observed in both research settings. The study aimed to provide evidence-based research to support the characteristics included in the definition of possibility thinking as a driver of

creativity in the classroom.

The elements of question-posing and question-responding (which had included only verbal questions before this study) were expanded to include nonverbal question-posing and nonverbal question-responding (Craft et al. 2013.). Both characteristics of question-posing and question-responding were developed in this study.

In the third study, three dimensions of questions were identified as elements of possibility thinking: question framing, question degree, and question modality. By question framing, the researchers meant “reflecting the purpose inherent within questions for adults and children (including leading, service and follow-through questions)” (Chappell et al., 2008, p. 267). The second dimension of questioning was question degree which is a “manifestation of the degree of possibility inherent in children’s questions (including possibility narrow, possibility moderate, possibility broad)” (Chappell et al., 2008, p. 267). The third dimension of questioning that was identified was question modality which means “manifestation of the modality inherent in children’s questions (including verbal and nonverbal forms)” (Chappell et al., 2008, p. 267). The study examined how students connected with questioning when learning to be creative and showed how students’ thinking looked when questioning (Chappell et al., 2008). Specifically, the researchers examined the transition from ‘what is’ to ‘what might be,’ using the questioning process.

Three Types of Question Posing. In the first dimension of questioning, the findings revealed three types of question-posing exhibited in possibility thinking. The first type was question framing which means determining the purpose of the question. Service questions are asked in service to the leading question (Chappell et al., 2008) and to “develop strategies to address their over-arching leading question” (Craft et al., 2012, p. 50). Service questions aim to

continue possibility thinking to answer the leading question. The children created the service questions; however, the teacher helped the students create the leading question. The third type of question is the follow-through question which is asked to help complete the final details of a project or idea (Craft et al., 2012).

Degrees of Possibility. The second dimension of questions related to possibility thinking is the “degree of possibility” (Chappell et al., 2008, p. 276). This dimension measures the degree of possibility of a student’s questions. The three degrees of possibility are possibility broad, possibility moderate, or possibility narrow (Chappell et al., 2008). When examined as if through the lens of the eye, possibility broad is like seeing a “situation through the 360-degree lens of a fly’s compound eye, a whole variety of possibilities exist; none of them is clearly in focus or well defined” (Chappell et al., 2008, p. 276). In one episode, two boys were working with the leading question about how to make a cart to transport soldiers. One boy brought a piece of doweling to the table. The other boy asked what it was going to be. It could have been any part of the cart. The question was full of possibilities which meant the degree of possibility was broad.

Possibility moderate stands in the middle of broad questions and narrow questions. For example, “the leading question ‘What are we going to do to have a birthday party for Rodney and Rory?’ is possibility moderate in its capacity for responses (around the 180-degree range in terms of the lens metaphor). This question has greater possibility within it than the specific cart-making activity” (Chappell et al., 2008, p. 277).

Possibility narrow is the most constricted and most concentrated kind of questioning. “It is like looking at the situation through the lens of a camera...focusing on perhaps 20 degrees of the possibilities available” (Chappell et al., 2008, p. 277). In the example of getting Rory through the playhouse door, the possibilities were limited. The possibilities were limited because the door

of the playhouse was already constructed. The question, How are we going to get Rory through the door? has narrow possibilities. In the end, Amy does try to squeeze him through the door; however, he will not fit. The question of degree is essential as this measures the limitations and opportunities that the student has when asked questions or creating her own questions.

Question Modality. Question modality indicates if the questions are verbal or nonverbal. Nonverbal questions may be expressed through the physical actions of students. For example, in this study, there is an example of nonverbal questioning illustrated by two girls folding and gluing paper; however, the researchers do not clarify what can be observed during nonverbal questioning. The researchers know that nonverbal questioning was “tentatively expressed” (Chappell et al., 2008, p. 282) and requires further explanation. Since they felt it was important to include it in their data, it would have been helpful to have explained it further.

Regarding question responding, the researchers were more precise with their examples of how question responding could be nonverbal. The following activities were nonverbal and incorporated different question-responding activities characterized by possibility thinking, such as predicting, evaluating, repeating, rejecting, and completing. For example, two children are attempting to make a hat with paper. In dealing with the question of how to make the A4 piece of paper into a hat, Jessie and Rhianna engage in the question-responding activities of predicting that holding the edges of the paper together may work and that sticky tape will aid the sticking of the two corners. They also engage in evaluating when the edges of the paper spring apart when they are not held by the glue; repeating when Jessie, and then Rhianna try to reinforce the edges to stick using tape; and rejecting the idea that the glue stick will hold the edges on its own. Additionally, they engage in compensating (altering a sequence of actions to repair an error) where Jessie uses sticky tape to reinforce the glue when the glue on its own has not worked. The

notion of completing is reinforced as the sticky tape is used to secure the join, which ultimately leads to the corners holding together and the hat being completed (Chappell et al., 2008, p. 281). The researchers' observations confirmed that there is a cycle of question-posing and question-responding, which occurs in a possibility thinking exercise. Question posing leads to question responding, which leads to question-posing again (Chappell et al., 2008). The researchers observed that possibility thinking could occur because of the teachers' pedagogical practices. For example, the teachers demonstrated flexibility and openness by allowing time and space to explore while still being available when students attempted to discover answers themselves (even though the teacher might have seen that the students were in error). The teacher's practices of standing back and promoting student agency and allowing space and time encouraged students to look for alternative imaginative possibilities. The teacher helped create the lead questions, which encouraged students to create their follow-through and service questions to engage in possibility thinking. "The children drove the shift from 'what is' to 'what might be' themselves" (Chappell et al., 2008, p. 283). Teacher practices were flexible but also focused. They gave the learners considerable time and space to produce ideas and shape and lead their learning.

Pedagogical Practices that Foster Possibility Thinking

Study One. The second theme in the empirical literature concerns pedagogical practices that can foster possibility thinking in the classroom. The first study examined how teachers can encourage possibility thinking in young children and built on earlier studies examining features of possibility thinking (Cremin et al., 2006). The team of researchers focused on early childhood centers, and the study lasted for twelve months. The methods used were video-stimulated review (VSR), classroom observations, interviews, and artifacts (lesson plans). The case study method was used, and each of the three teachers was considered a separate case study since they were

from different early childhood centers in different parts of the country (United Kingdom).

The study focused on teacher reflection and examined pedagogical practices such as standing back, encouraging learner agency, and creating time and space for students to work. The study focused on the progression of teachers' thinking throughout the study and developed a model that can be used to conceptualize possibility thinking.

Standing back was characterized as a pedagogical stance. The researchers' definition of standing back was when teachers stopped, observed, listened, and noticed what students were doing (Cremim et al., 2006). Students could explore using what-if questions and make their own decisions about discoveries without the teacher showing them what to do. Teachers became "agents of possibilities; 'what if' agents" (Cremin et al., 2006, p. 114). Standing back allows for fostering student independence and learner agency.

To promote student agency, teachers "planned each term's learning intentions based on the children's identified questions and specified areas of interest." Thus, the curriculum became a "co-constructed curriculum....relevant and interesting to them, so they can take ownership of their own learning" (Cremin et al., 2006, p. 114). The acknowledgment of student questions nurtured student agency.

Students were encouraged to solve problems themselves. For example, if a learner were having a problem, the teacher would ask questions such as, What could you do to solve the Problem? so students would use their imagination and creativity to find solutions. The decision-making was handed back to the learners (Cremin et al., 2006).

Creating Space. In this study, teachers created space for students by offering them the opportunity to engage and interact with the environment, allowing them to explore and create. The researchers observed "open access to a wide range of learning resources and broad choices

over what and how to engage” (Cremin et al., 2006, p. 115). Play was vital when connected with the element of space and the taught content. Teachers allowed students independence and choice. The classroom itself was a space where students could co-create. “Children engaged with it as they might with a person, developing relationships and understanding it” (Cremin et al., 2006, p. 115). For example, students could generate their ideas to create classroom displays. Space was used as an environmental tool to encourage possibility thinking.

Creating Time. This study also observed that time was viewed as flexible rather than strictly adhering to a schedule when explorations needed more time. The view of time was quite different from schools that believe in the importance of adhering to a fixed schedule. A teacher from the study reflected on the use of time in her classroom.

You have to have a very flexible approach to time and how you manage time. As long as you’re clear about where you’re going and what you want to achieve, it really doesn’t matter how you get there as long as the children are involved and are aware and can develop their own interest and ideas (Cremin et al., p. 115).

Students need time to think, explore, experiment, reflect, question, and make decisions to engage in possibility thinking (Cremin et al., 2006).

The implications of this work concerning policy and professional practice are considerable, particularly as teachers seek to reconcile the pressures of curriculum prescription with the demand to teach for creativity. Unusually, perhaps, and in contrast to other primary colleagues, the professionals in this study were not driven by the need for speed to cover the prescribed curriculum (Cremin et al., p. 117). The researchers discovered the importance of giving students time and space to direct their learning rather than adhering to outward mandates.

Study Two. In the subsequent study, the researchers examined characteristics of

possibility thinking and pedagogical practices that encourage possibility thinking. The study setting was an early childhood center for children ages three months to five years old. Data was gathered through observations, photographs, and interviews. The photographs were shared with children to stimulate discussion. Data were analyzed by keeping in mind these particular questions, “How is children’s creativity/possibility thinking manifest in child-initiated play? And what is the role of the practitioner in supporting this?” (Craft, et al., 2012, p. 53). These questions were answered by observing three behaviors exhibited while children were playing. The first observed behavior was “stimulating and sustaining possibilities” (Craft et al., 2012, p. 54). An example of this behavior in the study was a child named Carl, who wanted to create a cage to keep a fire. Some of the children brought plastic crates and logs to help with the project. Carl stimulated possibility thinking amongst the children, who joined in collaboratively and extended possibilities using different materials to make the fire cage.

When some other children tried to get involved in his project, Carl told them that this activity was only for acrobats. The teacher said to Carl that maybe the others are acrobats also. Carl replied by saying that they did not go to acrobat school demonstrating that Carl did not want to include more children in the collaboration. The example shows Carl stopping others from joining in which would have potentially increased opportunities for possibility thinking.

Communication of possibilities happened verbally, nonverbally, and through children’s actions, such as acting out and extending a story; however, the researchers did not give a specific example. The third observed behavior was “children’s agency, roles and identities” (Craft et al., 2012, p. 55). The researchers observed children playing and teachers intervening in the play to encourage more possibilities by asking questions. Researchers observed children’s ownership as each play episode had a child who was the leader of the possibility thinking play. The adults

encouraged student ownership and agency by giving children time and space to play and intervening in play in a way that would encourage that ownership and agency.

All three behaviors illustrated elements of possibility thinking. “Children’s self-determination, imaginations, intentionality were all evident as were their innovative ideas and the questions which seemed to lead these... Each episode revealed ‘what if’ and ‘as if’ behaviours blended together as children inhabited their narratives” (Craft et al., 2012, p. 55). In this study, one aspect of possibility thinking that was not present in other studies was risk-taking. In addition, another aspect of possibility thinking that was not present in other possibility thinking studies but was exhibited in this study was the “individual, collaborative and communal blend in PT (possibility thinking)” (Craft et al., 2012, p. 57). An example of collaboration through “collective ownership” (Craft et al., 2012, p. 56) took place in play episodes outside. For example, two children had individual narratives happening at the same time. One boy played with a crocodile, and another student played with a puppet. At one point, the boy with the crocodile invites the other student to feed it, and the other student with the puppet joins the boy’s narrative. The narrative moves from individual ownership to collective ownership.

The study also uncovered five ways adults supported children-initiated play. The five practices were “provoking possibilities, allowing time and space, being in the moment, making interventions and mentoring in partnership” (Craft et al., 2012, p. 57). The adult provoked possibilities by influencing and joining in children’s play. The practitioners provided resources such as props and directed children’s play at times. How practitioners allowed time and space were similar to those observed in other studies involving possibility thinking (Craft et al., 2012). Examples of how practitioners allowed for space and time were “setting up and creating play-spaces, stepping back, observing, holding back from interrupting, following children’s

interests...playing alongside children as a partner” (Craft et al., p. 57). The practitioner's other roles were being present in the moment by playing with children and intervening in children’s play. The three types of interventions in children’s play included,

supporting (where children’s experiences were scaffolded, the role being one of enabling children), sustaining (where the effort was on extending the play in different contexts, continuing threads from child-initiated moments, seeking to sustain the play, engaging in sustained shared thinking, encouraging children to stay in the moment), and suspending play (by managing the moment in terms of dynamics between children, modeling acceptable or preferred behaviours, managing frustrations, offering advice, managing space, guiding, resolving conflict). (Craft et al., 2012, p.57)

This study extended earlier work on possibility thinking in three ways. First, this study developed earlier studies by revealing more about the themes of provocation, the space of emotions, and encouragement in play. Second, the study demonstrated how teachers intervened in play by stepping into play, stepping back from children’s play, and collaborating with children in their play (Craft et al., 2012, p. 58).

Creative Learning in Connection with Movement, Storyboards, and Puppetry

Movement and Dance

Although there are no studies that incorporate possibility thinking into a mandated curriculum (where creativity is not already present), Anna Craft studied environments where puppets, drawing, and dance were integrated into learning and noted that collaboration encouraged thinking (Chappell et al., 2013; Craft, 2000). Craft and her team of researchers created a definition of possibility thinking through these observations. In addition to the articles

about possibility thinking, it is interesting to note other studies where drawing, puppetry, dance, and collaboration are presented as tools for learning.

According to Mason-Williams et al., (2017), literature concerning the use of dance and creative movement to teach content has been helpful; however, it has been mainly anecdotal. Mason-Williams and colleagues used a methodical approach to assessing the connection between the use of dance and creative movement to teach character trait vocabulary and students' understanding of those traits. Over eight weeks, four teachers and seventy-nine students in second through fourth grade were the participants in this study. The study occurred in a suburban elementary school in the north-central United States. One teacher taught a combined class of second-and third-graders, one teacher taught third-grade, and two were fourth-grade teachers. The teachers presented character trait vocabulary words and gave definitions. Teachers also asked their students questions such as “How do you think this character would move? Why? What in the story tells you this?” (Mason-Williams et al., 2017, p. 4). Then, students answered through movement by creating a movement connected with each word's written meaning. They also connected the movement to the characters in their reading stories.

The findings of this study showed that using movement to teach character trait vocabulary was an effective way for students to learn vocabulary. According to the study (Mason-Williams et al., 2017), students showed increased understanding after introducing movement activities. Students were engaged in possibility thinking even though the term was not used. Students appeared to be free to create movements connected with the vocabulary words present; however, there was no mention of prescribed curricula in this study.

Another study connected to dance examines the reasoning experiences of children as they participate in dance and poetry projects (Giguere, 2006). The study took place in an elementary

school and involved an arts program that integrated dance and poetry. The researchers sought a way to place poetry and dance in an elementary school curriculum. The researchers' questions were,

What is the nature of the relationship between learning in dance and learning in traditional academic areas, such as language arts? Can the experience of creating a piece of choreography be linked in some way to the experience of writing poetry for example? More generally, do children use different thinking and problem-solving strategies when they are creating in dance than when they are creating in language arts? (Giguere, 2006, p. 41)

The three-day artist-in-residence program for twenty-five fifth-graders called "Moving to Words" (Giguere, 2006, p. 42) included three dance classes where students created a group dance based on a poem. Researchers observed and gained through interviews what they identified as "tools for thinking" (Giguere, 2006, p. 44) that students engaged in when exploring movements in connection with poetry. Thinking strategies used in dance and poetry were "Observing, empathizing, recognizing patterns, transformational thinking, and creative reverie" (Giguere, 2006, p. 46). However, the researchers stated they needed clarification about how this related to pedagogy and if students could use these skills independently. Researchers noted that the assignment to create dances allowed students to solve problems and that dance should be included in the curriculum to help reunite body and mind.

The following study aimed to develop an understanding of emotions through movement as a part of social-emotional learning (Lucassen et al., 2022). The study participants were twenty-nine four-to eleven-year-olds in an English school and eighteen teachers participating in online workshops. The study uses movement as a tool for meaning-making. Students were

learning emotional vocabulary through movement combined with cultural artifacts such as images, pictures in books, and music. For example, students were asked to imagine they were inside a large dirty bubble, and then they had to clean their bubble so they could see out, prompting movement from children. Then, they were asked to stretch their bubble to explore their bubbles, also using their imagination. Finally, they were asked what it might feel like to be in a dirty bubble, and students responded by saying they would be bored or sad. Students connected the activity to books they had read, including one about a tiger in a cage. Then, students said what it felt like after they stretched out their bubbles: they felt happy. As a result, students learned vocabulary connected to emotions, they felt ownership of their learning through their independent thinking, and teachers felt empowered to use dance in their classrooms.

Storyboards and Drawing

Several studies support students using storyboards (panels to denote each event of a story) in connection with writing, while drawing was also used to generate ideas. Research incorporating storyboards in early childhood is limited. However, in a third-grade classroom in New England, students used digital drawings to help generate ideas when creating digital stories (McMackin & Bogard, 2012). Initially, students used a simplified storyboard (three boxes denoting the beginning, middle, and end) which they called a graphic organizer rather than a storyboard. After this, they made audio recordings of their stories using a Smartpen. Then, they used the digital storyboard. In this case, the storyboard was not to generate ideas; it was used to record the story's events and would be used online to accompany students' narrations of their stories. Researchers found that the graphic organizer helped students identify missing areas in their stories, and the storyboard encouraged students to add the necessary details as those pictures from the storyboard would be used in the final digital story.

In two studies, storyboards are used with high school students. In one study, high school students use storyboards to support reading comprehension, poetry, and film (Bruce, 2011). An essential feature of reading is to visualize text, and the storyboards supported students in visualizing their thought processes to engage in close reading with various texts.

In another study involving high school students transitioning to college in an Upward Bound program, storyboarding was used in the three-week summer composition course (Balzotti, 2016). The study took place over three summers with thirty students participating. Students created storyboards as a response to literature before writing their essays. In addition, students created storyboards to produce films. There was some initial resistance to a multimodal view of literacy amongst students, as they thought that creating the storyboard took time away from their projects. In addition, some students wrote on the storyboard panels rather than drawing pictures which surprised the researcher. The researcher discovered that, in the end, the use of storyboards encouraged students to widen their view of literacy and helped students gain an understanding of alternative steps that can be taken to create a composition. The storyboards enabled students to see their arguments and "internalize rhetorical concepts clearly" (Balzotti, 2016, p. 80).

In addition to storyboards used to teach writing, storyboards have been used to help English Language learners comprehend literary fiction and learn how to write in English. One study involved six English Language learners in middle school ages eleven to fifteen in North Carolina (Naar, 2013). Storyboards were used to increase student comprehension of novels. Storyboarding was implemented as a post-reading activity to explore the meaning of novels. This study aimed to establish the effect on reading comprehension skills using storyboards with students at the earliest stages of second language acquisition. The researchers found that students' reading comprehension and motivation improved.

Another study involving English language learners took place in Australia with seven-to nine-year-old children (Adoniou, 2013). In this study, drawing rather than storyboarding was used to teach writing. The study found that drawing before writing developed students' writing of informational texts, which included descriptions of procedures. For example, students first engaged in a cooking activity (making pancakes), after which they would draw the steps of the procedure they had just experienced. The final stage was to write about the steps of the cooking procedure. The study showed that drawing before writing improved students' English language skills.

In some studies, drawing was used in connection with meaning-making. In a study of ten kindergarten classes in Australia, teachers said they had no time for drawing because of proficiency requirements and that drawing was for quick writers who could draw when they were finished writing (Mackenzie, 2011). Teachers did not feel they could include alternative learning modes in their teaching, but researchers encouraged teachers to have students draw and talk about their drawings before they wrote. Teachers found that when students engaged in drawing before writing, they always had ideas to write about when previously they would stare at the page and exclaim that they had nothing to write. Students became more motivated and even chose to write during their free time. As a result, students were encouraged to understand that meaning can come from talking, drawing, and writing.

In another study that involved first-graders constructing meaning through drawing, researchers implemented an eight-week study focusing on multimodal literacy in South Carolina (Heid & Leigh, 2008). Researchers believe that specific modes of knowledge are privileged in a classroom, including language as one way of knowing. They believe that opportunities for constructing meaning through art in reading and writing lessons are reduced as students progress

into higher grades. In this study, students were asked to respond through art to the stories they read in class. Researchers discovered that "there is power in children's use of art and, when it is valued as a conduit for understanding how children construct meaning, understanding children's literacy processes is also expanded" (Heid & Leigh, 2008, p. 9).

As with the study for the Upward Bound participants, fifth-grade students in a standards-driven, racially diverse urban classroom in San Francisco were studied to identify how drawing is connected with writing (Christianakis, 2011). The study aimed to discover how students develop as writers, how teaching practices influence writing, and how schools as institutions limit students' potential and possibilities in writing. The teacher in the study was creative and allowed students in this study to use many modes to express themselves in his writing class (drawings, cartoons, rap, music, poetry) while at the same time telling students they needed to stay within the confines of the district-approved curriculum and that pictures were merely used as decorations or illustrations of the writing. During the study, students used visuals partially to develop their ideas when writing and partially as a supplement to their writing. In addition, researchers found that students used visuals to show power, gain status, and express humor and irony. Students were anxious about drawing as it might not be seen as academic; however, they engaged in multimodal literacy and encouraged their teacher to do the same (e.g., one student convinced his teacher to let him draw first to prepare for writing). Researchers found that visual imagery in connection with writing created new meanings even though visual images were discounted in this academic setting.

In addition to solely improving literacy, there have been studies that illustrate how visuals can encourage students' understanding of other subjects, such as science, in connection with literacy (Bradbury & Wilson, 2016). In one study, forty-two first-graders in the Southeastern

United States demonstrated their understanding of carnivorous plants during their science class. Two teachers and two science experts wrote lesson plans and taught a one-week multimodal science unit on carnivorous plants. This study used drawing as an assessment, with students creating drawings as pre-assessments and post-assessments. What was noteworthy was that researchers found that drawing informed students' writing and supported students' understanding of science concepts.

Puppetry

Some studies emphasized filmmaking and puppet shows. The first study aimed to discover what would happen if multimodal storytelling was infused into writing, incorporating elements of play, drama, puppetry, or filmmaking (Kargin et al., 2016). The researchers believe that too much emphasis is on what students write on paper rather than discovering multiple ways to show what they know, which might more accurately reflect how students share knowledge in daily life. Teachers helped students develop stories, encouraging them to create films and plays and to use puppets. The study occurred in an inquiry-based school in the Midwest with first-grade and kindergarten students. Teachers taught how to write play scripts with problems and solutions, sequence, and develop strong characters. They also helped children focus on expressions through "gaze, posture, gesture, and speech" (Kargin et al., 2016, p. 3) while acting out plays, creating films, or using puppets in performances.

Another study also introduced the idea of students filming their puppet shows after making their puppets. This study was also conducted with kindergarten through first-grade students (Buchholz & Wohlwend, 2014). Researchers believe literacy now includes media literacy, and play should be incorporated into literacy programs, from creating storyboards to writing and then including puppets to film puppet shows. Using various modes, teachers

explored alternative ways for students to express their stories beyond the printed page.

Researchers noted a difference between what students wrote on paper and when they began to film since students elaborated on their stories when filming.

