

A PEDAGOGICAL FUSION RECIPE: AN EXPLORATION OF TEACHERS' AND CHEFS'  
CREATIVITY IN PRACTICE THROUGH THE USE OF RESOURCES

By

Samuel Evalt

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## ABSTRACT

### A PEDAGOGICAL FUSION RECIPE: AN EXPLORATION OF TEACHERS' AND CHEFS' CREATIVITY IN PRACTICE THROUGH THE USE OF RESOURCES

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In this dissertation, I explored creativity in practice. I ask: 1) How do the participants define creativity?; 2) In what way does creativity reflect the positioning between actor and resource?; 3) What creative practices emerge when individuals choose to use, or not use, resources?; 4) How do resources mediate creativity?

To understand creativity in practice, I used a case study featuring eight participants across two fields, four teachers and four chefs. The two fields provided a way to understand and build a comparative case study about creativity in practice through the use of resources. I interviewed and collected digital artifacts from the participant teachers and chefs. The interviews were transcribed. Then I used qualitative coding to analyze the interview and artifact data. The findings revealed nuanced elements of creativity in practice and resources, which reflected layered voices. The findings highlighted of *recreative* and creative practices. And more importantly, resources mediated creativity in practice to illustrate the nexus of creativity in practice.

I framed creativity as a sociocultural practice and an epistemological construction rather than cognitive and ontologically based. I argue that creativity in practice is messy. Films and media portray a mythology of creativity as a cognitive and ontological construction of individual genius. The teachers and chefs shared narratives that reflected the reality of creativity as messy through the layers of learning and practices. Resources represent the mediator for learning and

practices. It is through resources that creators can strengthen their nexus of creativity in practice in critical or non-critical ways. Ultimately, the significance of the research helps deconstruct creativity in practice to make visible the challenges and messiness for all creators.

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## CHAPTER 1: “Be creative”. WHAT DOES THAT MEAN?

During a field observation of a teacher intern, I observed the students watching the teacher intern to note how they engaged with the lesson. In one moment, the teacher intern read from the project assignment rubric. The final category was creativity. She said, “be creative. Use color. Use pictures. Make it visually appealing.” It appeared that to *be creative* the students ought to use multimodal designs into their project assignment. My thoughts focused on the idea of creativity and I thought of my own practice as a teacher. Before sending the students off to their groups or individual work time, I often added that phrase, *be creative*, too. Did I mean for the students to add color? Did I intend for visuals to be present? Perhaps, in retrospect, I meant something akin to the use of glitter that simply adds a shallow sparkle without any depth. What did I mean when I told my students to be creative? I refocus and snap back to finish the observation. On my drive home, the question lingers.

The question fermented like a sourdough starter. In that time, I asked a few teachers who still practice in the classroom as high school English teachers. For them, the term creative occurs in tandem with PowerPoint presentations, posters, and aesthetics. The idea of aesthetics represents color, and design “to make something stand out”. So it would seem, teachers see creativity as a result of constructing a multimodal assignment, a new literacy (The New London Group, 1996). For context, one teacher asked students to be “original”, which means she asked students to “surprise me in a way that I didn’t expect.” The other responses showed the pervasive nature of connecting creativity to genres such as “creative writing” and the trait of originality. It would appear the result of viewing the multimodal literacies and non-prescriptive writing genres connected to teachers’ ideas about creativity that go beyond the norm. Still, the few English teachers I talked with appeared to view creativity as a cognitive element that allows the

production of an original product by students. What about themselves, as teachers? Do the teachers hold the same view of creativity upon themselves and their practices?

### **Prescriptive Practice Echo**

The cognitive notion of creativity as a means to produce a product echoed a sentiment within a textbook, *Writers Inc.* (Sebranek et al., 2001). I was assigned to teach the text while I taught in Chicago and carried it into Detroit. As a beginning teacher, the text provided an entry point into teaching writing and parts of writing such as sentences, paragraphs, the essay genres, and a few writing process points. I needed the resource help because teaching writing was not my strength early on in my teaching career. In many ways I echoed the practices that I remembered from being a student in high school and college and during the internship. Eventually, the echo silenced and I constructed my style and teaching voice.

Looking at the text now, it shaped a prescriptive and rote learning pedagogy for teaching and learning grammar. *Writers Inc.* featured no exercises, just exposition, pictures, and examples. The writing content taught a process approach to writing. For instance in the “Academic writing” section, the process essay explained prewriting, writing and revising, and editing and proofreading (Sebranek et al., 2001, p. 41-80). The other essay genres reflected the same process categories in explaining how to approach, what to do, think, and analyze. The model of writing prescribed actionable steps to take as a writer. “The best academic writing sounds like the writer knows what he or she is talking about” (2001, p. 199). Meanwhile creative writing reinforced the originality claim, “the process of inventing, the process of making something new and different, something made-up” (2001, p. 167). Furthermore, the text represented creativity as cognitive through an included section for creative thinking with a how-to guideline. As a result, creativity became a byproduct of a six step process of thinking, which

included many of the same steps as their guidelines for writing. Interestingly, the text refrains from directly defining creativity.

The anecdotal moments may seem trivial, yet it moves the conversation to focus on teacher creativity. My initial and limited scope of creativity constructed from a cognitive view that texts and classroom teachers share. Moreover, the views and use of texts may impact teacher practices. Ultimately creativity enables teachers to construct practices that move beyond the prescriptive and limiting forms imposed by heavy handed standards and views of learning. Some standards and institutional practices deprofessionalize teaching as rote recreative practices. To shape a view of creativity in teaching as beyond limitations such as aesthetics, or individualized cognitive functions of ordered doings, then it becomes necessary to construct and reshape creativity as sociocultural and epistemological.