In two studies, students collaborated with digital puppets on iPads. In one study, the emphasis was on cooperative skill-building (Wohlwend, 2015). In the other study (Deliman et al., 2018), the researchers wanted to avoid emphasizing print-centric views in literacy classrooms. Both studies focused on students collaboratively creating stories on iPads. In one study, sixty university students worked as literacy tutors with kindergarten students to create interactive puppets and incorporate those digital puppets into films (Deliman et al., 2018). Students created digital puppets, and the puppet characters were derived from popular shows, television, and video games. Students also create toys that could help fit into their film productions. The studies emphasized that students are creators, innovators, and problem solvers and that literacy should be redefined for children in today's world.

Two other studies examined two features which are connected in puppetry but are also distinct. One feature is dialogue, and another is movement. The study about dialogue took place in Ireland with students aged three to five. It focused on encouraging dialogue in young students to support their expression of meaning (Chubb et al., 2021). The researchers found that students felt more comfortable engaging in discussions with puppets, as puppets were seen as peers rather than authority figures, which encouraged them to express themselves through speech. In addition, drawing was also a part of the study, and the researchers found that children could express themselves nonverbally through drawing and that the drawings also helped students express themselves verbally because they could speak about their drawings (Chubb et al., 2021).

The other study, which emphasized puppets and physical movement, focused on using puppets to connect literacy and physical movement. It occurred in England with twenty-four four-and five-year-olds during their first year of formal schooling (Daniels, 2020). Rather than examine how puppets encouraged students to express their thoughts verbally, the researchers analyzed how students' movements while using puppets expressed their thoughts. The researchers believe there are connections between movements and meaning and they examined how students moved in order to gather information about the students' meaning-making. The researchers specifically examined what is communicated through students' movements during puppet play through gaze, hand movements, and facial expressions. "Rather than 'authoring' a narrative text, children appeared to be exploring the potentiality for abstract possibilities brought through the sensory experience of moving and feeling, and exploring what that could mean and feel like in the ongoing present" (Daniels, 2020, p. 9). Some play episodes did not contain speech but were full of meaning. "The explorations highlighted how meaning arises from moving, sensing, and feeling within the classroom assemblages; There is much to know about the process of children's meaning-making when words are not present." (Daniels, 2020, p. 5). The researchers aimed to rethink literacy and its meaning to redefine how students approach literacy.

Puppets have also been used to teach academic subjects such as social studies. In the following study, rural second-grade students used puppets to learn about social studies through literacy (Peck & Virkler, 2006). The study aimed to increase student motivation while improving literacy skills and teaching social studies content. Students created a story incorporating United States history, and the puppets were used to engage students and learn the content. First, students were taught the art of shadow puppets. Then, students combined written reader's theater with the

art of shadow puppets to create a puppet show about a national symbol (the Liberty Bell) that they would perform on Flag Day. Peck & Virkler (2006) noted that,

Drama has been pushed to the margins of the language arts curriculum, and despite a great deal of advocacy literature and practices of classroom performance, relatively little research has examined the process and impact of such activity in the classrooms. (p. 788)

The researchers found that the study encouraged student ownership of their learning and successfully integrated all aspects of language arts (reading, writing, listening, and speaking). Even though there were conflicts in groups, this feeling of ownership (and the knowledge that they could not change groups) encouraged students to negotiate, compromise, and avoid conflict. Students were so motivated that they looked forward to creating another shadow puppet show. Researchers stated that shadow puppets could be used to teach social studies, and they could be used to teach any content.

Collaboration Literature

Craft (2000) states that collaboration can sometimes encourage creativity. However, few empirical studies examine creative collaboration in early childhood settings (Bolden et al., 2019) (especially in the United States). Most literature about creative collaborations in early childhood pertains to "communication, shared meaning-making, and intersubjectivity, through socio-dramatic play" (Albarran et al., 2008, p. 898). The following studies are a part of the emerging literature on creative collaboration since collaboration was previously studied in math and science (Albarran et al., 2008). One example of an early childhood creative collaboration study examines groups of four-through seven-year-old children. The participants were Canadian middle-class children from an urban environment (Bolden et al., 2019). The focus of the study was how students create shared meanings through a play activity: open-ended group drawings. A

drawing station was set up with a camera. Students could visit the drawing station anytime they liked. The camera would record for one hour a day for eight days during morning playtime. The researchers found that students spoke with one another about the drawings, observed one another, and added on to one another's drawings. In addition, students communicated nonverbally through pointing and simultaneously drawing what another student was drawing.

In a study with older students in Mexico City, the creative collaborations of fourth-grade students are examined. The study aimed to examine the process of creating group stories (Albarran et al., 2008). The projects included the use of multimedia tools when engaged in creative writing. Students worked in groups to write stories. Students used computer programs to translate their stories online to add pictures, sounds, animation, voice, and music. The idea behind the study is that knowledge is co-constructed in communities. Collaborative talk and problem-solving are vital features contributing to this co-construction of knowledge. The researchers highlight "shared commitment, creativity, and the co-construction of knowledge, as well as engagement in verbally explicit forms of reasoning talk" (Albarran et al. 2008, p. 2). The researchers believed they were adding to the limited literature about creative collaborations and acknowledging the importance of group work in writing activities.

It is interesting to note that studies in creativity and creative collaborations are more prevalent in England since creativity was incorporated into the National Curriculum. Two studies from England emphasized emotions and friendship during collaboration. In one study, researchers examined eleven-to twelve-year-old students in a school in England, focusing on the effect of friendship and previous musical experience on creative collaborations involving music (MacDonald et al., 2000). For example, students were asked to compose music about the rainforest in pairs. The researchers found that the musical and verbal communication between the

friendship pairs differed from that between the non-friendship pairs. The children collaborated verbally and with music while composing, and the friend pairs produced more verbal and musical communication than non-friends.

The other study in England included twenty-four seven-through nine-year-old students over one year and focused on students' collaborative writing experiences (Vass, 2007). The study concentrated on students' emotional experiences when collaborating on stories. The researcher found that students' emotional experiences activated creative ideas. The researchers identified the emotional experiences as "musing, acting out, humor and singing as characteristic discursive features in the content generation phases which had such emotive content" (Vass, 2007, p. 110). The study captured emotional experiences as students collaborated, which appeared to be central when generating and triggering creative ideas. The research states that playfulness needs to be considered and recognized as necessary for creativity and discourse, including productive talk that inspires creative thinking where students jointly explore and express emotions.

Culturally Relevant Pedagogy, Creativity, and Learning

Three themes emerged from Ladson-Billings' research on Culturally Relevant Pedagogy to discover how successful teachers of African Americans helped students succeed. These themes included the goal of academic success, an ability to identify and work on real-world problems, and an appreciation of students' cultures (as well as one other culture) (Ladson-Billings, 2014). Culturally relevant creativity researchers have reported using creativity in connection with culturally relevant pedagogy in schools and afterschool programs.

In one study, researchers studied an after-school program where students could engage in hip-hop production in a music studio (Steenis, 2020). Participants were twelve students from eighteen-to twenty-two-years-old who were African American, Latinx, multiracial, and Asian.

Students wrote and collaborated on songwriting and engaged in recording sessions. The findings from the observations and interviews resulted in discovering that the program strengthened students' identities and awareness of self. In addition, political and social awareness grew as well as youth agency and the ability for students to experience personal and social transformations (Steenis, 2020). Other after-school arts-based programs are connected with culturally relevant material to help youth develop their creativity (Dunning, 2020). For example, one study examined a creative arts center that offered spaces for students to collaborate creatively as they integrated arts at appropriate age levels for students. Learning with one another was the policy as opposed to teaching at students. Opportunities were given to students to be curious, ask questions, and explore what is possible. Professional musicians and artists were invited to the center to teach. As a result of the study, students experienced a safe place where they belonged and developed critical thinking skills, community building, and problem-solving skills (Dunning, 2020).

Studies conducted in schools were in various subjects such as music, math, science, and English language learning. For example, in a Chicago elementary school, the impact of hip-hop-based music education was studied with 30 African American students who were in sixth and eighth grade (Evans, 2019). The findings show that students were empowered, and the program helped to build identity amongst students as they created Rap music using multimedia and computer technology.

In a creative math study in Australia, two teachers were observed who worked with thirty-four students (Curry et al., 2020). The study examined whether urban Aboriginal students responded to CBL (Creative Body Based Learning). Ten of these students had an Aboriginal and Torres Strait Islander background, while seven students were not proficient in the English

language. The findings showed that students responded to Creative Body Based Learning through increased engagement, improved math terminology, improved attitudes, and community building.

In a study examining culturally relevant creativity and science, the aim was to explore how students increased their knowledge of science, math, and technology with 25 Latina/Latino migrant farmworkers' children (Huffling & Stevenson, 2021). The students were in sixth through eighth grade and attended a STEM summer program. Culturally relevant narratives were used with students to connect with STEM activities. Students heard stories and wrote stories that connected with the science concepts they were learning. Researchers found that students applying multi-modal expressions of learning improved their learning of science concepts and demonstrated increased motivation.

In another study, English language learners created artistic works to be shown in an exhibit that focused on students' cultures and languages (Prasad & Stille, 2015). The results of this study show that using multimodal expressions for English language learners can increase students' language and literacy achievement levels. While there are studies connecting creativity to culturally relevant pedagogy, few studies examine literacy in connection with urban African American second grade students who are learning from a prescribed curriculum.

Summary

Possibility thinking has been characterized through studies examining features of possibility thinking and pedagogical practices that the existing literature has established. This qualitative research is an important starting place to support possibility thinking as a model to use with existing curricula to develop creativity. However, the research does not explain a model to use with existing commercially produced curricula to develop creativity in actual classroom

practice. The possibility thinking model can be challenging to implement, and examining how these practices operate within constraints is critical. It is unquestionably the case that the available research on possibility thinking is limited for studies in the United States.

Additionally, most of the studies available on possibility thinking have focused on the characterizations and implementation of the model. Still, they contain limited information on the instructional elements of possibility thinking and connections to possible constraints such as prescribed curricula. Studies are primarily focused on demonstrating the characteristics and pedagogical practices in settings where there is the freedom to incorporate play, limiting any discussion about challenges of mandated curricula and how these can be addressed in classroom practices. Furthermore, this leaves out connections to how specific constraints can be addressed using this model as well as potential challenges that might be encountered when attempting to support students' creativity development.

The empirical literature on possibility thinking supports certain pedagogical practices within the model. An overall flexible approach to time, space, questioning and responding, and exploration illustrates that accommodating children's needs is vital in developing possibility thinking. Balancing student agency with practitioners stepping in and stepping out of possibility thinking activities such as play is vital to possibility thinking activities. In addition, possibility thinking is encouraged by collaboration with peers, and in some instances, teachers are also involved in co-authoring possibility thinking episodes.

Chapter 3: Research Methodology

The following chapter describes the research design of this study, which examines students' responses when taught a prescribed curriculum integrated with possibility thinking to encourage creativity. The significance of this work is that many urban classrooms use mandated curricula, whereas it is vital that teachers implement literacy instruction with the needs of students in mind. This chapter begins with a presentation of the research questions, followed by an explanation of the research design which includes the conceptual framework, research methodology, data collection and analysis, the context of the study including the setting and participants (including research positionality), and the study's timeline and process.

This qualitative action research study aimed to document student responses when elements of possibility thinking (Craft, 2006) were integrated into a prescriptive curriculum. According to Herr & Anderson (2015), "Action research is inquiry that is done by or with insiders to an organization or community, but never to or on them" (p.3). The aim is to address a problem and, through an action or action cycle, reflect on the results of that action to create change with participants or within a setting (Herr & Anderson, 2015).

In this study, I first identified the problem as a lack of creativity in the curriculum by conducting a content analysis. Next, I implemented an intervention in my classroom to address this lack of creativity and observed how students responded. The aim was to encourage the development of possibility thinking (the engine of creativity) while still teaching from the mandated curriculum. In addition, I documented my reflections on my own teaching and learning as part of the action research process during the study.

Research Questions

The research questions for this dissertation focus on what creativity looks like when a prescribed language arts curriculum is taught through strategies and techniques that promote possibility thinking as defined by Craft. The questions central to the research are:

RQ1. What are the challenges and opportunities in the Journeys curriculum as identified through the lens of Craft's theory of possibility thinking?

RQ2. How can a teacher adapt the Journeys curriculum when looked at through Anna Craft's lens of possibility thinking?

RQ3. How does a teacher implement creative teaching and learning methods in order to teach for creativity in a mandated prescribed curriculum?

RQ4. How do students respond to lessons which integrate possibility thinking?

While it was not part of my original research study intention, documenting my growth and learning became integral to doing this study. The addition of an aim of reflection and learning as a teacher resulted in the following research question:

RQ5. How did the action research affect my growth as a teacher?

Research Design

Action Research and Rationale

Action research is the conceptual framework for this study. According to Creswell (2008), action research provides an opportunity for educators to narrow the gap between practice and theory to have immediate benefits for education by addressing "a specific, practical issue" (p. 597) that educators face and seeking solutions to that problem which will improve the practice of education (Creswell, 2008). In particular, teacher action research can encourage reflection, growth, and changes in teaching practices (Kim, 2013). Using an intervention to solve a problem,

researchers can "empower, transform, emancipate individuals from situations that constrain their self-development and self-determination" (Creswell, 2008, p. 597). The improvement of education practice includes self-development through reflection, which is an essential feature of teacher action research, as it may change the direction and findings of a study. Several features outlined by Kim (2013) identify the findings of teachers involved in teacher action research. The features include stronger student-teacher relationships and examining students' attitudes to see how teaching affects students as if teachers were "looking in a mirror"(p. 386). In addition, teachers felt empowered and noted an increase in "ownership of teaching" (p. 386), so instead of merely accepting others' research, teachers do the research. The personal and professional growth participants experienced through teacher action research helped them grow "along with their students" (p. 386) and develop confidence as teachers and researchers.

According to Herr & Anderson (2005), the doctoral student who does an action research dissertation must allow for the methodology to unfold as the research is taking place. The importance of the action research dissertation is that action research dissertations provide a viewpoint that traditional researchers cannot deliver (Herr & Anderson, 2005). This viewpoint can inform institutional key players of more valid improvements that need to be made.

This study addresses the constraints on teaching methods that nurture creativity in an urban public school classroom where the district mandates a commercially-produced curriculum. I am the practitioner and the researcher in this study, and I am an insider studying an outside initiative imposed on my classroom. I implemented an intervention to integrate elements of possibility thinking into a prescribed curriculum to advance students' creativity development. Reflection and growth as a teacher are essential characteristics of teacher action research; therefore, personal and professional growth was a predominant reflection feature in this study.

Positionality and Bias

In qualitative research, especially action research, the role of the researcher must be acknowledged, and the researcher must be aware of potential bias. As the researcher in this study, my role is unique. I am a fully trained Waldorf teacher and public school teacher, and at the time of the study, I had taught for twenty-five years. I taught in Waldorf Schools for sixteen years, including teaching in the first central city Waldorf school in a public school system in the United States, with a population of mainly African American students. As a Waldorf teacher, I emphasized Rudolph Steiner's view of imagination. After I taught in the Waldorf Schools, I taught in a traditional central public school for nine years to an African American population (using the Journeys curriculum), so I had training and experience teaching using the curriculum in this study.

Craft's theory of creativity and Steiner's view of imagination are different. Creativity was not discussed in my Waldorf teacher training. The goal was not to develop students' imagination or creativity. The goal was to teach using imagination since students already live in their imagination; however, in Craft's view, creativity needs to be developed.

When I was teaching the Journeys curriculum, I observed that the teacher was directed to teach content in specific ways outlined by the teacher's manual (and mandated and enforced by the district). While I may have formed a view of the Journeys curriculum after teaching it, I am aware that I was looking at it through the Waldorf view of imaginative pedagogy rather than Craft's view of creativity. I later discovered Crafts' theory of possibility thinking and its emphasis on developing student creativity. I did not previously have knowledge or experience using Craft's view of possibility thinking during teaching; however, I was open to encouraging student creativity. The emphasis is centered on encouraging students to think in a way that might help

students in their daily lives, which motivated me to examine the Journeys curriculum to observe if Craft's view of possibility thinking could be integrated into it. What helped me to address bias were discussions with a critical friend (Herr & Anderson, 2015). In this study, the critical friend was a retired teacher with an understanding of creative pedagogy. In addition, reflecting on the research process, using a research journal to write about the differences, considering various points of view, reflections, and creating posters with visual images of Craft's theory helped address bias.

I was teaching in the classroom where the study took place. I was both an insider and an outsider in this study. As an insider, I knew the procedures of my classroom, school, and district that might influence the study. However, I grew up and attended schools in a primarily white middle-class neighborhood. As a white middle-class teacher teaching economically disadvantaged African American students, I knew I was an outsider. My strength in teaching has always been the relationships I build with my students. Even though I lacked insider status because of my whiteness, students have sometimes explained away this whiteness by deciding in their conversations with each other within my hearing that "Ms. Prendergast is mixed."

During the time I worked at the Waldorf school, I taught the same African American students from first grade to fifth grade and created a relationship with their families during those five years. After that, I repeated the first through fifth grade cycle with another group of students. Building these relationships and being with these families and their children for years during their successes and challenges gave me an insight into my students and their families that I might not otherwise have had. However, even though I strongly connect with my students, this study helped me better understand my whiteness, how I can better relate to the students, and how I can better create lessons related to students. Creating reflective notes about the lessons, analyzing the lessons, transcribing the

audiotapes daily, and entering reflections on what was occurring in the classroom related to the research questions helped me address my assumptions and become aware of my limitations during the research process.

I needed to be aware of the distinctions between the researcher and teacher roles regarding how I perceived what was happening in the classroom. It was important to separate my opinion about the lesson as a teacher and view the data as researcher. Activities I would not normally engage in when teaching, such as videotaping, audiotaping, and transcribing audiotapes, helped separate my role as teacher and researcher. When I transcribed and coded the data, I reminded myself of the research questions to remain in the researcher's role to check bias. I examined the data for disconfirming evidence, pushed myself to identify potential or actual struggles, and used strategies for self-reflection.

Participants and Setting

The participants and the setting in this study were purposefully selected. The type of sampling used in this study was "purposeful sampling" (Creswell, 2008, p. 216) because the samples were all from my second-grade classroom where the study took place (Creswell, 2008, p.216). The study focused on a specific subgroup of students (the students in my classroom) to gain insight into their experience of possibility thinking within the lessons. The seventeen students who were all African American consisted of ten males and seven females. They were in second grade and attended an urban central city public school in the largest urban public school district in a Midwestern state in the United States. The school was an elementary school which included students from three-year-old kindergarten to fifth grade. This school was home to approximately 300 students. The student population was categorically described as 95% Black not Hispanic. All other racial/ethnic groups were represented in small proportions. Furthermore,

approximately 98% of students were classified as economically disadvantaged according to free and reduced lunch data, 20% were students with disabilities, and there were almost no students classified with limited English proficiency. The school was rated as meeting few expectations academically during the 2017-18 school year (Department of Public Instruction, DPI, 2018). During the course of the study, the district mandated that there be days for testing and days off from school for parent-teacher conferences, the October and Thanksgiving breaks, and school administration dictated times for school events, so there were many days that the study was interrupted. When these interruptions occurred, lessons were taught in sequence during the next available school day.

Obtaining Consent. Participation in the study was obtained through the *IRB Informed Consent Form* (Appendix A) and *IRB Minor Assent Form* (Appendix B). I called each parent to explain the study. After that, I sent home the *IRB Consent Form* and *The letter requesting permission to participate in a research study* (Appendix C) with students to parents. All parents signed the IRB consent form. Initially, one very introverted student did not want to be videotaped or audiotaped, but he changed his mind after a few lessons. All data gathered from participants were collected with explicit permission from the seventeen participants' parents, consent from the participants, and in full compliance with Institutional Review Board (IRB) guidelines.

Data Collection

Data collection occurred during the Fall semester of 2019. Data collection methods consisted of multiple sources to show triangulation as Marshall and Rossman (2006) suggested. Data was gathered from whole group discussions, the small teacher-led group, and independent literacy stations on discussions and learning activities connected to the learning objective.

Participants and parents were informed that confidentiality was maintained. Forty-nine hours of lesson data was collected over twenty-nine days; artifacts include sample lesson plans, representative student work, my field notes, and a teacher-researcher journal.

The research journal consists of my reflections, observations, teaching experiences for creativity, and decisions made in the research cycle. Observations helped "understand complex interactions in natural settings" (Marshall & Rossman, 2006, p. 98). I audiotaped my verbal field notes as well as my students' comments and dialogues to gather detailed data on students' responses to teaching Journeys through the lens of the possibility framework.

Body of Data. While the body of data that I gathered for this study includes the Journeys curriculum Unit One, teacher artifacts (lessons, field notes, reflective journal), student artifacts (drawings, written classwork), and audio and video recordings, the data used for this study was from the independent literacy stations, since the activities there were more open-ended and fit better within Craft's possibility thinking framework allowing for greater student interpretations. The gathering of artifacts and transcribing of the audiotapes occurred daily for approximately ninety minutes over a period of twenty-nine days (some lessons extended to more than one day). During this time, students were at times talking, writing, drawing, or reading. Table One briefly outlines the data and notes the connection to the research questions and how I conducted the analysis.

Table 1 *Levels of Research*

Data	Research Questions	Data Analysis
<p>Action Research (Whole group, teacher-led group, literacy stations)</p> <p>Observations (taking place as I taught) for the duration of the study</p> <p>Audio recordings of independent stations and teacher stations (120 minutes a day for 25 lessons (29 days)-Whole group, three stations with three rotations and three teacher-led groups.</p> <p>Video recordings (110 minutes overall)</p> <p>Student work samples collected for the study</p> <p>Field notes-I recorded field notes on the audio tape at the teacher-led group.</p> <p>Teacher Research Journal- Creating and responding to observations of the data, webs, drawings.</p>	<p>RQ4-To examine how students responded to the adapted lesson plans</p> <p>Data were gathered for 25 days (lasting approximately 90 minutes daily).</p> <p>The lessons were audio-recorded daily. I transcribed all audiotapes daily (110 pages in total).</p> <p>Visual performances, such as dance, were videotaped.</p>	<p>Abductive Analysis</p> <p>Deductive—using possibility thinking</p> <p>inductive analysis-creating themes from the patterns and repetition of codes</p> <p>drawings were analyzed by having conversations with students about their drawings</p>
<p>Journeys Unit One (455 pages)</p> <p>1. Teacher Manual</p> <p>2. Student-leveled readers</p> <p>3. Ready-Made Literacy Stations</p>	<p>RQ1-Content Analysis- to examine the text through the lens of possibility thinking and codes that emerged from the text.</p>	<p>Abductive analysis</p> <p>1. deductive—using possibility thinking</p> <p>2. inductive analysis—emergent codes</p>
<p>Lesson Plans created by the teacher</p>	<p>RQ2 and RQ3- Lesson plans integrating Journeys with the elements of possibility thinking</p>	

Methods of Data Analysis

Content Analysis. In this teacher action research study, I first performed a content analysis on a mandated curriculum to identify the problem in this study. I focused on Unit One as this is the first unit. The content analysis was done to identify the issues when determining practical solutions for incorporating creativity in places with constraints. Journeys was analyzed deductively through Craft's view of possibility thinking to discover areas where students can engage in possibility thinking and to identify omissions and constraints to possibility thinking. The process included identifying initial codes using possibility thinking elements. I identified the meanings related to these codes and reflected on the question, Does the data I coded accurately portray Craft's meaning of possibility thinking? I then summarized the reasons behind my coding scheme.

I first highlighted where possibility thinking occurs (even in partial form) and where it does not occur in the existing curriculum. I then made decisions regarding interventions I could use to address the content analysis results.

Content Analysis Procedures. The content analysis was implemented by hand rather than using a computer program. Then, the data was entered into NVIVO (a qualitative data analysis software program). The teacher edition, activities in the leveled readers (student books labeled struggling, on level, and advanced), and literacy stations were coded to discover where possibility thinking elements might be omitted, constrained, and present.

Seven codes were extracted from the literature on Craft's theory to examine the curriculum, i.e., question-posing, question-responding, self-determination, intentionality, being imaginative, play, and innovation (Craft et al., 2013). These words were not necessarily found in the Journeys textbook. For example, self-determination means creating a goal or objective, so the words goal

and objective were used when conducting the analysis.

As well as searching for words and terms, I searched for similar concepts and connections to the categories outlined in Craft's theory while examining the Journeys unit. I also highlighted those concepts and connections that were not present. For example, if the text indicated for the teacher to pose a question to students, I identified if it was an open question that allowed for possibility thinking (in Craft's view) or a closed question with a predetermined answer which would not be in line with Craft's view. The deductive codes (possibility thinking elements) and what I looked for in the texts are in Table 2:

Table 2 *Deductive Content Analysis Codes*

Deductive Codes	Meaning
Question posing	Degree of possibility–narrow, moderate, and broad Why, how, and what-if questions Student-created questions
Question Responding	Students could evaluate, compensate, reject, test, accept, or predict Students can reply using a unique approach The text provides one correct answer.
Play	Construction of narratives in connection with play Imaginative play, role-play Explore, experiment
Self-determination	Student choice Student decision-making about learning goals
Intentionality	Independent work Making decisions to follow through on learning goals
Being Imaginative	Creating new ideas/objects Blend ideas or objects Solve problems
Innovation	Make connections Original activities

Data Analysis for Action Research

The action research process includes "reflecting, collecting data, trying a solution, and spiraling back to reflection" (Creswell, 2008, p. 609). Data analysis in action research includes multiple layers: "the initial meaning making, including some decisions regarding directions for interventions or actions; and then a revisiting of the data for a more thorough, holistic understanding" (Herr & Anderson, 2005, p. 81). Each time a researcher engages in action research, knowledge is increased for improvement or transformation within and beyond the setting (Herr and Anderson, 2005).

The data were examined to help me discover students' experience of learning while encouraging possibility thinking to discover what "all participants have in common" (Creswell, 2007, p. 58). The experience of teaching and learning language arts while using Craft's elements of possibility thinking to encourage creativity was explored to discover individual experiences and patterns in students' responses to gain insight into students' subjective worlds.

For my analysis in the action research portion of the study, I used an abductive approach, which is a combination of deductive and inductive coding. First, I coded deductively by exhausting the theoretical approach to coding (Bussi et al., 2022), which, in this case, is the theory of possibility thinking. Then, I examined the data using an inductive approach to code data that was not accounted for when coding with the possibility thinking theory (Bussi et al., 2022).

The data was organized into significant themes that "constitute the nature of this lived experience" (Creswell, 2007, p. 59). The data's codes were analyzed to identify links, patterns, and "clusters of meaning" (Creswell, 2007, p. 61) among the themes. Categories were created from these themes. Creating categories involves observing patterns and commonalities (shared

experience) in students' different experiences. I compared and contrasted audio transcripts with one another to identify repeated themes in the data and searched for those categories within the themes that have, as Guba calls it, "internal convergence and external divergence" (as cited in Marshall & Rossman, 2006, p.159) meaning that the categories do not exclude one another but are distinct.

First, I coded and categorized the data from the audiotapes, videotapes, and student work samples and placed them in NVIVO (qualitative data analysis software). Then, I analyzed the data again using paper, colored pencils, and highlighters. I worked with sections of the data that I coded in NVIVO. For example, when working with the data on hard copies, I first made notes on the margins of the data and then highlighted emerging topics. Then, I wrote the categories that emerged from the transcripts. When examining the element of play (experimenting with objects), for example, some of the categories that emerged were collaboration, prediction, compensation, and evaluation.

Second, I drew a picture of the data with colored pencils. Third, I created a mind map of the data and highlighted the themes that emerged on the mind map. Fourth, I interviewed myself, asking the following questions about the data.

- What are the consequences of what emerged from the data?
- How do the ideas from the data connect?
- How are the ideas different?
- How does Crafts' theory matter in the context of what I am investigating? Or of this particular investigation?
- Is anything missing?
- Is anything wrong?

- What are the pros and cons of each way of looking at the data?

These steps allowed me to see where the data connected and themes began to emerge.

Inductive Coding. I noticed data was not included in the study when I only coded using deductive coding so I changed my coding scheme to include inductive coding. With inductive coding, some new codes and themes emerged as central to the study. Since I am both a researcher and teacher in this study, the data I collected is from my classroom, my students, my lessons, and my teaching. It seemed appropriate also to code what I saw as the teacher. It was helpful to explore my interpretations of students' interactions and reactions to the assignments and determine whether those interactions and reactions played a part in possibly thinking during the episodes. Additional findings emerged through inductive coding. Below is the table of inductive codes which emerged when I re-examined the data episodes through my lens as a teacher and researcher. At first, I had many more codes that are now under “terms” which I then collapsed into fewer codes as they were synonymous or similar enough to be posted under a single code that could then be grouped under themes. After closely examining the videotapes, I included nonverbal codes since there were instances when students communicated nonverbally. Although nonverbal communication included hand gestures and physical space, most nonverbal communications were through pointing and looking. Nonverbal communication sometimes punctuated verbal communication, and sometimes there were only nonverbal actions. Nonverbal communication codes are in Table Three. The inductive codes that emerged are in Table Four.

Table 3 *Nonverbal Communication Codes*

Inductive Coding from Video	Nonverbal Gesture
looking	looking away, making eye contact, narrowing eyes
pointing	gesture with hand or finger referring to someone else or for emphasis

Table 4 *Table of Inductive Codes*

Term	Definition of Term
Engaged	paying attention, engrossed, absorbed, smiling, cheerful, playful, having fun, lightheartedness, looking to another individual for direction, going along with, animated, dynamic, forceful, intense, bubbly, bouncy, exuberant, paying attention to the activity focused on assignment, getting involved, playing a part, and contributing
Unengaged	distant, distracted, bored
Collaboration	Two or more students are working together or organizing play together-teamwork
Students display self-consciousness	doubtful, uncertain, tentative, nervous, embarrassed, uncomfortable, inhibited, shy
Flexible	adaptable, open, willing to compromise, accommodating
Inflexible	resistant, holding the group back from moving forward
Focus on self	paying attention to self, connection with life experiences
Focus on group	paying attention to members of the group
Focus on teacher	paying attention
Connecting with others	relating to others in the group

My presence in a group changed the dynamic since students were more conscious that their work and interactions were being observed and possibly evaluated. It was rare that there were problems between group members; however, inflexibility was displayed when students held back while performing in front of the class because of self-consciousness. Self-conscious or shy students were more comfortable with activities that did not involve performances. Student engagement and connections played a significant role in the lessons since it was challenging for students to produce possibilities without communication between group members. The literacy stations were where students worked in groups independently of the teacher and appeared to find the most freedom to explore possibilities.

The codes were then grouped into the following themes, explained in the next chapter.

The themes were as follows:

- Collaboration supports possibility thinking by leading to new possibilities
- Connecting life experiences to the curriculum through possibility thinking
- Flexible story structure and independent learning as possibility thinking
- Visual strategies as a bridge to the imagination

Quality Control

I was an insider researcher, practitioner, and employee in this study. This study is a part of several dissertations that are a "hybrid between the traditional dissertation study and studies carried out by teachers on their own practice" (Fecho, 1995, p. vi).

According to Lincoln and Guba (2000), the researcher needs to have reflexivity, reflecting critically on oneself to avoid bias. For example, the teacher reflects on herself as both teacher and learner to avoid bias. A research journal documenting decisions and reasons for decisions can help objectivity (Herr and Anderson, 2005). In addition, Herr and Anderson (2005)

recommend that teacher researchers use "critical friends as vital sounding boards, to help them step back or out of the research enough to more thoroughly understand what it is they are seeing and doing" (p.78). Critical friends (Herr and Anderson, 2005) are beneficial, as they can pose questions regarding the meaning the researcher brings to the data and push them to be explicit about this meaning. In this study, I utilized a research journal and a critical friend.

Triangulation is central to the validity of the research (Fetterman, 1998). I used several methods to expose many characteristics of a particular view of reality. In this case, I compared audio transcripts, videos, and artifacts (artwork, samples of writing, projects, lesson plans, student work, and the teacher-researcher journal) for triangulation. "Triangulation is the act of bringing more than one source of data to bear on a single point" (Marshall & Rossman, 2006, p. 202). I tested one source of information against another to strengthen my interpretation of my findings.

Interpretation of Findings

Interpretation is central to the process of analysis (Rossman & Marshall, 2006). "In choosing words to summarize and reflect the complexity of the data, the researcher is engaging in the interpretive act" (Marshall & Rossman, 2006, p. 162). I interpreted the findings by considering the meaning of the themes, patterns, and categories. After critically challenging the patterns to discover a possible alternative to the explanations, I made sense of my findings, offered explanations, and drew conclusions. Connections between the questions and their importance to the unfolding narrative were explored, which was helpful when I wrote the description and interpretation of the data. I balanced description and interpretation as recommended by Patton (cited in Marshall & Rossman, 2006, p.163). In the next chapter, I explain the findings from the study.

CHAPTER 4: Data Findings

The purpose of this study was to investigate how creativity can be integrated into a prescribed literacy curriculum to encourage possibility thinking in students and discover how students respond. This chapter has two essential purposes. First, I describe in detail how the published curriculum of Journeys and possibility thinking theory were woven together. Second, I describe and examine how these lessons affected teaching and learning and give exemplars from my teaching that showcase how the students responded. To do this, I will first describe some aspects of the study classroom in depth, including the physical setup and schedule. Next, I will present data from representative lesson plan activities and details from student responses, including my reflections on those responses.

Description of the Environment

Wolcott (2009) recommends “start with a straightforward description of the setting and events” (p. 27). A description of the context within which the research study took place will be described since it affects how and where students interacted and how data was collected (i.e., audio recorders on group desks).

My first year in a traditional school in the district was when the Journeys literacy curriculum was adopted and mandated in the classrooms. The time of the study was after the No Child Left Behind Act of 2002; however, schools were still held accountable for teaching and learning through the Every Child Succeeds Act of 2015. In addition, teachers were not meant to deviate from the Journeys curriculum because students sometimes moved between schools in the district, and standard use of a single curriculum was intended to provide stability for those students. Since the primary concern was with test scores, there was little to no emphasis on developing students’ creativity in the prescribed curriculum or Journeys. I felt some

apprehension, since I was intent on creating spaces for students' creativity while the Journeys curriculum offered few opportunities and the district did not encourage deviating from the curriculum. I wanted to create a classroom environment where students would feel at home, engage in creative practices, and exercise their imagination.

The following section is excerpted and edited from field notes I took in order to describe the space and environment clearly. These field notes came from a single week when I took notes on a particular aspect of the classroom.

(Field Notes, #2-6, Oct. 21-25, 2019)

The environment I chose to build needed to allow students more freedom and scaffold their creativity. I am not new to using imaginative teaching strategies, so I already had experience creating a space for my students in which to use their imagination. However, Craft's view of creativity and teaching differs from Waldorf's teaching methods, so some adaptations were needed that invited more ownership and independence. Waldorf pedagogy encourages the development of creativity through indirect methods, while Craft's view is based on problem-solving with imaginative solutions.

To align with district mandates concerning the classroom arrangements, I had to create spaces allowing students to work in groups (as well as space for the teacher-led group), including a carpet area, a station chart, and signs with station names. I have identified four crucial parts of the classroom that I present and discuss: the desk arrangement, carpet area, station bins, and station chart.

Desks

Desk arrangement. The room's desks were triangular-shaped and fit neatly into a circle so four students could sit in one group facing another. This arrangement of the desks allowed for

group work, conversations, and collaboration. There were six of these pods in the room. Groups consisted of three or four students, and the extra desk was used for the reading station bin.

Desk Activities. After the whole group lesson on the carpet, students sang and went to their desks to complete their station work. All station work was completed at their desks or around their desks. A designated student brought the station bins to the groups while students sang a song.

Teacher's Table

The teacher's table was a sizable kidney-shaped table at the front of the room. There was room for six students to sit at the teacher's table. Behind the table was a large dry-erase board mounted on the wall.

Teacher Table Activities. While students completed their station work at their desks during the literacy block, one group was always with the teacher at the teacher's table. Each day three different groups met at the teacher's table during the reading lesson. I divided the students into reading levels which would change depending on students' progress. The groups were loosely based on the following levels. The first group was beginning readers, the second group was emergent readers, the third group was proficient, and the fourth group was advanced.

Station Bins and Chart

The station bins were bright blue laundry baskets open on the top and open on one side. These bins had signs attached that indicated which station activities were in each bin (vocabulary, writing, reading, phonics, spelling, media). In the bins were folders with various activities I had planned so students could choose activities, especially when I added activities to the stations as the week progressed. There were various folders and activities, so students could always choose which activity to do in that station. All the activities were related to the study in the reading,

writing, and vocabulary stations. The bins were stacked at the back of the classroom.

The station chart was a large piece of thick maroon cardstock. On top of the chart were labels that indicated the first station, the second station, and the third station. Placed on one side of the chart were rectangular colored pieces of laminated cardstock that indicated the name of each group (blueberries, kiwis, lemons, cherries, oranges, and grapes). In the middle of the chart, in columns, were colored popsicle sticks, where I wrote the stations' names. The media and phonics stations were not included in the study as students used the computer to listen to online books, and basic phonics was mainly sorting long and short vowels and matching pictures to words. This study used three stations (reading, writing, and vocabulary). The popsicle sticks were moved daily, so groups had different stations.

Activities with the Station Bins and Station Chart. After the whole group time, the students recited the expectations during station time. These expectations were on a sign that a student would point to as students recited each expectation (get along, respect others, on-task behavior, use quiet voices, participate, stay in your group). The students began singing and moving around the room to get to their groups. Some students stood at the front of the room, leading the singing. Students sat at their desks at the end of the song, and the teacher-led group sat at the teacher's table. During the song, the student whose job was to pass out the stations looked at the station chart to determine to which group she would deliver the station bins. On the smartboard (virtual interactive whiteboard) was a large timer. The timer was set to twenty minutes which is how long students had to work in their stations and the teacher-led group. When the bell rang, the timer was set to one minute, and students had to clean up during that minute. When the bell rang on the timer, students sang again, moved to retrieve supplies, and were expected to sit down at the song's end. The second teacher-led group would come to the teacher's

table during this time, and the same procedure was followed for the third station. Each day students followed this same procedure.

Carpet Area

On one side of the room was a large rectangular carpet with different colored squares. Each student sat on a square on the edges of the carpet so students could see everyone else. The carpet was where the class began their day (after breakfast) and participated in a mindfulness activity and the morning meeting. After the morning meeting, the literacy block started, and most of the whole group activities took place on the carpet (i.e., introducing the target skills, vocabulary, and discussions).

This section provided a picture of the classroom setting. My classroom setting was crafted to support the implementation of the Journeys curriculum, and I used this set-up to make space for Craft's suggested creative activities. The classroom set-up and environment supported teaching and learning through the Journeys curriculum while allowing me to adapt the curriculum to include possibility thinking activities.

Literacy Block Schedule

During the study, the literacy block followed a single schedule. In this section, I discuss how I used the literacy block to focus on the critical feature of Craft's theory of creativity, namely, possibility thinking, which is at the center of all the other elements of Craft's view. Creative learning requires students to draw from their thinking and experiences to generate ideas and act on them. Student-centered learning means the teacher must carefully design an environment to actively encourage students to think for themselves. Even though the district dictated the set-up of the physical environment, I aimed to create a space where students were comfortable exploring their creativity individually and collaboratively.

Each day the literacy block followed a similar schedule. After the whole group time ended, students went to their literacy stations while some worked in the teacher-led group. Stations rotated three times a day, so students visited two or three stations and one teacher-led group. There were three stations and, therefore, three teacher-led groups. Each station and the teacher-led group was twenty minutes long. The reflection time lasted ten minutes after the end of the third rotation.

A Typical Day. Students engaged in the literacy block at the beginning of the day and went to intervention groups (not associated with the literacy block) after about sixty minutes of the block. After that, students went to specials (art, music, gym). After recess and lunch, students resumed the literacy block. At the end of the literacy block, students reflected on their experiences during the literacy block (for example, they were asked what they learned). They also performed or shared what they learned. In the chart below, I have included what I was doing both as a researcher and as a teacher during the weeks that I collected data for this study.

Table Five displays an outline of a typical literacy block (Data gathered during Nov. 18-22, 2019, compiled from field notes).

Table 5 *Literacy Block*

What students were doing	What I was doing as a teacher	What I was doing as a researcher	Setting	No. of students
Listening, discussing, learning to facilitate the discussion	Introducing the learning intention and success criteria for the lesson. Facilitating the whole group and partner discussion and teaching students how to facilitate a discussion.	Audiotaping and videotaping a few students at a time.	Carpet	17

What students were doing	What I was doing as a teacher	What I was doing as a researcher	Setting	No. of Students
Actively engaging in collaborative creative activities every day for the study.		Observing, audiotaping and videotaping, posing questions	Carpet or desks (depending on the activity)	17
Working in literacy stations together and independently on creative activities in the reading, writing, and vocabulary stations.	Working with students in the teacher-led group and facilitating a creative project, posing questions, and standing back		Desks and teacher's table	Desks—groups of 3 or 4 Teacher's table group of 4-6
Talking, sharing, or performing what they created during the literacy block		Observing, audiotaping	Carpet, desks, and teacher's table	17 students

This schedule shows that students followed a routine within the structure of the literacy block. I facilitated by asking questions and encouraging students to create questions. I also provided an arrangement that allowed students to pursue discussions and creative pursuits as independently as possible. In other words, I aimed to let students facilitate, and my goal was to stand back as much as possible when students were exploring their creative endeavors in the classroom to give them space to discover. The station time allowed students to practice and explore or try out their creative pursuits independently and provided the freedom to engage in investigative pursuits.

Students met with me in small groups so that I could help students at their reading level. Students could reflect and share what they created in the literacy stations and the teacher's group

at the end of the literacy block. After the lesson, students led the discussions by asking other students questions and conversing about what they were explicitly learning that day and how it connected with the lesson's activities.

This section described an environment with a traditional literacy block structure. The boundaries of the structure were stretched to allow for student exploration, investigation, and possibility thinking. Students explored during the whole group and small group work, independently to the extent possible. Also, students shared their creations and learned to facilitate discussions with the class. In the following section, I analyze the data and describe the findings from the study.

Findings From the Study

This study examines how creative teaching and learning techniques were implemented in a published elementary school language arts curriculum, how Journeys was adapted and taught using Craft's theory of possibility thinking, and how the students responded. This study's findings are presented according to the research questions as described in Chapters 1 and 3. The first section presents this study's findings for the content analysis in answer to research question one: What are the challenges and opportunities in the Journeys curriculum as identified through the lens of Craft's theory of possibility thinking? Possibility thinking elements are introduced into lesson plans addressing research question two: How can a teacher adapt the Journeys curriculum when viewed through Anna Craft's lens of possibility thinking? Finally, the third section presents the findings concerning students' responses to the lessons addressing research question three: How does a teacher implement creative teaching and learning methods to teach for creativity in a mandated prescribed curriculum? and question four: How do students respond to lessons which integrate possibility thinking?

Content Analysis Findings: Investigating Possibility Thinking in the Journeys Curriculum

In answer to research question one What are the challenges and opportunities in the Journeys curriculum as identified through the lens of Craft's theory of possibility thinking?, this section will focus on the content analysis of the Journeys curriculum. Findings concerning the status of possibility thinking as present or absent are offered.

One method used for content analysis was to count the word frequency related to Craft's theory. Another step was identifying words that were the same and appeared in different forms (for example, question, questioning, questions). Also, synonyms that implied similar concepts and meanings that Craft identified were counted to make connections with the meaning behind the words (Saldana, 2021). For example, if the word narrative was counted, the word story was also counted. The term being imaginative appeared once. The word creativity did not appear in the text. The word innovation, including synonyms and stemmed words, was absent from the Journeys text. The word intentionality was missing; however, setting a purpose was present in the Journeys text three times. The word choose was present one time. These words are both related to the word intentionality. The term play and stemmed words relating to playing were absent in the Journeys text; however, the word pantomime occurs once, which I related to play because when an individual pantomimes, they are pretending.

When examining the features of question responding (evaluate, compensate, reject, predict, accept, test, complete), the word predict and evaluate occur the most since they were target strategies. Variations of the word predict with synonyms and stemmed versions occurred thirty-eight times. The word evaluate occurs seventeen times, and a variation of the word occurs once. The words compensate, reject, accept, test, synonyms for those words, and stemmed words are absent.

Question posing and question responding were the elements that were represented the most. The plural word questions appears fourteen times, and the singular word question appears thirty-one times. Implementing the word frequency process indicated which elements occurred most often in the Journeys curriculum.

The next step was to analyze the identified concepts in the text to deepen the understanding of what the text's authors meant and what the concepts meant according to Craft's theory. After that, the concepts were grouped into themes found in Craft's view of creativity. Further, I identified activities and questions related to possibility thinking.

I reflected on the question, Do I think this activity will allow students to engage in possibility thinking according to Craft's theory? Even though I was looking at the curriculum through Craft's lens, I was aware that my own cultural and social background, including my experiences, played a part in my interpretations. In addition, I was mindful that my background differs from that of my students. However, I tried to address this by allowing students the opportunity to make their own connections with the learning activities I was planning through the use of creativity to value students' contributions (Robinson, 2015). Furthermore, I was aware that Journeys did not promote itself as a curriculum that encouraged possibility thinking in students.

Finding Possibility Thinking Activities in Journeys. When I began examining the questions and activities in Journeys, I realized that finding accurate representations of possibility thinking would be challenging. I decided to code areas where possibility thinking might be partially present or activities could be adapted to include possibility thinking. I coded all questions since question posing is an element of possibility thinking. I labeled the questions narrow, moderate, and broad. I also coded places where question responding was possible.

Another code I employed was being imaginative, which illustrated where students could create something new. Innovation was not present in the Journeys text. Self-determination was present when students discussed what they wanted to write and for what purpose. Intentional action was present when students were asked to research an animal (Journeys decided the research goal; however, the student could make her own decisions about what animal to research and subsequent decisions about the research). Below is a table of codes and examples of the coding.

Table 6 *Codes in The Content Analysis*

Code	Criteria	Example of Coded Selection
Question Posing (narrow, moderate, broad)	Questions addressed to students Students asked to create their own questions.	Which dog in the picture has curly hair? (narrow—answer is given in the text) Why do you think these characters take walks in the woods? (moderate) What makes people change? (broad)
Question Responding	Predict what will happen in the story, what the story will be about, or what a character will do Evaluate if something worked well (other features of question responding were absent).	Predict—Then have children make predictions about what might happen in the story. Evaluate—Have partners give their opinions about whether or not the author did a good job writing.

Code	Criteria	Example of Coded Selection
Being Imaginative	Create something new	Think about how the story “A Swallow and a Spider” could have ended differently. Write the new ending as a play and act it out. Work together to make sentences that describe a classroom object or the scene outside the classroom window.
Play	Act out stories or experiences	Act out events in the story. Picture yourself in the woods on a fall day. What would you do? What might you see or hear? Act out one of these things.
Innovation	Create an original story or drawing	Write a story of your own.
Self-determination	Students decide the goal of the research	Guide children to develop research projects.
Intentional Action	Make decisions about an assignment that already has a goal decided by Journeys. Write or draw about a topic decided by Journeys. Make decisions about their purpose for reading	Explain that good readers set a purpose for their reading. Have children page through the selection and tell their purpose. Write about how a person and his or her pet are alike and different.

Second Stage Of Coding: Reflection on the Content Analysis Question. The next question I examined was: Are these areas that I coded accurate portrayals of Craft's view of possibility thinking? For example, Craft stresses the concept of questioning. I examined all the areas and removed those that did not relate to Craft's meaning. This was done for all the different codes.

To summarize the results for question one, the most often coded elements in Journeys were question-posing and question-responding. Many other elements were present in some sections of Journeys, present and absent in other sections. Overall, the element of play was absent. The presence of the elements allowed me to use Journeys as a springboard to build upon to create lessons. The lessons I wrote were designed to encourage and expand possibility thinking in students.

Learning and Cultural Relevance in Journeys and Craft. One of the most striking observations was the absence of cultural diversity and differentiated types of learning activities in Journeys. Learning in Journeys is primarily passive, meaning students are receptacles of information rather than active creators of their learning experiences. The curriculum controls the materials and information students receive, as all questions are scripted for teachers, and many answers are provided in the teacher's edition. The role of the teacher is to ask questions according to the instructions in Journeys, lead discussions, impart information, read text from the teacher's edition, and demonstrate how to fill out the graphic organizers. In other words, Journeys provides the materials, and the teacher is the deliverer of those materials.

There are few opportunities for teachers and students to contribute to the curriculum in Journeys. Experiences from students' culture, home, family, and community are given little space. For example, the books students read are chosen by the curriculum. Answering rather than

asking questions about texts is the primary learning mode. While students are given opportunities to respond to prompts in their own way and discuss some of the questions with peers, the differences between students are acknowledged mostly through ability. Additional individual differences, such as culture, race, gender, and learning styles are not considered, e.g., for bodily/kinesthetic learners.

When examining Journeys for cultural diversity, I discovered that no African Americans were depicted in the main stories presented to students in the whole group. There was minimal representation of African Americans in the Journeys leveled readers. For example, only one story in a leveled reader about a boy and his cat named Sooty (*Ben and Sooty*) and two informational texts (*Birthdays Around the World and Families*) depicted brown and black children. A few photos of African American children were in the teacher's edition and the Journeys stations.

The teacher directs most activities in Journeys, and there were only a few activities where students could share their life experiences. It was at the literacy stations that students had the most opportunity to use their “funds of knowledge” (t Gilde & Volman, 2021). Funds of knowledge is a term that has been used by several scholars (see Moll et al. 1992; Andrews & Yee, 2006) to explain the rich life experiences that students bring with them into schools. Often, as scholars have argued, (Delpit, 1995; Gay, 2010; Ladson-Billings, 2014) teachers persist in teaching through deficit lenses which means that students are seen as lacking or deficient, thereby perpetuating stereotypes of students of color. The funds of knowledge approach (Moll et al. 1992) focuses on validating student knowledge and life values so that one can scaffold student learning from the familiar to the unfamiliar. By including and creating opportunities for students at the independent literacy stations, students had an opportunity to create a connection between their experiences and what they were learning in school in a positive manner. Unit one of the

Journeys curriculum was Euro-centric, with few opportunities for African American students to connect with the curriculum by seeing themselves depicted in the stories or sharing their knowledge and experiences from their lives and communities.

Further, when examining the possibility thinking theory, it was apparent that Anna Craft did not address culturally responsive/relevant pedagogy directly through her possibility thinking theory. However, Craft (2003) does write about the importance of connecting learning to children's lives, cultures, and interests, stating that connecting learning to students' lives gives students a sense of ownership. While her empirical studies do not indicate that they were performed in culturally diverse schools, she did address the problem of cultural and color blindness by indicating that disregarding students' diverse cultures can block creativity (Craft, 2015). Expanding on her view that a connection between students' lives and learning is essential, the possibility thinking activities can be a first step toward addressing the lack of culturally responsive/relevant pedagogy in Journeys.

Action Research Findings: Themes Emerging from the Lessons

First, I will explain the change made from deductive to abductive coding. Then, I describe the adaptations that I made to integrate possibility thinking into the Journeys curriculum. After that students' responses from the teaching of the adapted lesson plans will be shared. I discuss student responses under specific themes that I coded from the data and support them with exemplars and excerpts from the data.

After creating and implementing the lessons, the data from student responses (video, audio, artifacts) were coded abductively according to Craft's elements and the codes that emerged from the data. Abductive coding combines deductive and inductive coding (Bussi et al., 2022). Abductive coding allows for both top-down and bottom-up ways of looking at data. Theory can

be informative for coding, but pure deductive coding can miss many elements that can be found through emergent coding. First, I coded deductively, and then I coded inductively. While deductive coding is derived from a theory, inductive coding emerges from the data and is not brought down from a theory (Creswell & Poth, 2018). The deductive codes were drawn from Craft's elements of possibility thinking, and the inductive codes emerged from the data. The coding scheme is outlined in Chapter 3. After inductively coding the data, it became apparent that the students' independent and group work demonstrated most closely what Craft meant by possibility thinking. Therefore, my findings will focus on these two aspects of the data. The themes developed as I worked with the data.

The following themes and findings emerged from the data analysis:

- Collaboration supports possibility thinking by leading to new possibilities
- Connecting life experiences to the curriculum through possibility thinking
- Flexible story structure and independent learning as possibility thinking
- Visual strategies as a bridge to the imagination

Episode One: Collaboration Supports Possibility Thinking by Leading to New Possibilities. While Journeys provided some opportunities for collaboration, the activities I incorporated into the lessons gave opportunities to communicate new ideas, allowed students the freedom to engage in possibility thinking in various ways, and gave them opportunities to see possibility thinking modeled by others. Students could work together on a shared purpose, which resulted in new creations. Students built on one another's ideas and rejected each other's ideas, which prompted new ideas to emerge. Students also problem-solved, played, and created new products such as stories, pictures, and dances. In addition, it gave me, as a researcher and teacher, a way to see into students' thinking through their communication with other students.

Collaboration functioned as a feature that promoted possibility thinking by relating to student engagement in play and imaginative activities such as dance, stories, drawing, puppet plays, and problem-solving.

Collaboration and Movement. In the following section, I draw from Episode One, Lesson Five Day One (Field notes #5, December 9th, 2019) to examine an activity from Journeys, describe how I adapted it to include the possibility thinking elements, and reflect on how the students responded when I taught the activity. The theme's focus is on the relationship between collaboration and possibility thinking. In answering the research question, "How do children in the classroom respond?" the fieldnotes, videotape, and interactive dialogue with the students yielded the overarching theme of learning through creative movement and collaboration. It emerged from prompts I provided as a teacher and the freedom to create on the part of the students. It involved collaboration as a significant theme within the creative movement and supported learning through possibility thinking. What emerged from the data is that shared purpose and the willingness to work together can influence the extent to which possibility thinking can be enacted successfully and even enhanced. In addition, the activity demonstrated that collaboration could evolve as students learn to work with one another and build on one another's contributions. The activity encouraged collaborative learning as students related to the concepts from Journeys through creating movement or dance and increased their opportunities for possibility thinking. The data also showed that providing opportunities for collaboration can work well; however, skill-building for collaboration might be an essential element that needs to be intentionally taught to students to further collaboration in classroom activities.

Journeys Vocabulary Activity. One daily portion of the Journeys whole group lesson includes a short vocabulary activity. In this vocabulary activity, Journeys instructs the teacher to

introduce the vocabulary by displaying and discussing the words, using sentences from Journeys. The details of the activity from Journeys are in Table 7. I coded the possibility thinking element present as question-posing with narrow possibility. This section of the data coding and analysis in Journeys involves *a priori* coding. In other words, I coded the text for present or absent elements connected to Craft's elements of possibility thinking. The codes I used were the presence or absence of question-posing, question-responding, intentionality, play, innovation, self-determination, and imaginative possibilities. I coded the same to see whether question-posing offered broad or narrow possibilities.

Table 7 *Journeys Vocabulary Activity and Corresponding Codes for Possibility Thinking*

Code for possibility thinking elements in the adjacent excerpt	Journeys excerpt
Absence of possibility thinking elements (question posing, question responding, intentionality, play, imagination, self-determination, innovation)	Review target vocabulary and definitions with children. Remind children that they heard these words in the Read Aloud "Lester." Recall story events as you guide children to interact with each word's meaning. Continue with the rest of the words.
Code for possibility thinking elements in the adjacent excerpt	Journeys excerpt
Question posing—present and narrow	Mrs. Carpenter's class loved the funny noises the pets made. What makes noise in your classroom? This question is coded as narrow since students merely observe and remember what makes noise rather than being involved in creating something.
Question posing—present and narrow	The children thought watching Lester was wonderful. What is something wonderful that you enjoy doing at school? There may be many aspects of school that students enjoy. However, this question does not involve students creating possibilities or alternatives. Students use their memory to recall what they know they already enjoy at school.

I altered the activity to include more possibility thinking elements by changing the talking aspect of the lesson to an artistic activity involving the creation of a song or dance in connection with the vocabulary words. This study is not about assessing if students learn but about offering learning opportunities that include possibility thinking. As a teacher, I believe this activity allowed students to learn the words differently since they must translate them into movement or song. Associating a word with a particular movement they have created allows students to internalize the word differently and learn the word. This activity is more engaging than sitting for an extended period, allowing for kinesthetic learning and movement that minimizes boredom in the classroom.

In Table 8, I present my altered lesson plan to show the inclusion of Craft's possibility thinking elements. Question-posing with broad possibility and being imaginative are both intentions in my altered lesson plan and, therefore are present. The activity connects with the possibility thinking elements and encourages collaboration between students.

Table 8 *Altered Written Vocabulary Lesson*

Possibility Thinking Elements	Excerpt from my written lesson
Being imaginative (allows for imagination) Question posing-broad (allowing for several possibilities) Collaboration (encourages students to work together)	Vocabulary Words for the whole week lesson 5, unit 1-wonderful, noise, quiet, sprinkled, share, noticed, bursting, suddenly Work with a partner. Each student has their word card. How would you combine two or more words into a song or a dance?

Possibility Thinking Elements	Excerpt from my written lesson
<p>Question posing -broad (allows for several possibilities) (encourages group work among students involving decision making alongside creative problem solving and making up a song)</p> <p>Collaboration (students need to work together and communicate with each other to make up the song with sound effects)</p>	<p>For example, ask students–How would you sing the combination of the word wonderful and noises?</p>

Definition of Creative Collaboration. While Craft et al. (2012) state that collaboration can support possibility thinking, she does not define in detail what she means by collaboration. When she writes about collaboration, it is when students work together on a project with a specific goal and engage in possibility thinking. Therefore, in this section, I will explain the definition of collaboration I am utilizing in this study. Scholars (Bolden et al., 2019) have pointed out that the literature on creative collaboration in early childhood settings is scarce. Most studies are with older students or adults in the workforce; however, some aspects of creative collaboration can be applied to early childhood settings. Students can share their life experiences as they work towards a creative group goal (Costantino et al., 2015; Allwood et al., 2000) that encourages students to explore as they construct knowledge together (Albarran et al., 2008). Drawing on definitions from Costantino et al. (2015), Alberran et al. (2008), Bolden et al. (2019), and Alwood et al. (2000), I define creative collaboration as groups working towards a shared purpose by contributing their experiences and knowledge as they freely explore possibility thinking in various ways (play, talk, nonverbal). During the teacher-led group, I taught them how to work with one another by engaging them in collaborative activities, observing, and coaching them to contribute to each project.

The following is an excerpt from my fieldnotes, No. 22, Vocabulary Activity 2, December 9th, 2019:

Students work in small groups with peers they choose because they might know each other or be friends. Students are given a vocabulary word card with their names on colorful cardstock. The vocabulary words are from Journeys Lesson Five (share, wonderful, noise, quiet, sprinkled, bursting, suddenly, quiet). The word's definition is printed on the back. Students are asked to combine the words that they each have and create a song or dance. Most groups collaborate to create a dance of the three words rather than a song. Groups of students stand and work in different classroom areas.

The following data episode was videotaped and transcribed. (Excerpt from Video Data: Classroom Vocabulary Activity 2, Dated: December 9th, 2019):

The group has the vocabulary words wonderful, share, and noise. The group consists of three African American students who are seven and eight years old. Jodie is a thin, wiry student who loves to move and has a great sense of humor. Her short hair is pulled back from her face. She responds well to the lessons that include possibility thinking since the lessons allow Jodie to express herself. Jodie is very extroverted and energetic and speaks dramatically, emphasizing her words through her inflection when using gestures. In this example, Jodie is the facilitator and motivator of the group. During this data episode, Jodie is the student who answers my questions verbally. Casey is a calm and kind student. She is a heavy-set girl with long blue braids down the left side of her head and wears a jean jacket. Casey is not afraid to express her opinion. Darian has short black hair and is wearing a gray and black hooded sweatshirt with the silhouette of a basketball player on the front. Darian is an introverted and self-conscious student who likes to remain in the background during classroom activities. It is rare to hear him speaking in class. He

has some difficulty healthily managing his anger. When upset, he walks away. Darian is often absent from school. All three students are not reading at grade level. However, they can all read and understand the vocabulary words for this activity. I let the students walk around for this activity and create their own groups. I set a limit of three to four students in each group. These three students (Jodie, Casey, and Darian) ended up together. They knew each other; however, they were not good friends and did not usually spend time together. They did not object to working with one another or ask to be in a different group. They all have friends in the class and are not unpopular. Their interactions in the group ranged from ignoring each other to working together and enjoying doing an activity together. They communicated differently through words, gestures, and nonverbal signals that appeared to signify agreement or discord. Reactions to the assignment to combine their vocabulary words into a song or dance ranged from hesitation to enthusiasm. Students completed combining the words in the dance without much discussion and communicated chiefly through nonverbal cues.

Week Five, Day One, Dated: December 9th, 2019. I posed the lead question, "How can you create a dance or song by blending your vocabulary words?" Casey, Jodie, and Darian are working at the front of the room near the dry-eraseboard. While Casey is dancing and moving, I look at the vocabulary cards for the group on the desk. Jodie's word is wonderful, Casey's word is share, and Darian's is noise. I ask the group how they will fit the word share into their creation. Casey had been speaking to Jodie, and when I asked this question, Jodie turned to Casey and said, " Shhh, " to her. Casey says, "Shhh!" back to Jodie and then looks away. Darian smiles at me, but I see Casey frown. Darian turns away and beats with his fingers on the chalk tray while Jodie turns to look at me. Then, Jodie turns away and says something inaudible to Casey while Casey dances. Jodie turns back to me, looks at the camera with intensity, and says,

“I think I got the idea!” Then, Casey puts her hands on her hips and walks to the dry-erase board. Casey seems to be upset with Jodie.

Even though there appears to be a problem in the group, Jodie continues, “So first, he make the noise” (referring to Darian), pointing upward with her pointer finger, emphasizing the word first. “Second, she share” (referring to Casey). Jodie points up again. Casey speaks simultaneously with Jodie, “I just want to make a song.” Casey looks at Darian and then at me while she leans her arm against the dry-erase board and lifts and drops her right hand in frustration. As Darian watches Casey, he says emphatically, “We’re making a dance.” Jodie looks at me and says, “She going to fake like she going to share with somebody.” I ask if this will be a part of a dance. Jodie says it will be a part of a dance as Casey moves closer to Jodie. Casey says, “Or we can just say we’re making a song.” “No, no,” says Darian. Jodie looks at Darian and says, “yes.” She had a bold look and spoke determinedly and with authority. Darian says, “I don’t want to make no song,” and then looks away. Darian has made his position on this issue clear.

Casey and Jodie agree to create a dance. Casey steps back and watches while Jodie is showing the sharing movement. Jodie calls out, “Here we go. Boom!” Her arms are bent at her hips. Her arm is in front of her body, and she puts her right foot forward as she turns her body to the left and the right. Darian moves his arms from side to side and then repeats what Jodie does, changing the movement slightly. Casey repeats part of the movement that Jodie created (with her hand). The students are all engaged in creating a movement for the words.

Jodie indicates it is time for her word by saying, “me!” and walking over to the table where the vocabulary words are kept. Casey demonstrates the word wonderful by lifting her arms above her head with palms up, moving in a circle over her head. Jodie watches Casey as Casey repeats

the circular motion movement seven times. I asked Jodie how she would be wonderful. "Doing this," Jodie says as she smiles and copies Casey's movements by lifting her arms above her head and creating a circle around herself. Jodie says, "So when I start the show, I'm going to be doing this." She points upward and toward me with her pointer finger on her left hand. Jodie has created the movement for her word with help from Casey.

Jodie surveys the group and takes charge. First, Jodie looks back at Darian. Darian has been moving his body from side to side, not making eye contact with anyone. Jodie reminds everyone and says, "He gonna be making noise," as she points to Darian. Then Jodie points to Casey and says, "She is going to be sharing." Jodie turns back towards Darian and Casey and says, "Okay, 1,2,3!" Jodie looks at Casey, nods to her, and then gestures to Darian.

Darian is making a noise with his mouth. Darian pretends to beat in the air with his pointer fingers. Jodie looks forward. Casey makes fists, bends her elbows at the waist, and makes small rowing gestures. All three students are doing the movement for their word. The movement for share looks like someone offering something to someone else (arms moving from the body outward in front of the body). The movement for wonderful looks like someone looking up and exclaiming with their arms in the air how great the sky is. Darian's movement for noise looks like the beating of a drum with his pointer fingers (as well as creating an actual noise with his mouth). The group members perform the movements for their words at the same time as each other. They also performed other students' movements simultaneously and performed variations of others' movements.

Interpretative Commentary: Vocabulary Dance Episode One. In this episode, I observed and recorded a group of three students in the process of creating. Although other groups were doing similar vocabulary dances and songs, I focused on this group as a representative sample of

what happens when students collaborate when given a creative task. I examined how the interactions of participants and the possibility thinking elements connect. The lead question was framed by me when I introduced the activity to the whole class after giving the students their vocabulary word cards with each student's name printed on the card. The words came from the Journeys curriculum, and I wrote the students' names on the cards with the words. While students did not have a choice of words, they chose their groups. The lead question was: How can you create a dance or song by blending or combining your vocabulary words? This lead question offered moderate possibility and yet framed the whole activity. "Leading questions are those which provide the overarching framework, or main question of PT (possibility thinking)" (Burnard et al. 2008, p. 276). My question would fall into the category of possibility moderate because the activity is limited to dance or song, but it is broad enough that students have possibilities about how they create the dance or song.

The episode demonstrated the process of working together and reaching an agreement after some short disagreements. At first, the three students were keen to know their words, and once they thought about them, there was a brief discussion regarding whether or not they should create a dance or a song. The two categories that arose from this episode demonstrated interactions within the group and interactions with the teacher.

Interactions within the Group. The dynamics of the group interactions ranged from nonverbal to verbal and from uncooperative to cooperative. The first action the groups in this activity needed to do was decide to do a song or dance, which would lead them towards a shared purpose. The group did not initially agree on whether to create a song or a dance. Casey rejects Jodie's idea of the dance. Casey walks away, leans on the dry-erase board, lifts and drops her

right hand in a frustrated gesture, and declares that she wants to create a song. Darian rejects the idea of creating a song. Two of the three students in the group reject each other's ideas.

Interactions with the Teacher. Jodie was the only member speaking about the goal to me. While Jodie appears engaged, confident and focused on the assignment, the other two students do not appear to be engaged in answering my question or making progress with the activity. Their interactions were less with me than with each other.

Intentional action is making decisions about a goal, and Jodie demonstrates intentionality as she hastily turns enthusiastically toward me and is keen to answer my question. She gesticulates while accentuating the words “first” and “second” dramatically. She takes the lead role as she makes decisions about the dance performance. She is focused on me as the teacher rather than the group. The fact that Jodie is excited when she attempts to contribute to the creation of the dance is hopeful. Her focus on the goal may help the group to move forward.

Jodie is speaking with me rather than the group members, and she knows she needs to make these decisions with the group. She can answer for the group but cannot make decisions for the group. All students know that I expect them to decide as a group which activity they would like to do. I know I need to encourage all group members to collaborate and solve the issue so they can engage in possibility thinking. I use the question-posing element to support and motivate the group to act collaboratively.

Lack of Shared Purpose. The fact that the group does not agree on a shared purpose creates an obstacle that blocks possibility thinking. Jodie continues to look at me and does not engage with the other group members, so the other two members communicate with one another and state their opinions concerning the problem. Darian speaks for the group stating that they are creating a dance. His statement is strong and leaves no room for discussion, which frustrates

Casey. Casey and Darian have both felt comfortable enough to share their opinions which is a good sign for the group. Jodie and Darian moved from being passive in the activity to actively engaging with the problem. Their engagement is demonstrated by their willingness to state their opinions about the group's purpose. The members struggle to communicate about how to solve this issue.

Agreeing on a Shared Purpose. Jodie finally responds to Casey and accepts Casey's idea of the song. Jodie's objective is to create, and she is single-minded in her objective, so it does not appear that she minds if they create a song or dance. She wants a decision, so they can start with creating. Jodie honors Casey's contribution and allows her to pursue her goal; however, Darian has not received the same consideration. Casey then honors Darian's wishes by accepting the idea of creating a dance. Jodie then accepts the idea, enabling the group to have arrived at a shared purpose. Deciding on a shared purpose is a turning point for the group.

The possibility element of question responding (accepting) has worked in combination with the aspect of collaboration (agreeing on a shared purpose) and unblocked an obstruction in the group. The group can move forward to another phase where they can begin to create and discover possibilities.

Collaboration begins by accepting the shared purpose, and students begin experimenting with different gestures and movements. Students are now demonstrating a willingness to work together on a shared purpose. All three students are engaged in exploring different movements for the word share. The members allow each other to pursue their ideas freely to make contributions.

The students are smiling as they contribute to the dance as a group. Darian's participation in the group dance shows that he is engaged in the group project and is enjoying this

participation. Darian works with Jodie by using his imagination and repeating Jodie's movements while blending them with his own to create a new movement. His actions show he is aware of and honors others' contributions, accepting and adding on to enhance the group's mutual purpose. When I ask Jodie what will be wonderful, Casey takes her turn to be front and center and contributes her creative dance skills by showing how Jodie's word can be incorporated into the dance. It is a delightful moment where I observe that Jodie and Casey are more relaxed and exploring possibilities related to the dance. They work collaboratively on the dance, using their imagination to blend movements. The possibility thinking elements and the collaborative work move the group forward with their creation.

Interactions Through Nonverbal Communication. Andriessen et al. (2013) write about group members accepting others' ideas, which can demonstrate consideration and concern for the group. In this episode, students interact because they contribute to the dance, repeating and blending their movements with others' movements. There is no discussion or disagreement about the details of the movements, which shows an acceptance of members' contributions. They need to problem-solve to translate their words into movement. The students appear to understand what they need to do. They are engaged in the assignment I have given in a way that shows understanding since they match the words with movements. They problem-solve individually and together. When they problem-solve with one another, it is primarily nonverbal. For example, students repeat other students' movements and add to the movements to create a new movement. The movement connected to their words appears to fit their meaning. All three students are engaged in the element of completion, meaning they work together to perform the final dance. The group's objective was to work to complete the assignment and present the dance, which they did.

In sum, the group evolves enough to complete their task despite the challenges at the beginning of the episode, which include tense social interactions and a lack of a shared purpose. In this episode, the tensions between students arising from the initial rejection of each other's ideas and the resolution of the tensions through acceptance are observed concerning possibility thinking. Students move from focusing on just the assignment to focusing on the group and the assignment simultaneously, which helps the assignment take shape and progress. They arrived at a place where they explored, experimented with the movements, and built on each other's movements. The students understand the assignment and demonstrate understanding of the words through their movements. Jodie's energy was high, carrying the group with her energy, and the group progressed with the supporting questions and encouragement from me. Question-posing, question-responding, tension, rejection, acceptance, intentional action, and being imaginative are the central features of this episode. The collaboration evolves during the data episode so students can create a dance together.

The theme of collaboration also led to the discovery that students could engage in possibility thinking nonverbally. Nonverbal action related to possibility thinking was also observed by Craft and her team (Burnard et al., 2006) when they implemented empirical studies; however, as a teacher, it was surprising to me that in this collaboration there was minimal discussion, yet students were still able to complete the assignment and develop an outcome. I needed to watch the videotape numerous times and slow it down to see everything that occurred, as the interactions progressed rapidly. When examining the videotape, I was surprised to discover the amount of nonverbal communication between students and how quickly students moved through the initial tensions to build the dance.

Another discovery was that students took what other students created and built on those creations to invent something new. The adding-on strategy interested me as a teacher since I did not directly teach them this strategy. Their ability to use this strategy may have resulted from participating in the possibility thinking lessons for four weeks. For students to do this, they needed to pay attention to each other and acknowledge the worth of others' contributions. In other words, the contribution was worthy enough to copy and change into a new possibility.

From my observations, the third discovery from this episode is that students have a better chance to engage in possibility thinking as a group if they agree on a shared purpose and are willing to work together. This willingness to work together encouraged the episode's most frequent possibility thinking elements, such as question-responding and being imaginative. When students are willing to accept, repeat, and build on one another's ideas, they engage with possibility thinking as a group.

Episode Two: Connecting Life Experiences to the Curriculum through Possibility Thinking. The following is an excerpt from my fieldnotes No. 12, Versions of a Story Activity 3, Dated: November 11th, 2019.

In the Journeys station in Lesson Three, students were instructed to "Write about how a person and his or her pet are alike and different." One issue was that some students did not have pets and did not know anyone who had a pet. Students were asked to give evidence of facts demonstrating the skill of comparing and contrasting rather than creating the pairs of ideas they could compare and contrast. I adapted the Journeys assignment so students would work on the skill of comparing and contrasting (as well as story structure), but they would need to use their imagination to create something new. The assignment was "Create your own puppet show of *The Three Pigs*. What will you change? What will you keep the same?" Puppet shows are not

included in Journeys but could be easily added to the Journeys lessons, thereby allowing students the space to play while learning the targets in Journeys. I included a puppet show in the assignment since I observed in another data episode that playing with puppets allowed students a vehicle that encouraged the production of new ideas. Play is an element in Craft's view of possibility thinking. Students chose which puppet they used for that particular story. The selection of puppets meant that all students were encouraged to participate. It ensured that all students played a specific character in the story they were creating.

Students could either write the puppet show after creating it or perform it during the reflection time at the end of the reading block. After the students performed the puppet play for the class, they asked the audience questions about the skills the class learned that week. Allowing the space for this type of exploration is also included in Craft's view of possibility thinking. Using puppets allowed students to play with objects and ideas freely rather than just discussing ideas about a story.

Students were more engaged with the puppets than when they were instructed to write a story, and it was easier to collaborate because they were playing with the puppets together. The use of puppets was successful at engaging students. I observed that play was an element that was quite important when introducing creativity into the curriculum.

I chose the *Three Little Pigs* because the pigs are called to learn self-reliance and independence as they attempt to create their homes and engage in problem-solving to protect themselves from the wolf. The themes were relevant to students as second grade calls for students to increase independent problem-solving. In addition, I also chose the story because students have found the story engaging and humorous in the past. The pigs do not have names and have few character traits, leaving space for students to create distinct personalities. To

prepare the class, the students heard two versions of the story to help them to create their own version. The instructions were to use puppets and write the story. Some students chose puppets (they did not write the story), and some chose to write individual stories (they did not use the puppets). I included examples that are representative of the writing examples students submitted. The following data came from student writing artifacts and audiotapes. The excerpts illustrate how they used elements of the story of *The Three Pigs* and created a new story by inserting new events, ideas, and characters. The station activities were kept in the station for a week, so the following data excerpts are from the week that Lesson Three was taught. The spelling was corrected for all of the written stories in the study for ease of readability but the presentation is faithful to the grammar students used.

(The following is an excerpt from student artifacts: Versions of a Story Activity 3,
Dated: November 11-15, 2019):

Jordon wrote:

The pigs went to the park to play, but the big bad wolf wants to play with the pigs. Now, the big bad wolf was nice, and they play everyday.

Avery wrote:

The three pigs was walking. He saw a man with bricks. He said, "no." So he went back home. So they got a whooping. They had to live with their dad.

Casey wrote:

The three pigs want their own home. Their mom said, "you are old enough to have your own home." They was old enough to have their own home. The mom let them go, and they went to Rockin' Jump. It was fun, and it was a busy day.

Logan wrote:

The three little pigs were fighting with the big bad wolf because the pigs wanted to go to McDonalds and Skyzone and the wolf wanted to go to Wendys and Rockin'Jump.

Taylor wrote:

The three pigs were friends with the fox. They give their mama money. Their daddy got eat by a wolf.

Drew wrote:

I am the mom. I have 4 kids. They are 1 girl and 3 boys. They are kind. Me and their dad have to talk. I having a baby. It's a girl. I am happy. "We should tell the kids, okay?". "Kids, we have surprise for you guys. We are having a baby." "Yes, yes, boooooo."

Kyle wrote:

The first part of my story was ...so I changed...now it was the father and the mama and the three bears...new baby sister. And they went on the picnic, and they went to their grandparents house. And they went to a farm. They had a picnic with lots of pumpkins.

Brooklyn wrote:

They put their costumes on. They went trick-or-treating. They got a lot of candy. They had some left. The big bad wolf wanted some. They gave the Big Bad Wolf some. Then they went out of house. Then the wolf ate them.

Researcher's Reflection. Some of the student's versions are similar to each other since they introduce aspects of the students' lives (i.e., Rockin' Jump, Mcdonald's, Wendy's). In Logan's and Jordan's stories the characters' perspectives change, so the relationship between the wolf and the pigs changes, and they become friends. Students may draw from their life experiences when writing about being punished, or having to live with one or another parent,

going to McDonald's, Rockin' Jump, Skyzone, Wendy's, and the park. Some of these might be lived experiences while other aspects may be drawn from stories they have heard or seen on TV. Both Taylor and Drew introduced new characters (the fox and the baby). Drew did not explicitly state that her characters were pigs, so they may be another kind of animal/human. Kyle began the story by introducing the characters, drawing on another story of animals that come in threes (*The Three Bears*) and who also have a problem. He also included a setting. Brooklyn introduced the problem and the resolution to the problem. They changed the story by changing the setting, some characters, and the problem's resolution (the three characters were not protected from the wolf). Most of the new ideas students introduced in their versions (settings, new problems, and new friendships) have a connection with real-world experiences the students may have had in their lives or stories and events they have heard from friends and relatives or seen on TV. The creative space that was given allowed students to connect to their learning and possibility thinking by contributing their voices and their experiences through created narratives.

These stories have some problems and solutions; however, details concerning the problems and solutions are missing. Students engaged in the being imaginative element in their stories as they were creating something new. In addition, they blended ideas from two different stories (*The Three Pigs* story and the parts of the story they created). For example, Drew brought in the story of *The Three Bears* rather than *The Three Pigs*, and Kyle wrote about a mother being pregnant (it was unclear if it was a mother pig). Engaging students in an activity that uses a story and having students change aspects of that story encourages students to engage in possibility thinking as they connect ideas.

Some students wrote stories in the first person that were not explicitly connected with *The Three Pigs* story.

Noah wrote:

First, we was playing Fortnite, then Iconic kill all of us. Then, we had ate some pepperoni pizza. Last, we play again. Then, we put that mint stuff in. After we was done with our soda we had turn our game off and went to sleep.

Noah and Madison wrote:

First, we went to Dominoes. Then, we start fighting because they won't give us no food. Second, we had went to another pizza store. Last, we go home enjoy our food. When we done our food we get ready to in the shower.

Logan and Harper wrote:

Dtay was playing on his game. He was playing NBA 2K19. And he started to get bored so he went outside to play. But his mom said a kidnapper on the loose to give people candy and kill kids. So they went outside anyways. He got kidnapped and hit the kidnapper and dragged him home and hit him with a bat.

These students mainly wrote about playing video games and eating pizza. Dtay introduces a dangerous character; however, Dtay is so strong that the kidnapper is caught.

(The following is an excerpt from Field notes No. 12, Dated: November 14th, 2019):

A group of two students created a puppet show using real-life experiences without the pigs. The data was gathered from an audio tape as students created a puppet show rather than writing the story. Students created the story as they played with the puppets. The story begins with a playground accident, and the characters must be taken to the hospital. Students help their friends and inform others about the accident. Below is the data episode that illustrates the students' version (including story structure). In this example, students were constructing the story collaboratively.

(The following data episode was audiotaped and transcribed. (Excerpt from Audiotape Data: Versions of a Story 3, Dated: November 14th, 2019):

Drew: Hey Rose, do you want to go down the slide, or do you want to get Nika and Jonathan?

Come on. Do you want to go down the slide? Do you want to go down the slide? Do you want to go down?

Blake: Let's go down the slide. I'm going to hurt myself ...going to hurt myself.

(Blake hurts herself.)

Drew: Let's go and take them to the hospital.

Blake: Carry her. Okay, carry her. Let's get up in the car.

Drew: Okay, let's try (Students make a car sound.)

Blake: Okay, I'm about to get them. Come on, put them up in a wheelchair together.

Let's put them where some of the stairs go up.

Drew: Okay, let's go see the doctor. Hi doctor.

Doctor: What's the problem? The boys got hurt?

Blake: The boys tried to help us, and we fell on their stomach. The boys got sick, and now they don't feel good.

Drew: Something on his mouth. Blood.

Blake: I'm about to go to talk to my friend on my iPhone while you talk to the doctor. (Talking on the phone) Hi friend. How are you doing? I'm at the hospital.

The person on the other end of the phone: What happened?

Blake: Oh, Roosevelt and Nika fell.

The person on the phone: How?

Blake: Because me and Rose fell on top of Roosevelt and Nika. Hold up... Rose?

Uh-huh

Blake: Who is this?

Grandma: What are you doing?

Blake: Nothing.

Grandma: What are you doing?

Blake: Nothing, grandma. I'm just doing my work on my phone like I usually do.

Grandma: Why? Why do you have to get all that work after school? It's summer.

Blake: My mom and dad always saying, "You need a summer job."

Friend on phone: You need a boyfriend.

Blake: Duh. But I think I don't want them right now.

Friend on phone: I don't want a boyfriend either.

Blake: Let's not listen to no more boys at school because we have to listen at school.

Blake: Doctors coming, and I will call you right back. Me and Rose have to talk.

Blake: Hi, doctor. You about to do an x-ray on them?

Doctor: Uh-huh.

Drew: So, this is what happened...

Blake: His bone is broke?

Drew: So, they fell down the slide with me and my best friend Rose. Rose went home to get some clothes because we are going to be here all night. Right? Doctor, are we going to be here all night?

Doctor: I don't want to say this. This is terrible. But yes.

Blake: I need food.

Drew: We're talking about three pigs.

Doctor: She will be in her room.

Blake: What room are you in?

Doctor: You and your sister and you will be in 119.

Blake: Let me call her sister. We're going to be in room 119.

Sister: You're going to be here all night? Why?

Blake: Because the doctor says it's very contagious, and he wants us to stay in a room, and he has to leave in a couple of hours.

Drew (talking to the other doctor): You have to go for real. Because I'm not going to play no games with these people.

Blake: We're going to work.. We're going to have to call dad and ask him if he can watch them.

Blake taking to his dad: Can you watch a friend? A boy?

Dad: Parents?

Blake: No, they don't have no parents, dad. They're out of town.

Dad: I'm going to have to talk to your mama. If they're not coming, go to your job. I will just stay here and watch them.

Dad: What have you been doing to my daughters? What did you do to my daughters? Have you known them since middle school?

Dad: I'm about to take them their medication.

Blake: Dad, stop!

(Below is possibly a change of scene.

Dad: I think I should go to the garden and plant some plants.

Blake: What is mom doing?

Dad: Mom says she is at her job.

Students start talking, but not as the characters.

Drew: Let's write it down.

The students talk about how to spell words and the dialogue.

Drew: Hey Rose, what are you doing?

Blake: What you gonna say?

Drew: I'm gonna say, "What's up? I saw you.

Blake: Come on, let's work. The timer is on (referring to the timer for the stations).

Drew: No, it's not.

Blake: Yes, it is. It's over there.

Drew: Maybe we could fake like she's in the dirt.

Blake: Lets' make some props.

Drew: What's props?

Blake: It's like iPhones and stuff. Do you got some glue? Get your glue stick. Do you have scissors?

Drew: Where are your crayons and stuff?

Blake: These are my crayons.

Drew: Did we finish the show?

Blake: I'm trying to make a phone. Come on. Let's make the iPhone. Now come on, Drew this is your iPad. I'm drawing the new iPhone 11. The three cameras. Everyone is buying that online.

Drew: It's not going anywhere.

Blake: It's going to be old and disgusting.

Drew: What if there is going to be an iPhone 13?

Blake: What is there is going to be an iPhone 100?

Drew: I'm going to make Facebook.

Blake: I'm going to make Twitter.

Drew: Everyone thinks that fancy.

Blake: It's not that fancy.

Drew: My mommas afraid of bugs. I ate a bug once.

Blake: What kind of bug?

Drew: I ate a worm.

The bell on the timer rings, which means it is the end of the station time.

Researcher Reflection: Episode Two, Versions of a Story. I had anticipated that students would create stories that demonstrated a clear connection to *The Three Pigs*. Initially, I thought students did not do the assignment correctly; however, after reflecting on students' responses and examining the story from a different point of view, I could see some connections with *The Three Pigs* story. In terms of the story's theme, all the stories of the students contained elements of conflict and danger. While this could be a coincidence rather than purposeful on the part of students, it shows their ability to be engaged and create a story of their own with several dramatic scenes. Two pigs were in immediate danger and tried to escape something dangerous (the wolf), and the third pig helped them. In the students' story, two characters were in danger (hurt), and the rest of the characters supported the hurt characters. Getting hurt on the playground is a common occurrence. This story is one of compassion and friendship in light of that accident. Centering themselves in the curriculum appeared to bring more meaning to their learning.

These students were fully engaged in this activity which was particularly impressive since the two students had a history of not following directions and being unkind to other students before the study began. However, their behavior improved when I started teaching lessons that included possibility thinking opportunities that students could connect to their life experiences.

Students drew on their home and school knowledge to connect with the curriculum ('t Gilde & Volman, 2021). Students modified the assignment to fit their lives, and they were more engaged than they had been before the study began.

Some scholars state that there should be a conversation between educators and the curriculum (Pinar, 2019). In my view, it would benefit students to also engage in this conversation with the curriculum by interacting with the curriculum in a way that helps them connect with it, and teachers can help guide these conversations. The assignment was to create a version of *The Three Pig's* story. Instead of dismissing what students did because it looked like they were not following the assignment's directions, I reflected on students' responses. I realized that I had to move away from narrow expectations and instead recognize the creative stories that students were producing. I realized that when I asked students to work on their own version of the *Three Little Pigs*, they drew on their "funds of knowledge" to create a story that included themes of conflict and events that they were familiar with rather than choosing to write about the pigs per se that they might not relate to or have no familiarity. Instead, they included the experiences and events they might have observed in their lives or seen on television or videos. They took the story and created their own connections to the curriculum.

Considering that one of the curricular goals in this segment was about comparing and contrasting, I think, on reflection, that this could have been better achieved. After reflecting, I can see that more work needs to be done to connect the activity with the target skill of comparing and contrasting, which could happen if I met with students and examined their stories to compare and contrast them with *The Three Pigs*. However, students appeared to have made new connections with the learning target of story structure and sequence of events. Students explored possibilities they would otherwise have missed. They engaged with the being imaginative

element by creating something new. They made decisions about their goal (self-determination) and made successive decisions to reach their goal (intentionality). Students interpreted and made meaning of the curriculum, which kept the curriculum fluid and changing. These fluid conversations are impossible if teachers respond to the published curriculum as the authority to follow and teach only what is prescribed.

Episode Three: Flexible Story Structure and Independent Learning as Possibility

Thinking. (The following is an excerpt from student artifacts: Versions of a Story Activity 3, Dated: December 10th, 2019).The Journeys curriculum specifies a classroom set-up in which there are several literacy stations where small groups of students are meant to practice while one group works with the teacher. As prescribed by the district and implied in Journeys, the independent literacy stations are seen as practice while the vital work of the small teacher-led group is occurring. The time with the teacher is valued, while independent student work is seen as practice or busy work. Most of the emphasis and importance is given to the group interacting with the teacher. In this next data episode, I examine students independently created stories in their literacy stations. I argue that independent work allows students the freedom to explore possibilities and make connections. The literacy stations can be a place for students to explore their stories and their connections with stories independently. Centering students' stories in the classroom allows space for student voices.

Journeys Curriculum and My Adaptation. The following data episode connects with Journeys Lesson Five. The assignment in the Journeys literacy stations for students was, "Listen to the story Teacher's Pets. Listen for new words. Write two new words that you like. Use the two new words that you like to write about the story *Teacher's Pets*." This assignment prescribes the characters and the events the students will write about without asking them to add something

new to their writing or bring something of themselves to the writing. My aim in my adaptation of the assignment was to give students a broader opportunity with which to engage in possibility thinking while still connecting with the target skill for Lesson Five, which was story structure. The new assignment was, "Create a story together and act out with puppets. Focus on what comes first, next, and last." Furthermore, to continue to give students the opportunity to support their practice of sequencing events, I gave them lines on the page; and I wrote the words first, then, next, and last, after which there were several lines for their writing. The page layout was meant to give students a structure to support them in working independently.

This adapted assignment allowed students to create their story's characters, setting, problem, and solution. The work involved in this activity gave students an opportunity to make decisions about their work (intentionality), use their imagination, play with puppets, engage in question responding (test, reject, and accept), and possibly create an innovative story. The data from this episode came from both audiotapes and student artifacts. As explained in Chapter 3, audiotapes were from the recording devices left at the independent learning stations; I later gathered and transcribed the dialogues on the tapes. I listened to them for the silences, the asides, and the sounds sometimes made by students in the course of their interactions and dialogues. By letting go of the idea that the independent workstations are only for practice, I instead let students visualize the stations as places where they could create and make decisions about their learning by being asked to create their own stories. Further, they could be imaginative and express themselves in several ways. The parameters of the assignment were for them to write a story, use puppets for a puppet show, and engage in question responding.

The assignment gave students choices with regard to how they could respond. Students' responses varied. Some students wrote the story but did not create a puppet show, and some

students created a puppet show but did not write the story. I was not present at the stations; however, this approach difference may have occurred because of a time limit. Some students may have been concerned that they needed to finish the writing, and others who used their puppets might have needed more time to write the story. There were differences in the way the stories were written and performed.

Centralizing Student Experiences. Perhaps the most crucial difference was how the students wrote their stories. When I examined the written stories, they read like a series of daily activities. I initially thought they were not stories because most were written differently than I expected. Students had been introduced to story structure features; however, they still needed to gain experience. Some aspects of the story structure were not explicit, such as the characters, problems, solutions, or setting. The stories were qualitatively different from the stories the students performed. The students who used puppets and played with them to create their stories with each other had characters, settings, problems, solutions, and a series of events. My prompts to allow students to think of a sequential story in which events take place one after another resulted in students demonstrating their knowledge by using the included temporal words in their stories. The students did not necessarily use temporal words in their puppet shows; however they did include a series of events which demonstrated sequencing, as taught in Journeys most (but not all) of the time.

Despite the prompts and how they might have steered students, they nevertheless wrote more in this assignment than the previous week, and the structure of the page (providing lines after each of the temporal words) helped students organize their thinking and writing. They brought themselves into their writing in ways reminiscent of journal writing and less as a story with a problem and solution. Below are some examples of the student's written stories from this

assignment. Their writing reflected several themes. All the students chose to write about a day that did not include school. Instead, they included play, eating, and engaging in everyday activities like brushing one's teeth. Their stories also involved buying food and snacks. At times, students wrote about fights that were resolved. The stories, except for one, all included more than one character or indicated that the student had been with friends, family, or both. The station work was placed in the station for a week so the following data excerpts are from the week of Lesson Five.

(The following data is from student artifacts: Create your own story, Dated: December 9-13, 2019).

Several students wrote about a day with family and friends. Harper, Parker, and Emerson's writing was typical of the students who wrote as if writing the story of his day in a diary and Avery did solve a problem in her story.

Harper, for example, wrote:

First, we play a game and ate breakfast. Then, we left out the house then we went to the water park and played. Next, we get hot dog burgers and brats. Then we ate them. Last, we go Rockin' Jump. Then, we go back the house and brush our teeth. Then, we get in the shower and put on our pajamas and go to sleep.

Parker wrote similarly of a day in his life:

First, we went to our room and play on our phone. Then, we got off our phone and went to the store. Next, we went to the park. Last, we went back home, watch movie, eat some popcorn, and went to sleep. First, we played Fortnite then My'khai had killed both of us. Then, we had played again. Then he kill us again. Next, we had ate some McDonald's. Last, we turned the game off and go to sleep.

Emerson wrote:

First, we played a game and ate breakfast. Then, we left out the house. Then, went to the water park. Next, we get hot dogs and burgers and drinks, so we ate them. Last, we go to Rockin' Jump. Then, we brush our teeth and go to the shower put on our pajamas and go to sleep.

Researcher Reflection: In all three cases and several others, the final end of the day was signaled with going to sleep. Other students, using the journal format, tried to write about a conflict and how the conflict got resolved. There were few details, and they wrote in statements instead.

Brooklyn's writing is a good example of this type of story.

Brooklyn wrote:

First, we was fighting. They kept fighting. Then, I saw them. I say stop fighting and say sorry. Next, they said sorry. Last, let's play the game together.

Brooklyn writes as an observer of an incident or event. She sees herself as the peacemaker or as the main star in the story who brings a conflict to an end. Somewhat different from Brooklyn and yet similar in some ways was Cameron who also in his story was interacting with unnamed peers with whom he has a dialogue. His story too, ends with sleep.

Cameron wrote:

First, do you want to play? yes or no? Then, do you want to eat? yes or no? Next, do you want to do nothing? No. Last do you want to go to sleep? The end.

Of all the students, there were very few who wrote in the first person singular and very few who discussed any interaction with any others in their writing. Avery was one such person who wrote as if in a private diary. She tells of being forgetful and then getting money to buy food and snacks.

Avery wrote:

First, I had went to the store. Then, I had forgot my money. Then, I had went back home.

I was looking for my money. Next, I found my money. Now, I can go to the store. Last, I buy a lot of food and snacks.

Creating Spaces for Students' Experiences. In analyzing the assignment and my adaptation and response to the students, I thought students did not follow the assignment at first. These were not stories, the way I thought of stories or the way the curriculum defined stories. When reflecting more on what students wrote and attempting to see their work from their point of view, I observed students placing themselves in their stories. The students were the characters. The settings were their home, the park, their room, or Rockin' Jump. The events were playing on their phones, playing video games, eating, sleeping, showering, and going to the store. The activities were in order and were taken from their lives; however, most stories did not have a problem or solution. In Brooklyn's and Cameron's stories, there was an unnamed conflict. In the former, there was "fighting" and in the latter, there was questioning a group or another person that involved getting a response from that person and having a dialogue with them. I realized that if I did not pay attention to students' work because it did not fit with the idea of story structure in Journeys, it would have placed students outside the curriculum and would have resulted in my seeking a particular way of expression instead of being open to possibility thinking from the students in my own teaching. My aim needed to be for students to connect with the curriculum or even be the center of the curriculum. Allowing students to write their stories in their way and validating what they wrote was one way to achieve this aim.

I needed to let go of the idea that independent stations were not a place where new learning happens because students work without the teacher. Journeys treats the stations as

having no connection with the teacher-led group. The teacher group is considered the most essential feature of the literacy block. The view that independent work should only be practice undermines the opportunity for a student to be an authority of their own experience, one who can work independently and make connections with the curriculum and their lives that the teacher cannot make. Students spend a considerable amount of time in the literacy stations. Discounting this major portion of the time and work as merely practice undervalues students' contributions.

In this episode, students could make decisions about their learning in the stations by being asked to create their own stories. Their station work could be brought into the teacher-led group, and the teacher could work with students to develop their stories further by posing questions about their work and helping students identify elements of story structure as outlined in the curriculum. This support of students' work would increase possibility thinking by posing questions and having students engage in question-responding. It would also teach students how to connect and expand their work through writing while connecting with themselves and their stories. Students' stories that represent their experiences can be brought to the center of the curriculum to supplement or, at times, replace stories from the Journeys curriculum that do not reflect students' culture. By examining and reflecting on school and district mandates and adapting and being flexible, teachers can reshape ideas to increase student space.

Performance, Imagination, and Learning Story Structure. As previously stated, another set of students created a puppet show for this assignment but did not write the story. I had previously told stories so students could further understand the concept of identifying the problem; however, I emphasized that students may create problems and solutions in their stories. Below is an example of two students (cousins) creating a puppet play in the stations, which relates to the element of play, being imaginative, question-posing, and problem-solving. The characters

in the story include robbers, police, and the victims. The story is about a pair of robbers who pretend to be police officers. They start by doing something good and catching a robber but proceed to rob people and, in the end, are caught and jailed. The students play multiple characters, and I have identified the characters to make the story clearer. My own field notes are also inserted into the transcribed audiotape in the form of researcher's reflections. The following excerpt is from my field notes.

The story is called The Bad Boys. (Field notes No. 17, Audiotape recording and transcribed: Create your own story, No. 2, Dated: December 11th, 2019):

Larin: What are you going to do tomorrow?

Kennedy: I'm going to do a lot of bad things. The problem is that we are so bad.

Larin: Now when we go to the police station?

Kennedy: The problem is we are going to be fake cops and do bad stuff.

Researcher's reflections: Here, they are referring to the "problem" as part of the story structure that requires a "problem." Identifying a problem in a story is something that I emphasized when teaching them about story structure.

Larin: But we going to do bad stuff.

Kennedy: You want to become a cop and do stuff on a mission?

Larin: We need to take our test. We gonna catch a robber.

Kennedy: He is 36 years old. His name is Marko

Larin: We 40. No 30. No 20.

Kennedy: He is 30 years old.

Larin: Let's go get him!

Kennedy: Move out!

Larin: The problem is we are doing bad stuff.

Kennedy: He is so short.

Larin: Let's go do some bad stuff. We gonna blow-up! Dude, give me your money!

Kennedy: They actually kind of saved the day. (Kennedy may be referring to their characters as fake cops who catch the criminal.)

Larin: Give me your money. We are robbing a bank.

Kennedy: They saved the day. They do bad stuff to save the day. We can still break them out of jail. They blow him up. We can get them out of jail.

Researcher Reflections: There were several different plot lines at play here and some indecision regarding whether or not the characters were good or bad or pretending to do "bad stuff."

Larin: Everybody stay. Get me all your phones. I see your back pocket. Phones! You got their iPhone 11. Let's get all their iPhone 11 phones.

Kennedy: He got iPhone 11.

Larin: He got two.

Kennedy: Put them in a truck. No shooting.

Researcher Reflections: Again here, there is the idea that they had to pretend to be bad boys to get the actual thieves.

Larin: Let's go rob the bank.

(The students start singing)

"Bad Boys, bad boys

What ya gonna do when they dump on you?

Outside I ain't gonna lie

Come get your code red, number two."

Kennedy: Let's do puppet show.

Larin: Let's do some bad stuff. Get down! Get down!

Kennedy: Where is it? I gotta write it down.

Larin: Get down! Get down! Where is the money? Where is the money? Where is the money?

Kennedy: Move out! Move out! The cops are coming!

Larin: Get down! Get down! Get down!

Kennedy: Get the money. Get the money!

(Students imitate a police siren)

Kennedy: We are the bad boys that tricked the police.

Larin: You know how the robbers took our iPhone? (Victim speaking to the fake police)

Kennedy: You can have ours (response from the fake police)

Kennedy: They stole our wallets. They stole our sodas. They stole our food.

Larin: We are some poor people. We are some slop.

Larin: Can you guys go catch them? (victim speaking to fake police)

Kennedy: Sure!

Larin: Let's go in the truck! Get in the truck! Let's go!

Kennedy: We gotta get away!

Larin: Let's get the getaway car!

Kennedy: The police car.

Larin: It was taken a few years ago

Kennedy: We could steal a firetruck

Larin: A firetruck is nowhere around

(Students make car noises.)

Kennedy: The cops are gonna come.

Larin: The safe! The safe! They gonna check the safe!

Kennedy: Alright

Larin: The cops are here.

Kennedy: They ran in here and took a whole lot of food. (victim speaking).

Larin: They stole my soda, my refrigerator (victim speaking)

Kennedy: They took everything from us..my kitchen (victim speaking)

Larin: Okay, you guys

Kennedy: So, where are they? (real police speaking)

Larin: They are in the backyard trying to get a getaway car (victim speaking)

Kennedy: Lock everything! (real police speaking)

Larin: Ha ha ha

Kennedy: Tacos!

Larin: Yes, tacos!

Kennedy: There is stuff in the safe.

Larin: We rob every bank in the whole world.

Kennedy: We have too much money

Larin: We have all entire thing

Kennedy: So, a lot of sodas, a lot of food.

Larin: Bling!

Kennedy: Let's go rob the last bank.

Larin: I'm gonna get this.

(Students make siren sound)

Kennedy: We only have \$100. They took our stuff, and that went the bad ways. (victim speaking)

Larin: They took our sodas (victim speaking)

(Students make siren sounds)

Larin: Do the solution

Kennedy: The cops are coming

Larin: Hide!

Kennedy: It's backroom down there.

Larin: The cops found us!

Kennedy: We go to jail because it's the bad boys.

Larin: Then we gotta sing!

Students sing:

"Bad boys, bad boys

What are you gonna do when they come for you?"

The station timer bell rings.

One of the differences between this and the previous episode is that students created the story orally through play. They needed little prompting and were much more at ease with this type of story creation. Scholars have pointed to the “rich tradition of oral narratives among African Americans that has resulted in oral narrative skills being an area of strength for African American children” (Iruka et al., 2012, p. 222). Oral narrative skills are a strength that African American children bring to the classroom, a “community cultural wealth” (Yosso, 2005, p. 69) or “fund of knowledge” (Esteban-Guitart & Moll, 2014, p. 35) that teachers can build on and nurture. The process of creating the story is more evident than the written stories since we hear

the story as it is created. The option of creating a puppet show can encourage all students who may find that play and oral storytelling allow them the freedom to explore and develop narratives.

Story Structure. While students were creating this action-based puppet show, their voices were filled with energy and engagement, and they were telling the story in an excited tone. When I reflected on this episode, I had a series of different reactions to this story. First, I was pleased that the students created a story with characters, a problem, and a solution. Then I read the story in transcript form. It was disjointed and did not make sense in some places. It jumped from one scene to another without transitions. I then realized that I had some assumptions regarding how stories should be formulated that are Euro-centric. I wanted to see a beginning, middle, and end in a linear sequence. However, once I moved away from this strict idea, I began to see the stories as scenes that students created. I realized that this was an instance where my positionality as a white teacher might impede my understanding of narratives from different cultural perspectives. The literature on African American narratives states that African American children may use a particular oral narrative style that teachers might misinterpret. "When African American children's stories fail to conform to educators' expectations of a story, educators may evaluate the stories negatively, dismissing them as rambling and not making sense" (Iruka et al., 2012, p. 221). I read this story multiple times and struggled to understand what was happening. Michaels (2006) states that African American children may sometimes use a style of oral narrative where the connections between scenes or events are not explicit but need to be inferred. This type of narrative is called the "topic-associating style, which consists of a series of segments or episodes which are implicitly linked" (Michaels, 2006, p. 122). The connections are present; however, the teacher may not be able to see them, which might negatively impact how the teacher perceives

students' abilities. "Commenting on, or questioning the child about, the very last thing mentioned is a strategy commonly used by teachers in responding to topic-associating children" (Michaels, 2006, p. 137). I realized that my initial confusion about the story could have been cleared up had I brought this story out of the stations and into the teacher-led group to have a discussion and pose questions to students. Interactions between the teacher and student related to their stories can support teachers understanding of student perspectives and center students' stories in the curriculum and the classroom, affirming the student's role as author.

Discovering the Origins of Stories. It would have been informative to ask students where the idea for their story came from while working with them in the teacher-led group. When examining the story's subject, I thought that students might be watching cop and robber shows, or there may be a connection with real life. I discovered that the reggae song they were singing in the story is a theme song from a television show called Cops, which was playing at the time of the study. The Cops series is a reality show where police officers are videotaped while on the job (i.e., making traffic stops and arresting criminals). Students may have created a story based on this theme of cops and robbers. Working with students' stories in the teacher group can encourage a teacher's understanding of students and how and where to draw ideas for stories.

While I did not know for sure that students derived their story idea from the Cops series, it is interesting to note that the series was considered racist partially because most of the perpetrators in the Cops program were African American (the series was canceled when the Black Lives Matter Movement began). Students may not see themselves in the Journeys curriculum, but if they watch Cops, they see African Americans represented. I reflected on how negative depictions of African Americans can affect students and their stories. In addition to promoting students as authors of their own stories, one way to promote positive depictions of

African Americans might be to offer books and curricula where students see African Americans depicted in a positive light. Encouraging topics for stories or narratives about African Americans who have contributed positively to their family, community, and the world might also be helpful; however, I would not always want to direct their writing, which might constrain their creative freedom.

The Blurring of Good and Bad. There was a blurred line between good and bad in the story. For example, in the beginning, the characters said they would be bad boys, but they wanted to pretend to be cops and catch a robber, which is not necessarily bad unless students view police officers as flawed characters. For students to see cops as flawed is also not surprising, given the news reports of violence perpetrated by cops on the African-American population. Then the characters decided to rob a bank and rob people of iPhones, soda, and food. I thought it was interesting that students showed both the perpetrators' and the victims' points of view. In my interpretation, the students understood that what was happening to the victims was bad. When the victims speak, they are in distress, and their voice reflects their pain and anxiety, and it is apparent that the robbers took everything and left the victims with nothing. Here the students played both cops and robbers, good cop and bad cop, victims, and aggressors. Students were engaged in the element of play and so could engage in multiple perspectives and create a solution. In the end, the solution shows that the students understood that what the robbers were doing was bad because the robbers ended up in jail.

Puppets as a Vehicle for the Imagination. Both the examples of written stories and the puppet show demonstrate the beginning of creating a story. Students may draw from their lives, media, or fiction to create stories. Students created something new which connected to the imaginative element. Problem-solving and the element of play combined to encourage possibility

thinking in this episode. While students may have used the cops and robbers theme, they created a new possibility—robbers pretending to be police officers. The students who approached the assignment by working with puppets created imaginary characters and included a problem and a solution. When I reflect on this, I can see that students' use of puppets for play provided a vehicle with which they could generate ideas, enter the story, use possibility thinking, and expand into an imaginary world while still bringing elements of their life (or what they watch) into the story.

Reconceptualizing the Curriculum. It is necessary to let go of the idea that independent work in the classroom is only valuable if it includes practicing already acquired skills rather than creating something new, and the most critical work is when the student is with the teacher. Students may be open to additional possibilities when working independently without the teacher's influence. What is needed is a reconceptualizing of the Journeys teacher-led group and the independent literacy stations. Instead of viewing these as two separate portions of the curriculum, we can let go of the disjointedness of Journeys to form bridges by highlighting students' creative work in both areas.

Centering Students' Stories. These data episodes demonstrate the value of highlighting students' independent work and allowing students the space to explore their imaginations and imaginative worlds freely through written or oral forms of narrative. As teachers, we must embrace the idea that students may have different narrative styles, and both teachers and students will benefit by centering students' narratives in the curriculum. Centering student stories validate the knowledge students bring to school, as stories offer a way for students to connect their experiences with the curriculum. Opening spaces in the curriculum for students to explore imagination, questioning, play, life experiences, and productive discussions about their work is essential to promoting possibility thinking.

Episode Four: Visual Strategies as a Bridge to the Imagination. In this section, I address how a writing assignment can be adapted to support students' imaginative thinking by using a visual strategy. The Journeys assignment is from the literacy station in Lesson Four. The assignment is, "1. Read aloud the title *A Bed of Roses*. Look at the pictures. Read the story to yourself. 2. Choose the part of one character to act out. Have your partner choose another. 3. Write about your character. Tell what your character did." The acting and writing activity is connected to the characters' actions in the story. Students are instructed to act out and write about the character in the story rather than use their imaginations to create new possibilities.

I adapted this assignment to include an opportunity for students to generate new ideas, allowing them to explore possibilities by asking students to add a new event to a preexisting story. I chose a Ghanaian trickster tale called *Anansi and Turtle Go to Dinner*. In this story, Anansi invites Turtle to dinner because Turtle shows up at Anansi's house at dinner time. However, Anansi does not want to share his food. Anansi tells Turtle to wash his feet at the pond since he is about to eat dinner. Turtle's feet get muddy each time he walks back from the pond, so Anansi tells him to wash his feet repeatedly. In the meantime, Anansi eats all the food and leaves nothing for Turtle. Then, Turtle invites Anansi to dinner and tricks him so Anansi does not get to eat Turtle's food. The story is fundamentally about fairness and upholding a culture of sharing. If there is food and a visitor shows up, food is shared. However, in the story, Anansi decides to trick the turtle. The turtle, in turn, decides to teach Anansi a lesson and tricks him the next day after inviting him to dinner. Anansi reflects on the incidents of the two days and realizes that 'what goes around comes around,' and that he needs to treat his friends respectfully if he wants to be treated respectfully. I chose this folktale to expose students to a story from a culture

not represented in Journeys to support students' awareness of stories from different cultures (Bosma, 1992).

As a part of this adapted assignment, I told students they could create a puppet show or play of Anansi and Turtle, but they needed to add a new event to the story. Students were instructed to "Create your own play or puppet show of *Anansi and Turtle Go to Dinner*. How will Anansi trick Turtle after Turtle tricks him? Write the play or puppet show." I gave students parameters such as the characters (Anansi and Turtle) and the goal of one of the characters (Anansi tricks Turtle) to support them as they created a new event. (The following data is from student artifacts: Creating a New Ending #2, Dated: December 2-3rd, 2019):

Some students chose not to create a puppet show or play. The following three examples represent students' written work from this assignment.

Ariana wrote:

Hi, my name is Queen. What are you doing today? Hi sister and brother. They do not got food in the house.

Avery and Madison worked together and wrote:

First, we make some chicken. Next, we make nachos. Then, we eat up. Then, we go outside and play on the slide, and we went back in the house and washed our hands and eat cake.

Jodie wrote:

We went to the candy store. We got candy. We went back home.

Researcher Reflection (Field Note No. 16, Creating a New Ending, December 3rd, 2019):

Ariana wrote dialogue. The character Queen meets someone new; however, the other character is nameless. Queen greets her brother and sister and explains that the other characters do not have

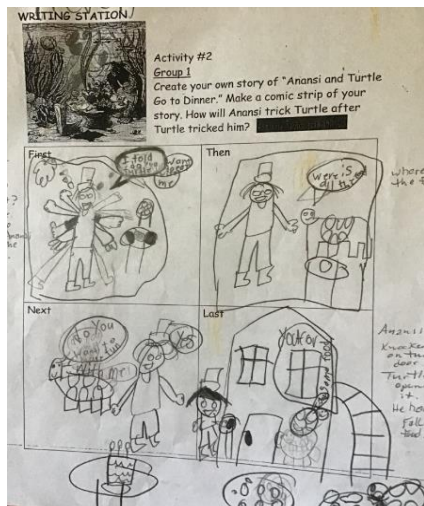
food in the house. The readers do not know who does not have food and why they do not have food. The reference to not having enough food may connect to the Anansi story since there was not enough food for Turtle in the story. Avery, Madison, and Jodie wrote a series of events. Avery and Madison use the temporal words (first, then, next, last), including making two different dishes, eating them, and playing on a slide. Then, they return to the house to wash their hands and eat dessert. The reference to eating may connect to the Anansi story, and the washing of their hands since Anansi repeatedly sent Turtle to wash his feet. All these stories (except one) do not have a problem or solution. The story with a problem does not have a solution. What is missing in all stories is an explicit connection to the Anansi story where Anansi tricks Turtle. Students' writing was more realistic than the imaginary world of the talking spider and turtle. Since "research has shown that young children have problems in generating departures from everyday reality in their imagination, not in subsequently drawing them" (Harris, 2021, p. 475) I chose to support students' understanding of the assignment and encourage them to enter the imaginary space of the Anansi story through a visual strategy.

Storyboarding Stories. Storyboards offer visual representations which might help students create their story. "Storyboarding their own graphic vignette may help students visualize how to show a reader with words" (Friese, 2013, p. 28). Students need structure and support, and the squares in a storyboard might give students a visual way to structure their ideas.

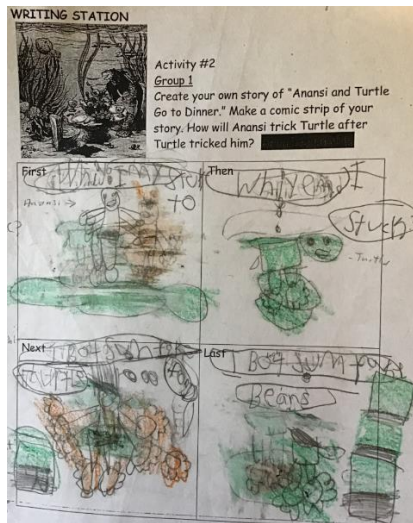
Students were given a piece of paper with four squares. In each square was written one temporal word (first, then, next, last). I removed the option of creating a play or puppet show since students would not have time to perform and complete the drawing and writing in twenty minutes. The assignment was, "Create your own story of *Anansi and Turtle Go to Dinner*. Make a comic strip of your story. How will Anansi trick Turtle after Turtle tricked him?"

The result was quite different from the previous assignment. Students completed the work by adding visuals and new ideas. As I wanted to center students' narratives in the curriculum, I brought their stories to the teacher-led group to discuss and examine. I asked the students questions about what they drew and what it meant. Students told me their stories, and I helped them write what was happening.

The following artifacts show how students expressed themselves and their ideas in pictures and words. The following data is from student artifacts: Create a New Ending #3 Dated: December 4th- 6th, 2019):



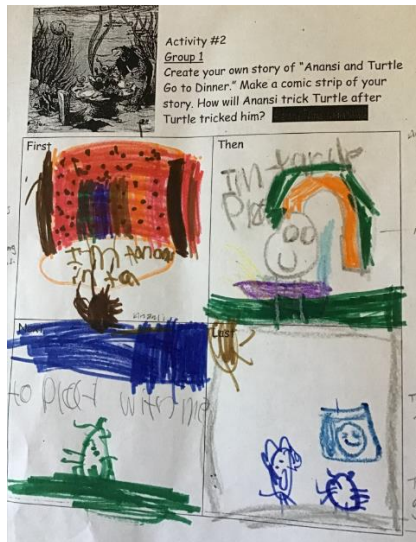
In this story, Blake repeated the events in the Anansi story and continued the story by adding his new idea. Anansi asked Turtle what he wanted to eat, and Turtle was so late that Anansi ate the food. Turtle invited Anansi over to have some fun. Turtle had real food and gave Anansi fake food. I wrote what the student told me in the margins since parts of the students' writings were difficult to read or there was no writing. First square—Anansi: I told you do you want to eat? Second square—Turtle: Where is the food? Third square—Turtle: Do you want to have fun with me? Anansi: Yes. Fourth square—Anansi knocked on the door. Turtle opened it. He had fake food.



Kyle was working with Blake and wrote that Anansi tricked Turtle by serving him fake turtle food.



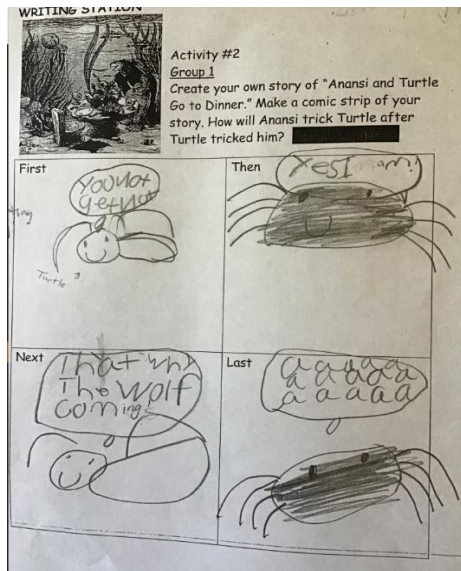
Drew wrote that Anansi decided to invite Turtle to a party. The only way to get to the party was for Turtle to use a phone to find out where the party was. Anansi gave Turtle a fake phone to trick him so he could not come to the party.



In Taylor's story, Anansi made some beans and checked on them to see if they were done. The trick was that Anansi invited Turtle over to have dinner, and they sat in the living room and never ate.



Casey writes that Turtle pretends he will pay for Anansi to have ice cream. The trick is that Turtle will not pay for the ice cream. However, Turtle, in the end, pays for Anansi's ice cream.



Jordon writes that Turtle scares Anansi into running away because he pretends there is a wolf and yells out that there is a wolf, and Anansi runs away.

In the first set of stories, students made implicit connections or no connections to the Anansi story by using the topic of food and having the character wash their hands rather than demonstrating and entering the alternative world of Anansi and including events they might experience in their lives. Creating a comic strip in the second assignment allowed students to show the story with pictures and include writing within the characters' talk bubbles. The number of words they had to write made the assignment more manageable and differentiated according to student ability as well as learning style. The second set of stories demonstrated that drawing in the storyboard squares supported students thinking of possibilities by separating and connecting the events in sequential order.

Picture into Word. Students had difficulty entering Anansi's world enough to think of possibilities in the first set of stories. Harris (2021) believes that students' imaginations are constrained by what they have experienced or observed in the past, limiting their ability to think of possibilities. Even when the students' experience limits them, there may be ways to help

students connect with imaginary worlds. The story, in connection with the storyboard, helped to extend students' possibility thinking by providing a visual bridge (drawings and the layout of the four squares) to enter Anansi's world using the story's characters to create a specific event. All the comic strips used pretense as a trick (i.e., pretending there is a wolf or that one character will pay for another character's ice cream, introducing fake food or a fake phone). Casey creates a twist to the story by depicting Turtle with a conscience demonstrated by Turtle paying for Anansi's ice cream. Students demonstrated the element of being imaginative by blending their ideas with the Anansi story to create a new event, taking something from their real life and placing it in the story's context (i.e., phones, paying for something, ice cream, having no money). Students produced possible ideas and displayed them coherently in an imaginary setting while still connecting life experiences through a visual narrative technique.

Visual Connections with the Curriculum. Students' attention was focused on extending the story problem through a visual representation by using the drawings to formulate ideas about the relationship between the characters (Broderick et al., 2021). Students used drawing "to slow down and articulate thinking that might otherwise be missed" (Broderick et al., p. 24). The option of accessing possibility thinking through drawing allowed them to include and connect aspects of their lives and literature through a creative medium, thus helping students make a personal connection with learning and with literature.

When I observed that students were engaged and could generate new ideas if they drew them first, it helped me reflect on these assignments meaningfully so I could see more than was previously visible in the first assignment. As a teacher, the comic strips informed me that students are helped by providing a bridge through drawing to express their ideas and generate new ideas through artistic methods. When they attempted to develop or express ideas with

writing skills they had not yet acquired, this was a significant obstacle, and the way to guide them through this obstacle was through an artistic method -in this case, drawing. Drawing becomes the vehicle through which they can express themselves. It opens the portal to new and innovative ideas. Then, they can use the skills they are beginning to learn to translate the visual into the word. Translating that initial assignment to an activity incorporating the arts increased students' ability to focus on the assignment, create new ideas, work independently, engage in possibility thinking, and to connect the curriculum to their lives.

Conclusion

This study focused on how a published curriculum and possibility thinking theory were united to create new lessons to encourage creativity in students. The utilization of possibility thinking elements in the lessons enhanced students' connection to the curriculum and led to engagement with imagination by connecting life experiences and visual imagery within student-generated stories. In addition, playing with puppets inspired students' ability to generate ideas as they collaborated. Linking movement with words provided a space for nonverbal creative collaboration. The findings in this chapter display the relationship between students' experiences, expression through a story, the arts, and the curriculum to demonstrate how students' stories can be centered in the curriculum and how a prescribed curriculum can be adapted for possibility thinking. In Chapter 5, I will discuss the findings drawn from this study in light of the literature, describe the study's limitations, and outline how this study can lead to future research.

Chapter 5: Discussion

The underlying purpose of this study was to encourage students' possibility thinking while still teaching the target skills in the Journeys curriculum. The qualitative findings of this study have provided awareness of how encouraging the use of possibility thinking can influence student responses in a classroom where a mandated prescribed curriculum is in use. This chapter will examine the research questions using relevant literature from Chapter 2 and related findings from Chapter 4. The research questions will be examined, the limitations of this study will be explained, and the significance of the findings will be discussed. The chapter will end with an exploration of opportunities for future research and concluding remarks.

The empirical literature on incorporating possibility thinking into commercially published reading curricula in the United States is limited. However, the data in this study provides evidence that possibility thinking can be woven into the published Journeys curriculum and support students' creative abilities.

Interpretation of Findings

This section will focus on reviewing the research questions for this study, given the pertinent literature from Chapter 2 and the results from Chapter 4. The following research questions directed this study:

1. What are the challenges and opportunities in the Journeys curriculum as identified through the lens of Craft's theory of possibility thinking?
2. How is it possible to adapt the Journeys curriculum when looked at through Anna Craft's lens of possibility thinking?
3. How does a teacher implement creative teaching and learning methods in order to teach for creativity in a mandated prescribed curriculum?

4. How do students respond to lessons which integrate possibility thinking?
5. How did the action research affect my growth as a teacher?

Based on the content analysis, the literature on possibility thinking, the creation of lesson plans combining Journeys and the possibility thinking elements, and the data gathered when implementing these lesson plans; this study can be used to think about some essential points that can be applied in teaching. The first point is that allowing students to engage with possibility thinking activities that encourage students to connect their experiences with the curriculum can be the first step towards culturally relevant pedagogy. The second point that emerges from the study is that possibility thinking elements embedded into Journeys can be a valuable way to create opportunities to support the development of possibility thinking in students in connection with academics. The third point relevant to teaching and learning is that the Journeys structure with embedded possibility thinking practices expanded the potential to encourage possibility thinking by increasing student-led learning experiences of the target skills from the Journeys curriculum through collaboration amongst the students.

The following sections will examine how this study relates to the literature concerning puppetry and drawing, creativity and collaboration, creativity and culturally relevant pedagogy, movement and learning, and possibility thinking studies. In addition, a discussion on my growth as a teacher will be described in connection with action research.

Literature connected to incorporating creativity into a mandated curriculum is limited; therefore, I examine studies incorporating specific creative literacy activities such as puppetry, drawing, and dance. Using these creative tools in this dissertation encouraged students to play and create stories meaningfully, generate ideas, connect the arts with academics, and fill a gap in the literature addressing the use of possibility thinking within a mandated prescribed curriculum.

Puppetry and Literacy

Deliman et al. (2018) found that using digital puppets on iPads and filmed puppet shows (using created paper puppets) encouraged collaboration between kindergarten through first-grade students. Wohlwend & Buchholz's (2014) aim was to avoid print-centered literacy and encourage young children to make meaning while allowing students to create stories in a different medium.

Daniels (2020) focused on the movements of children (four to five-year-olds) while they used puppets and observed a connection between nonverbal and verbal meanings related to literacy. At the same time, Chubb et al. (2021) found that puppets encouraged verbal literacy through discussion among three to five-year-olds since students saw puppets as peers rather than authority figures.

Most studies were with students younger than second grade; however, the studies with second-grade students focused on writing social studies stories connected with United States history and using shadow puppets (Peck & Virkler, 2006). Another study encouraged second-grade students to write scripts connected to books, stories, and movies they knew (Fisler, 2003).

These studies, like this dissertation, used puppets to teach literacy; however, the literacy goals differed. There was a focus on creating stories in my classroom to demonstrate specific academic skills. Some findings, however, were similar to this dissertation. As I found in my study, for example, a similar finding was that puppets are a meaningful tool to encourage students to play collaboratively and convey meaning through created stories. Students can incorporate the skills of story structuring and sequencing of events. The studies were different from this dissertation since there was an emphasis on digital puppetry and filming puppet shows (Deliman et al., 2018; Wohlwend & Buchholz, 2014; Wohlwend K. E., 2015), and these studies' main aims were to use puppetry as a learning tool rather than a means to develop creativity.

Storyboarding, Drawing, and Literacy

Researchers studied students using storyboards mostly in connection with filmmaking to illustrate a story after it was written or to comprehend reading texts (Balzotti, 2016; Bogard & McMackin, 2012; Bruce, 2011). While this dissertation used storyboards as a bridge from drawing to writing, storyboards in the literature were used for comprehension, responding to literature, and as part of a final product in an online narrative (Bogard & McMackin, 2012; Bruce, 2011). The study with third graders was similar to this dissertation, where the students used a graphic organizer similar to a storyboard to plan their story (Bogard & McMackin, 2012). As in this dissertation, these storyboards encouraged students to generate and plan ideas to create events in a story. The difference was that most of the students in the studies were older (third grade and high school), and there was an emphasis on creating digital stories, which was not the case in this dissertation. Few of the students in the studies came from an urban environment, and many were white.

When examining drawing, not in the form of a storyboard, but in connection with writing, researchers focused on drawing to teach English language learners comprehension of literature and sequencing of practical activities (e.g., cooking). The drawings are connected to writing in some studies, as in this dissertation (Mackenzie, 2011). The difference is that drawing to connect with writing was used in the first few months of school in kindergarten rather than in the second-grade classroom, where academic skills related to stories were taught, such as sequencing events in a story. In this dissertation, the drawings encouraged students to plan and brainstorm before writing because they allowed students to express ideas differently through visuals before using words. In comparison, storyboards encouraged students to create a roadmap

of their stories to plan each story event. The drawings and the storyboard structure allowed students an approach that encouraged an entryway into the imaginary worlds of their stories through visuals. The visuals provided a doorway for students to explore the world they were creating in their stories.

Collaboration

Studies focusing on collaboration emphasized productive talk and emotional connections between participants as essential and connected collaboration with creative writing and music projects (Albarran et al., 2008; MacDonald et al., Vass, 2007). However, in this dissertation, students demonstrated nonverbal awareness of other students' contributions when collaborating. Students reproduced others' contributions and changed contributions by adding to or altering them nonverbally. There is little research on young children regarding nonverbal creative collaborations. What is similar between this dissertation and the studies is the recognition that creativity can occur when students are engaged in joint activities to create a product.

The structure of the Journeys curriculum supported a variety of collaborative student-led activities. One of the most important things I observed in the classroom was how the structure provided by Journeys, in conjunction with the embedded possibility thinking elements, allowed space for students to engage in collaborations. Students had the chance to listen to and share ideas, especially in the independent literacy stations. This space feature was influential in increasing opportunities for students to explore purposefully with peers during collaborations. Students engaged in this space to intentionally build on peers' ideas while creating collaboratively.

Culturally Relevant Teaching and Creativity

Researchers have reported using creativity in connection with culturally relevant pedagogy in school and after-school programs. Some after-school programs consist of participants writing lyrics to hip-hop songs that express issues in their personal lives and community (Steenis, 2020), while others provide arts-based programs connected with culturally relevant material to help youth develop their creativity (Dunning, 2020). Researchers have also found that culturally responsive creative practices can be implemented during school in a variety of subjects, such as music, environmental education, math, science, and English language learning (Arias et al., 2022; Curry et al., 2020; Evans, 2019; Huffling & Stevenson, 2021; Prasad & Stille, 2015). However, few prior studies have examined literacy in connection with creativity and culturally responsive teaching (Ramirez & Jimenez-Silva, 2015), as this dissertation reveals in its findings. These findings were partly arrived at through emergent coding and partly because of the systematic reflection in which I engaged, allowing me to think about and learn more about culturally relevant pedagogy. Additional differences between these studies and this dissertation were that most participants were older (fourth grade through high school), while this dissertation examines creativity being encouraged in early childhood (second grade). In addition, study participants had different backgrounds (Latinx, English language learners) than those in this dissertation who were African American.

The literature did not address the integration of culturally relevant creativity into a prescribed mandated curriculum. The findings from this dissertation study show that creativity can be encouraged within schools with young African American students in connection with literacy instruction as the first step towards culturally relevant pedagogy and does not need to be relegated to older students in after-school programs or students in subjects other than reading.

Even though most students in prior studies were older and not African American, several findings support this dissertation's findings, including the finding that culturally relevant creativity validates students' perspectives and shows students to be active rather than passive learners whose experiences are valued.

Supporting Student Narratives. Student-created narratives through writing, puppetry, and drawing played a central role when adapting the Journeys curriculum to employ the possibility thinking elements, allowing students to engage with the elements when the lessons were implemented. Narratives also played a central role in discovering that students could connect with the curriculum by including their backgrounds and experiences. As a teacher, I reflected on giving space for possibility thinking in which students could create narratives that would highlight their experiences. Through my reflections and reading, I learned that centering students' voices could be one way to make the curriculum more culturally relevant to students. Again, this was a learning point that emerged from my action research, and other components of culturally relevant pedagogy also need to be considered.

Combining Journeys with the possibility thinking elements increased opportunities for constructing narratives using Craft's (2000) continuum, the movement from "what is to what can I do with this?" (p. 24). By initially implementing the content analysis, I determined "what is." The action continued as I answered the question, "what can I do with this?" I created lesson plans expanding and introducing the elements of possibility thinking into Journeys. The focus was on weaving the target skills, strategies, and activities from Journeys with narratives where possibility thinking could flourish. I adapted Journeys by changing activities related to identifying narrative features (i.e., sequence of events, story structure) to student-created stories in order for students to attempt to demonstrate these learning targets. Students created narratives

through puppetry, storyboarding, and drawing, which allowed students to work with possibility thinking and the learning objectives in Journeys differently. This action required students to engage with targets while still embracing the elements actively and allowed students an opening to contribute their narratives to their learning experience and, in the end, gave students opportunities to see themselves in the curriculum.

I used the lesson plans I created to be purposeful in my instructional design to prepare students to write, draw, and use storyboards, and puppetry, to demonstrate sequencing of events and story structure while still engaging with possibility thinking. The increased space for collaboration, differentiated lesson planning, and the lessons' structure allowed me to plan opportunities for students to engage creatively. The plans included instruction on narrative creation and allowed students to create and adapt their narratives during independent literacy stations where they could work collaboratively. The open-ended nature of these narrative creations and the space in the literacy stations for students to create together gave students the freedom to personally engage with literacy connecting their experiences with their stories.

Movement and Vocabulary

While most portions of my study are connected with creating stories, the dance episode is unusual as it relates to elements that might be used within a story, namely vocabulary. Few studies examine dance in connection with academics, and fewer connect movement with vocabulary. One study demonstrates with second through fourth graders that character traits vocabulary can be taught through movement (Mason-Williams et al., 2017), while lessons in my study used the vocabulary words outlined by Journeys (e.g., share, wonderful, noise). In the study, teachers introduced vocabulary that students could use when describing character traits and supplied them with the definitions. Teachers asked students how they thought a character

would move. Students moved as they thought the characters would and created a movement connected with the written definition. Students were assessed four times throughout the study. Assessments included a written or a picture definition of the character trait, and the assessments showed that connecting movement with character trait vocabulary was an effective approach. While this study was similar to this dissertation because it connects movement with vocabulary, it differed because students in my study collaborated. In addition, I did not systematically collect assessment data as part of the study.

Other studies emphasized using movement to teach social-emotional vocabulary to five- and six-year-olds (Lucassen et al., 2022), writing poetry, and creating a dance to go with the poetry (Giguere, 2006). Besides the age difference between students in this dissertation and these studies, my study worked with mandated vocabulary and did not include movement to poetry.

My study adds to the limited literature on dance and vocabulary. It differs since students in my study worked in groups and combined several vocabulary words into a dance. In addition, my study explores how a commercially published curriculum could be broadened to engage students creatively.

Possibility Thinking Studies

The possibility thinking studies relate to the conceptualization of possibility thinking and pedagogical practices that might encourage possibility thinking. As expected, there are some similarities between my study and studies related to possibility thinking. However, there are distinct differences. Students in the studies were mostly younger than the students in my dissertation study. Two studies mainly focused on one aspect of possibility thinking, namely play and questioning (Chappell et al., 2008; Craft et al., 2012), whereas my study was focused on literacy in connection with seven elements of possibility thinking. Another difference was that

teachers intervened in the play episodes to encourage more possibilities (Craft et al., 2012). In contrast, I did not intervene as most play episodes were with the puppets in the literacy stations, and I was working with the teacher-led group.

In these studies and this dissertation, the teacher posed questions; however, the difference was that in the studies, teachers asked students questions during play episodes, while they were making a craft, or when doing science experiments (Burnard et al., 2006; Chappell et al., 2008; Craft et al., 2012; Cremin et al., 2006), whereas I connected question-posing with literacy. The current findings that communication of possibility thinking can occur both verbally and nonverbally were corroborated by the findings of Burnard et al. 2006, Chappell et al. 2008, Craft et al. 2012 and Cremin et al. 2006.

Craft et al. 2012, documented examples of children's ownership exhibited in leaders of the possibility play. Some students in my study showed leadership, as in the dance episode; overall, the difference was that students primarily engaged in collective ownership as students collaborated.

In several possibility thinking studies, teachers identified students' questions and used those questions as a means for students to co-construct the curriculum to show ownership of learning and nurture student agency (Burnard et al., 2006; Craft et al., 2012; Craft et al., 2012; Chappell et al., 2008; Cremin et al., 2006), whereas, in my study, the curriculum being prescribed, students did not have the opportunity to co-construct it. Adults encouraged student ownership and agency by giving children time and space to play, while interventions in play encouraged ownership and agency (Craft et al., 2012). I encouraged ownership and agency through the independent learning stations since students needed to take ownership, think independently, and be agents in their learning as they were creating independently.

Using self-determination as students decided the topics for their narratives, making decisions within that narrative, and using their imagination to create innovative ideas (Craft et al. 2012) also occurred in my study. Students in my class had to decide the topic of their story and make decisions within the story-making process to complete narratives. The difference was that I incorporated a literacy learning target in students' assignments.

In the studies, teachers created space in the classroom environment where students could interact and create their environment (Burnard et al., 2006; Chappell et al., 2008). In my school, the district mandated the classroom structure, including furniture ordered for classrooms and inspections to determine if classrooms were set up in a district-mandated manner. There were limited options for student-created environmental spaces.

Time was flexible in these studies, allowing students additional time to reach their goals. Rather than following a schedule, teachers could allow more time for explorations if needed (Burnard et al., 2006; Chappell et al., 2008; Craft et al., 2012; Cremin et al., 2006). Flexibility with time was not an option in my classroom since the times of the literacy block were prescribed by the district.

Study Limitations

Examining this study's limitations can help focus on what needs changing in future studies to facilitate the further development and knowledge of the possibility thinking framework and how integrating its elements into a published curriculum can support creativity through literacy instruction.

Limitation: Focus on Certain Portions of the Curriculum

This study focused on certain portions of Journeys and one second-grade unit of the five-unit curriculum. Since the unit used in this study provided many opportunities for question-

posing, question-responding, and problem-solving, more research is needed to discover if the other units provide the same opportunities. The study did not include several other components, including phonics, phonemic awareness, and the online portions of Journeys.

Limitation: Experience Teaching with Imaginative Teaching Practices and the Language Arts Curriculum

This study was carried out in one classroom by one teacher who had some experience with Journeys and using imaginative teaching practices. I had not previously used Craft's theory of possibility thinking in the classroom; however, I had engaged in imaginative teaching practices while working as a Waldorf teacher. The practices are quite different; however, I was open to these differences. I was also interested in encouraging creativity development in students, and I consider the creativity practices highlighted in this study valuable.

I taught using the Journeys curriculum for several years, so I knew it well and was able to enhance many aspects of Journeys to weave in the elements of possibility thinking to foster creative development in students. The teacher's experience and knowledge of curriculum and creativity will determine what is needed to engage in such a model.

Limitation: Focus on Opportunities

The focus of this study was on providing opportunities for students to engage in possibility thinking while still engaging in the content of the language arts curriculum. While I observed students' learning knowledge in Chapter 4 (identifying which students incorporated features of story structure and sequence of events), I did not include summative assessment data in the study. In addition, I did not compare assessment data between lessons using possibility thinking and lessons without possibility thinking. While I observed students engaging with possibility thinking, I did not systematically assess the development of their creativity over time.

Implications and Significance of Study

Two important conclusions can be drawn from the study. The first is that introducing or infusing possibility thinking into a mandated curriculum can expand opportunities for students to learn to be creative. A second important conclusion from this research is the significance of the learning that can take place for a teacher conducting action research. The following section describes the implications of the research as well as my growth and learning in the research process.

My research questions focused on adapting the Journeys curriculum to include and teach possibility thinking. My focus was on teaching for creativity to promote creativity in students rather than on teaching creatively, which would have addressed how I could creatively deliver lessons. To develop lesson plans, I needed to engage with my creativity to support students by integrating possibility thinking with Journeys. Reflecting on the lesson planning process, I discovered I was using many possibility thinking elements and connecting with both my role as a teacher and a researcher. I needed to trust in this process even though I questioned how and if my students would meet with these challenging activities I included in the lesson plans.

Teacher Hat vs. Researcher Hat

There were several points throughout working on this dissertation when I felt tensions between aspects of the study. The tensions prompted me to reflect on my roles as both a teacher and a researcher. One tension I experienced was between accountability and responsibility. Noddings (2013) states that a weakness of accountability implies a sense of compliance and answering to a higher authority. In the case of teachers, the higher authority is the district and the administration. She explains that accountability answers to a higher power, while responsibility focuses on those within one's care. Another point she makes is that teachers should not be held

accountable for following a prescribed curriculum but responsible for the decisions made regarding the curriculum.

I reflected on both accountability and responsibility from the point of view of the teacher and the researcher. To be accountable as both a researcher and teacher, I needed to explain why I made the decisions regarding the curriculum; however, tension arose when I examined the reasons. The reasons differed since my aim as a teacher and researcher were separate. Reflecting on my responsibility as a teacher, I felt responsible for student learning. As a researcher, I felt responsible for constructing opportunities for creative learning since the literature supports fostering creativity as beneficial to students. Sometimes the role of the researcher and teacher were in conflict, and sometimes there was conflict within one role. When students were creatively engaged or problem-solving, as in the dance or the puppet shows, I observed they were engaged in possibility thinking and recognized students' need for more time to participate in the activities. As a teacher, I knew I needed to follow the mandated times for the literacy block outlined by the district. However, following the mandated times conflicted with my researcher role when I observed that more time might be needed for certain activities. For example, the students who created a puppet show needed more time to write the puppet story. However, I decided to follow the mandated district times to observe how students responded within the given time because, as a teacher, I knew that sometimes the time constraint encouraged students to engage more quickly and be more productive with the assignments. As a researcher, I knew that some researchers believe creativity thrives within constraints and can propel an individual to be more inventive (Amabile, 2013; Kamoche et al., 2001). Sometimes, the roles of researcher and teacher would merge. On the one hand, I was accountable to myself as the teacher and to the

district for student learning and my learning decisions. On the other hand, I felt a responsibility as both teacher and researcher to teach what I thought would benefit students, namely creativity.

Lesson Planning. When creating lessons, I planned for students to be introduced to the learning targets during the whole group section of the literacy block through discussion and activities. Students needed to understand the learning targets so they could complete the assignments in the independent literacy stations. When students worked in the stations, they practiced their understanding of the learning targets and demonstrated their knowledge through their creations. When I analyzed student assignments as a researcher, I examined student artifacts for aspects of possibility thinking. As a teacher, I focused on students demonstrating knowledge of the learning targets, as outlined in Chapter 4.

When reflecting on students' responses, I realized I needed to be more open and flexible during the lesson planning process to more closely represent Craft's view of possibility thinking. Rather than examining each element separately and attempting to create an activity demonstrating that element, I observed that many elements were integrated if I engaged a group of students in a problem-solving activity. In addition, I observed that when groups of students were being imaginative or engaged in play, many other elements were included in the activity. As a researcher, I reflected on Craft's example of the continuum. Craft (2000) states that possibility thinking works on a continuum from "what is this?" on one end of the continuum to "What can I do with this?" (p.24). When using this continuum during lesson planning, I realized that much of what the curriculum does is to ask students to identify concepts. Identifying concepts relates to the question, "what is this?" If I want to move along the continuum toward possibility thinking, I need to ask, "what can students do with this?" For example, there is an activity where teachers are meant to introduce words and have students say and discuss the

meaning. This activity is related to "what is this?" because students identify the words and their definitions. During planning, if I ask myself, "what can students do with this?" I can present the class with a problem that can be solved in a collaborative group. If I present the problem as a question, I might ask students, "How can you take three of the words and write, act out or use puppets to create a story or draw a picture?" Students are introduced to a problem they need to solve with a lead question related to being imaginative or play involving choice. All of these aspects of the activity are related to possibility thinking (problem-solving, collaboration, question posing, question responding, choice, being imaginative, and play). In addition, this type of activity includes other possibility thinking elements such as intentionality (making decisions) and, depending on the outcome, innovation.

By reflecting as a researcher on student samples, the study has changed my thinking about lesson planning for possibility thinking. I can examine an activity from the mandated curriculum and ask myself, "What can the students do with this?" I can focus on the elements of being imaginative and play and ask, "How can students create something new from this? "Is there an opportunity to blend ideas? Is there an opportunity to pretend or experiment with objects?" Students can work in groups, and I can give them problems to solve by asking questions, so students create from their learning. My role as a researcher has informed the way that I plan lessons as a teacher.

Implementation of Lessons: Standing Back vs. Leaning In. Pedagogical strategies such as standing back can affect students' responses as students are allowed to work without interruption on open-ended activities. The teacher remains a resource while observing and reflecting on what students are doing in order to better plan what to do next (Craft, 2006). When I implemented the strategy of standing back, my role as a researcher and teacher were standing

side by side rather than being in tension. I was observing and reflecting as both teacher and researcher. Standing back encourages students to take ownership of their learning since they have to experiment with their ideas and make decisions related to their work independently from the teacher (Craft, 2006). However, standing back is only one of several pedagogical strategies that Craft suggested, including offering students choices and opportunities to collaborate.

A balance between the teacher standing back and leaning in allows for flexible learning spaces. As a teacher, I knew I had to lean in to give students a basic understanding of the learning targets in the whole group and the teacher-led group for students to engage with the targets independently in the literacy stations.

In addition, I learned that students need more than just time to create independently. I now see my teaching as a series of cycles that includes alternately leaning in and standing back. Students need to return to engage in dialogue with the teacher (and other students) about their creative work to help them see their work from a new perspective, which might mean they can revisit what they have done and revise. This cyclical work takes time, but this work can be incorporated into the teacher-led group within the literacy block to create the balance between standing back and leaning in.

Student Responses. I am aware that if students are not motivated, they will not engage with new explorations or their learning. Craft (2006) states that engagement is necessary for possibility thinking. When I taught Journeys prior to the study, many students were not very engaged in the independent literacy stations and did not always complete their work. During the study, they completed work without much prompting from me. Students were more immersed and engaged in their work than before the study. For instance, they were more animated as they

created puppet shows and dances that included agreeing, disagreeing, and building on one another's ideas.

The shift came for me in this study when I observed students engaging in possibility thinking within the constraints of the mandated curriculum. Overall I learned to reflect more deeply as a teacher and researcher on my practices, which helped my confidence grow since students' behaviors improved and their disengagements were significantly reduced. Student engagement was noticed by a teacher evaluator who arrived unexpectedly to evaluate me during the study. During this observation, he noticed that all the students were engaged, unlike previous times he had evaluated me before the start of the study. At the end of the observation, he stood up, clapped, and wrote in his evaluation, "Bravo!!!"

My Interpretations vs. The Students' Reality. The open-ended assignments allowed students to respond by connecting life experiences and building on one another's ideas as they collaborated, helping them connect to the curriculum. Students worked in independent spaces, explored and experimented with ideas while still connecting with Journeys, and engaged with play and visual bridges to support student-created narratives.

I reflected on my responses to student work as both researcher and teacher. As a teacher, I was curious to discover students' responses and was encouraged when students met the challenges in the assignments. However, as a researcher, I had to reflect and ensure I looked at creativity through Craft's lens rather than my view of what I thought was creative. For Craft (2000), students were innovative if what they created was innovative for those students or innovative within the classroom community. When it appeared that some students did not follow the assignment's directions, I reflected and discovered that I needed to examine student work more objectively to determine what students were attempting to communicate. Students created

something new according to their interpretation of the assignment. The objectivity of the researcher role informed my teacher role so I could look at student work from an asset point of view rather than a deficit point of view. The researcher role helped me learn to pause, reflect, and remove my "conceptual baggage" (Hsiung, 2008, p.217) to reveal students' voices in their work.

Student Attitude as a Mirror to Teaching

In Kim's study on action research (2013), he cites themes that can emerge from action research studies connected to teacher growth. One of the themes connects to how student attitudes mirror the way a teacher is teaching. Students' attitudes improved when I introduced the lessons connected with the study. For example, students with some behavior issues were calmer and displayed enthusiasm and engagement (i.e., laughing, smiling, and focusing on learning). Since I had adapted and written the lessons and was videotaping and audiotaping lessons, my level of engagement was high. I had a passion for teaching previous to this study. However, my relationship with teaching changed while implementing this study. For example, I listened to audiotapes of students working, which I had not done previously. This daily activity provided me with awareness of the results of my teaching and an opportunity to reflect again at the day's end. How students understood and interpreted what was being taught through verbal communication in the independent literacy stations was not available to me previously because I had not been audiotaping the lessons and using them to reflect. The information I gathered during the study alerted me and gave me a greater appreciation for the sheer number of things that occur in a classroom of which a teacher might not be fully aware. The opportunity to create lessons that encouraged students' creativity changed my teaching attitude because I was more absorbed in my work. My attitude was reflected in the student's attitudes. The way I related to students differed because I was more aware of their learning behaviors and communications.

Ownership of Teaching: Positionality and Passivity

Another theme outlined by Kim (2013) was that of ownership. Analyzing the curriculum, creating adaptations to include a theory, implementing the new lesson plans, and reflecting on student responses shifted my position, so I felt more ownership in my teaching. Through my adaptations, I formed connections with the curriculum I did not have previously. The responsibility for planning and implementing the lessons was informed by student responses and developed by me, not an outside source (the curriculum).

Personal and Professional Growth. My concerns about district guidelines were replaced with intentional reflections on students' backgrounds. Since my experiences differ from my students, increasing my awareness of their backgrounds and cultures will be an ongoing process. As I honor students' individuality, I must become more aware of their family and community experiences. I learned that I need to find ways that allow students to connect to the curriculum by relating what they know, their individual experiences, with what they are learning.

When student work was different than expected, I reflected on why this might be in order to gain insight into the students' experience, so I was using an asset-based approach rather than a deficit-based one. I learned I needed to be aware that students might be understanding, interpreting, or expressing themselves in a way that I did not understand because my background differs from theirs. I realized I need to increase the time spent communicating with students about their work, even if it means adapting school and district expectations (e.g., changing the schedule and viewing the station work as more than practice).

Student Co-creation vs. Mandates

The fact that a mandated curriculum is being used implies that the teacher must follow it, which creates tension with one aspect of possibility thinking: that students co-create the

curriculum (self-determination). How can students co-create the curriculum when the curriculum is mandated? As a teacher, I adapted the curriculum and created lessons. I adhered to my lessons. I asked myself, "Did I make the curriculum central through my created lessons?" While students had an opportunity to explore their voices within the constraints of the curriculum, was that enough? Where were students' contributions to the development of the curriculum? I gave space for students within the Journeys curriculum, but after reflection, I was not satisfied with the amount of space they had been given.

The findings demonstrated that the element of self-determination was challenging to include in the lessons. I reflected on what co-creating the curriculum might mean in this situation. The first step is to turn the dial which points to the teacher and point it toward the student. I revisited Craft's continuum. Rather than ask, "What can I have the students do with this?" I can ask the students, "What can you do with this?" If I did this using the example of introducing new words, it would mean that instead of giving students a choice of activities that I created, I would ask students, "What can you do with these words?"

Implications for Future Teaching

As a teacher and researcher exploring implications of independent learning, it became apparent in the study that independent learning requires skills. For example, the issue in the dance episode needed an intervention from me, so in order for students to resolve issues independently in the future, I will teach students to set shared goals, make collaborative decisions, monitor their progress toward achieving their learning goals, and self-assess. In addition, it was not clear that students were aware that they were comparing and contrasting in *The Three Pigs* activity, so in the future, I plan to engage in dialogue with students about their

independent work, so they learn to reflect and can explain their thinking while I offer guidance and suggestions.

As a researcher, I reflected on students' engagement in possibility thinking, and as a teacher, I reflected on student work samples to discover evidence of learning. I realized that it would be more beneficial to students when practicing the learning targets and engaging in possibility thinking to combine some of the learning targets from the unit. For example, when I created assignments where students were meant to demonstrate the skill of sequencing events, some students did not include all the components of story structure. In the future, I will include story structure in the assignment directions to encourage students to include problems and solutions in their stories. The combination of learning targets would allow more opportunities for possibility thinking since students would need to think of possible problems and solutions.

The most challenging element to include from Craft's view of possibility thinking was self-determination. In order to make space for this element in future teaching, I will shift my thinking from giving choices to enabling students to create their choices. For example, when I introduce content, I will ask students to collaborate to develop choices that demonstrate creativity and are related to the content. Students can then choose from the choices they have created.

Extensions to Activities. I noticed that drawing, storyboarding, puppets, and dance provided different ways to connect with literacy. However, I would like to extend these bridges to include more variety, such as music, painting, drawing, printmaking, sculpture, photography, creating a video or film, or designing a craft. I want to teach students skills, including interrogating their visual images (Serafini, 2012), so they can translate their images into writing.

As a researcher and teacher, I expanded my view of narrative to include dance. Through dance, students communicate in different ways using their bodies and facial expressions so

dialogues can occur. In the study, students created a dance with the three vocabulary words. This activity could be extended so that students would perform a story through dance and include the vocabulary words.

Culturally Relevant Creative Practices. During the study, students connected through narratives with their experiences, the curriculum, and possibility thinking. Including students' experiences was one step toward culturally relevant creative practices. In the future, I will intentionally implement other components of culturally relevant pedagogy in connection with creativity to encourage connections with real-world contexts where students examine real-world problems, create solutions, and demonstrate their findings using various modes (acting, drawing, puppetry, video). These types of activities connect problem-solving to possibility thinking. I have started researching student interests such as stories, films, videos, games, music, and dance. I will connect those interests to learning through student-created narratives and student-led literacy projects. In addition, I plan to connect literature and the arts with students' lives by introducing authors with similar backgrounds to my students rather than relying solely on the stories in the curriculum. Students can explore personal connections with these resources and create stories, extensions, different endings, projects, and narratives connected with the literature. Through culturally relevant, responsive, and sustaining literature, I am exploring how to build on this finding to include other aspects of cultural relevance in my classroom.

Implications of the Study for Schools, Districts, and Educators

The data collected in this study provides critical understanding for schools, districts, and educators who choose to implement published literacy curricula embedded with creativity. The following are meaningful implications resulting from this study's data. There is a need to provide professional development focused on teaching for creativity. Through creative lesson planning,

professional development can explicitly focus on embedding possibility thinking within a district's adopted curriculum. In addition, professional development highlighting narrative practices, collaboration, and differentiation of problem-solving activities would be helpful. In the next section, each of these implications will be examined.

Professional Development. This study shows that using Journeys with embedded possibility thinking elements is multifaceted. Many aspects of implementing this model must be considered. For example, a teacher's accomplishment while using this model would be contingent on professional development. To implement the teaching of a published curriculum embedded with possibility thinking elements, continuous professional development in instructional planning, teaching for creativity, and skillful introduction to student-initiated narratives and differentiated problem-solving activities, would be necessary.

Lesson planning is one of the foundations for successful teaching and learning. The components of possibility thinking require planning for different types of thinking and collaborative learning. A teacher must allow students to work independently, so students must be prepared for that work by offering students strategies and instilling confidence. Teacher flexibility in offering students space to explore and allowing students to discover without interference is contingent on teaching for creativity. In addition, teachers need to plan to create a safe environment where student-initiated explorations and students' individuality are honored. Professional development in lesson planning for possibility thinking is essential if districts want to embed possibility thinking elements into an adopted published curriculum.

Encourage Student-Created Narratives to Expand Creativity and Deepen Literacy Skills. Another implication of this study is that teachers need to encourage student-created narratives. Student-created narratives are necessary for the partnership of possibility thinking and

a published curriculum to facilitate creativity in students. Promoting student-created narratives moves students from merely identifying narrative features to creating them. The movement from identification to creation while still integrating literacy skills allows students to engage differently with literacy. In addition, when students engage in creating rather than reading others' creations, there are more opportunities to develop possibility thinking because more possibility thinking elements can be incorporated into the activities. However, teachers may need to modify their lessons to include time and space for student-created narratives.

Some districts might place much emphasis on their purchase of literacy curricula. The expectations and professional development associated with curricula might influence teachers to consider the narratives within the curriculum as central, leading to a dependence on the included narratives and the associated skills as the only way to teach literacy. However, my research demonstrates that possibility thinking can be embedded within the published curriculum to supplement literacy instruction.

In summary, the implications of this study rely on questions shifting "from 'what is this and what does it do?' to 'what can I or we do with this?'" (Craft et al., 2013, p. 539). This shift will allow districts, teachers, and students to experience the development of the possibility thinking framework within literacy instruction.

Recommendations for Future Research

Expansion of Skills

There are several options for future research related to areas not covered by this study. Future studies using mandated curricula could incorporate different theories and pedagogical approaches, such as culturally relevant pedagogy or activities related to social-emotional

learning. Another option is a future study focusing on differentiation within mandated curricula using phonics instruction and computer work while employing possibility thinking.

The creative arts could be used to explore connections with possibility thinking. In addition, working with other subject areas, such as technology, science, and social studies, may offer opportunities involving future research. Teachers could also conduct action research studies to research possibility thinking practices with other content areas (i.e., science). This type of research might expand options in the curriculum for implementing possibility thinking methods and define methods and practices that might be used across all content areas. A focus on student problem-solving in connection with other content areas and researching pedagogical strategies that seem most helpful for encouraging children to think creatively are additional options for future research. These options for future research are connected with teaching and expand on work from this dissertation.

Educators with Ranges of Experience

It would be beneficial to examine how a teacher's experience influences the ability to incorporate creativity development into a curriculum. The knowledge of literacy curricula, lesson planning, literacy practices, and how this knowledge affects the skill to weave the possibility thinking elements within a curriculum might help determine what types of support teachers might need when using this model. Identifying the kind of support educators need is necessary for teacher trainers and teaching consultants who want to promote creativity in the classroom through the possibility thinking framework.

Assessing Creativity and Content

The information provided from a systematic assessment of the development of creativity could help determine what activities are the most effective at promoting possibility thinking. In

addition, a future study could identify whether employing the possibility thinking elements promotes literacy learning. Studying assessment and creativity could address effective practices that meet the needs of a wide range of learners.

This study explored how a teacher implemented the published Journeys curriculum while incorporating possibility thinking elements into literacy instruction to promote possibility thinking (the driving force of creativity). I complete this study by seeing the curriculum from a different perspective, one which places the learner in a more central position in the classroom where the learner is called to ask and answer the question, "What can I do with this?" This study is the beginning of a "What might be?" series of empirical studies related to published curricula and the possibility thinking elements, highlighting an understanding of how the possibility thinking elements and the fostering of creativity can occur across content areas and how this type of teaching serves students and their learning. In summary, the results of this study of Journeys and the embedding of possibility thinking elements can very well serve as a catalyst for future studies on creativity and curriculum.

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Appendix A



Study title	Adaptations to Teach for Creativity Using a Published Language Arts Curriculum
Researcher[s]	Barbara Prendergast (Curriculum and Instruction)

I am inviting your child to participate in a research study. Participation is completely voluntary. If you agree to let your child participate now, you can always change your mind later. There are no negative consequences, whatever you decide.

What is the purpose of this study?

I want to understand how students learn to development their creativity while still using the assigned language arts curriculum.

What will my child do?

I will continue to be teaching the same language arts curriculum but will be introducing activities that connect creativity development to the curriculum. All students will participate in the activities that may help them develop their creativity (for example puppet plays, artistic activities, creative reading projects). If your child participates in the study, I will write down your child's reactions to these activities, write down what questions your child asks and the responses your child gives to questions, videotape, and audiotape your child participating in the activities. The activities will be from Mon-Fri for 90 minutes for 5 weeks).

Risks

Possible risks	How I am minimizing these risks
Risks: Potential participants may not want to participate in the research study activities. Risk does not exceed minimal risks encountered in the normal running of a classroom.	Safeguards: Students do not need to participate in the study if they do not want to participate. If students do not participate in the research activities it will not affect their grades. Students will not be forced to participate in the study. Students who do not participate in the study will still participate in the regular language arts curriculum which I will still be teaching.

Breach of confidentiality (Breach of confidentiality means your child's data being seen by someone who shouldn't have access to it)	<p>SAFEGUARDS: I will store all electronic data on a password-protected, encrypted computer.</p> <p>I will store all paper data in a locked filing cabinet in a locked building.</p> <p>I will keep your child's identifying information separate from the research data, but I'll be able to link it to them by using a study ID.</p> <p>I will destroy this link after I finish collecting and analyzing the data.</p>
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There may be risks we don't know about yet. Throughout the study, I'll tell you if I learn anything that might affect your decision to let your child participate.

Other Study Information

Possible benefits	<p>The benefits will include increased understanding of teaching and learning. All students in the class will also be involved in additional engaging creative activities which may help to develop their creativity and critical thinking skills.</p> <p>This study will help me to understand how children can continue to learn the goals of the curriculum that the school has provided while also learning about creativity and creative thinking.</p> <p>This research will contribute to an understanding of the processes associated with creativity development within schools that use commercially produced curricula.</p> <p>By identifying creativity practices that promote creativity, this research can inform the practices of educators who work with</p>
	students who are in schools that use commercially produced curricula.
Estimated number of participants	21 participants
How long will it take?	5 weeks, 5 days a week for 90 minutes each day (during the reading lessons)
Costs	None

Compensation	None
Future research	Your child's data won't be used or shared for any future research studies.
Recordings	I will record (video and audio) your child. The recordings will be used for gathering data such as the answers to questions or observations on how your child engages in the creative activities. These recordings will be destroyed after the completion of the study.

Confidentiality and Data Security

I will collect the following identifying information for the research: your child's name
This information is necessary, so I can compare your child's reactions and questions with other students in order to see if an activity is helping your child develop his/her creativity and how.
Your child's name will be connected to all of the data I collect in the classroom, but when I write up a report of the study I will use non-gender specific names and no identifying characteristics.

Where will data be stored?	On my computer at home.
How long will it be kept?	It will be destroyed January 2021 (IRB extension granted)

Who can see my data?	Why?	Type of data
I am the only person who will see the data.	To analyze the data and conduct the study	I will keep data that is coded with names removed (names removed and labeled with a pseudonym (fake name)). No one will know whose data it is except for me.

Contact information:

For questions about the research	Barbara Prendergast	000-000-0000
For questions about your child's rights as a research participant	IRB (Institutional Review Board; provides ethics oversight)	414-229-3173 / irbinfo@uwm.edu

For complaints or problems	Barbara Prendergast Dr. Nancy File	000-000-0000 414-229-4197 nfile@uwm.edu
	IRB	414-229-3173 / irbinfo@uwm.edu

Signatures

If you have had all your questions answered and give permission for your child to participate in this study, sign on the lines below. Remember, your child's participation is completely voluntary, and you're free to remove them from the study at any time.

Name of Child (print)

Name of Parent or Guardian (print)

Signature of Parent or Guardian

Date

Appendix B



Minor Assent for Research Participation

IRB Approval Date: April 9, 2019

Study title	Adaptations to Teach for Creativity Using a Published Language Arts Curriculum
Researcher[s]	Barbara Prendergast (Curriculum and Instruction)

I am inviting you to be in a research study. A research study is a way to learn new things. I am trying to learn more about creativity. Creativity means using your imagination to make new things and solve problems.

We will be doing some things like acting out stories, creating crafts, creating puppet plays, painting, modeling clay, creating songs, and drawing pictures with different materials during our reading lessons. This will last for 5 weeks during our reading lessons.

If you agree to be in this study, I will also write down some things about what you do and say during these reading lessons. I might also record your voice or video you. If you do not want me to take notes about your work or record you, you can say no. You'll still do our reading lesson activities, but I won't ask you any questions for the study. If you want to say no, it won't affect your grade.

When something good happens, we call it a benefit. If you say yes to being in this study, it might benefit teachers who will learn more about teaching kids and how they learn. As your teacher, it is my job to make sure you keep learning in my class whether or not you want to be in the study. If you say yes, it means letting me write things down and make recordings about your work. If you say no, I won't write things down or make recordings about your work.

You don't have to be in this study. It is up to you. No one will be mad, no matter what you decide. If you say yes now, but change your mind later, that's ok too. Just let me know. When I am finished with this study, I will write a report about what I learned. This report will not have your name in it or say that you were in the study.

Signatures

If you decide you want to be in this study, write your name on the line below.

Name of Participant

Date

Appendix C

Letter Requesting Permission to Participate in a Research Study

Dear Parents,

In addition to working as teacher at Siefert Elementary, I am also a student at UW-Milwaukee. As part of this program, I will be conducting a research study to learn more about how to promote student creativity in the classroom. I'll be working with my students in my classroom and would like to invite your child to be a part of it. Below is some information about the study. Please sign and return the attached permission slip if you agree to have your child be a part of the study.

Why I'm doing this study: I am really interested in helping students develop their creativity which will help them as they move through their lives.

What will happen to your child if he or she is in the study? If your child participates in this study, I will take notes, videotape, and audiotape students as they ask and answer question in the whole group, and also as they work on projects in their reading stations and in the teacher led small group. If your child is not in the study, he/she will participate in the same learning activities, but I will not videotape and audiotape or take notes in relation to the study. **Who will know that your child is in the study?** I'm going to keep whatever I hear from the students confidential by not using students' names. I will remove your child's name from notes that I take and will destroy any videotape and audiotape I take after I finish. However, I will write a report based on the interesting things I will learn in this study using fake names.

Does your child have to be in the study? No, your child does not have to be in the study. No one will get angry or upset with your child if your child does not want to do this. Just tell me if

you don't want your child to participate in the study. If you decide that your child will not participate in the study, it will not affect your child's grades. Remember, you can change your mind later if you decide you do not want your child to be in the study anymore.

Questions? You can ask questions at any time. You can ask now. You can ask later. You can talk to me or you can talk to your child about this study at any time.

I need to know that you are willing for your child to participate. Please review the official permission slip form that is attached and sign if you are willing to let your child participate.

Sincerely,

Ms. Prendergast