A sociocultural and epistemological view of creativity becomes needed because the majority of research about creativity constructs a cognitive perspective (Beghetto & Kaufman, 2011; Diakidoy & Kanari, 1999; Feldman & Benjamin, 2006; Fryer & Collings, 1991; Kaufman, 2016; Kind & Kind, 2007; McGuinn & Stevens, 2004; Pringle, 2013; Ryhammar & Brolin, 1999; Sawyer, 2011; Sternberg, 1986). The cognitive studies about creativity formed ontological representations through problem solving, building originality, or representing gifted intellect. The history showed researchers trying to understand creativity through quantified measurables by testing children (Guilford, 1950; Ryhammar & Brolin, 1999; Sawyer, 2011).

The results of the tests produced a limited scope of creative traits (Ryhammar & Brolin, 1999; Sawyer, 2011). While the cognitive studies highlighted select creative traits of individuals, the challenge remains addressing the constructed knowledge of creativity rather than the individual becoming creative. The epistemological view of creativity aides in making visible the

sociocultural elements. The elements include connecting how culture impacts creative practices and seeing what is valued. Sociocultural approaches highlight the layers of languages, practices, and knowledges shaped by time and experiences (Bakhtin et al., 1981; Gutiérrez & Rogoff, 2003; Lave & Wenger, 1991; B. Rogoff, 1995). Furthermore, in drawing from a sociocultural view, the conceptual understanding of creativity may be developed and reveal more of the complex layers that shape teacher practices. The sociocultural and epistemological lens will frame my view and analysis of the conceptual and theoretical underpinnings of the study.

One of the challenges with the limitations of educational research on creativity has been to build out a broader view of how it occurs in practice by teachers. By practice, I define practice as a social action that occurs multiple times throughout time and embodies a person's experiences, history, and knowledges (R. Scollon, 2001). For instance, Scollon observed the practice of handing. Within teaching, it may be represented in lesson planning, constructing assessments, and providing feedback. Practices may also involve how a teacher speaks to the class to set up an activity or lecture notes. Practice connects to discourse through what a person consumes and produces (Certeau et al., 1998; de Certeau & Rendall, 1984; Gee, 1996). The consumed resource produces discourses and practices may reflect a structural power. Thinking back to my own practice of using resources such as *Writer's Inc.* to inform my teaching and planning, not only did the text provide primary information about writing and grammar, and it provided a prescriptive view of writing as a product. That rote view of learning and writing also reinforces particular discourses about writing such as the stunted five paragraph models or generalizing writing as stages that all writers must do from prewriting to the final product. In turn the power relation between the individual and the resource can be dissected through critical theory to reveal the impact on creativity and practices (Fairclough, 1992, 2012).



Unfortunately for me, and perhaps other teachers, *Writer's Inc.* and similar teacher classroom resource texts held influence as a primary resource on practice. As a resource of information, I drew from that text to provide structural knowledge of writing and the teaching of writing. Tracing that resource it mirrored the departmental view of writing and teaching. More so, that view of teaching and writing reflected the district's push for higher test scores. To put it another way, the resource embodied a view of prescriptive teaching. The resource contained a power of influence over me as a young teacher in learning practices and pushing a value of teaching. From a literacy perspective, teachers use models, mentor texts, and sentence stems as a resource for the students (Bunn, 2013; Charney & Carlson, 1995; Ryan, 1986; Smagorinsky, 1992). The use of models limits the scope of resources. Resources move beyond textual examples to include texts like books and webpages, people, multimodal texts, professional development, among other types (Bannister, 2015; Lave & Wenger, 1991; Macbeth, 2010; Manz & Suárez, 2018; Stroupe, 2016; Young et al., 2017). All of this is to say that the *Writer's Inc.* text seemed to limit my creativity as a teacher. While not solely responsible, and I share the blame, the resource provided a cycloptic view of teaching and practices.

Having said that resources may be limiting, resources may also present positive influences toward learning and practices. One example of this occurs in cooking with the cookbook. The text provides a record of a particular cultural food and culinary technique trends, history, social values, and health issues (Mitchell, 2001). The culinary field's use of the recipe and staging, unpaid work experience in a kitchen, illustrates learning and practices with resources. The cookbook represents the sociocultural contexts of food. Moreover, food resources link food and culture to a critical view. "Cultural identity was also evident in Scottish cookbooks. Recipes such as oatcakes were markers of this identity and traditional recipe books

reaffirmed the Scots as a nation separate from the English were published from time to time” (Mitchell, 2001, p. 22). The culinary field provides a comparative partner to study creativity and practices. The culinary field’s research, like education, on creativity highlights cognitive and sociocultural elements of creativity.

Moreover, the two fields connect through the characterization of professions and social practices. The construction of knowledge and theory in practice shape professions (Hatano & Wertsch, 2001; Nilsson & van Driel, 2010; L. Shulman, 1987; L. S. Shulman, 1986, 1998). In particular, social practices shape knowledges and practices in both fields (Horng & Hu, 2008; Horng & Lee, 2006; Leone, 2018; Barbara Rogoff, 1994; Windschitl et al., 2011). On the other hand, some scholars view professional domains remain separate in practices (Abbott, 2014) and knowledges (Lee, 1995), yet education and culinary fields have shown similar values to creativity knowledges and practices (Horng & Hu, 2008; Horng & Lee, 2006; Kind & Kind, 2007).

Ultimately the two fields provided a way to understand and build a comparative case study about creativity in practice through the use of resources. The education and culinary field framed the comparative study to view creativity. Bringing the two fields into conversation helps make the strange, creativity in practice, familiar with the culinary field as a bridge. Often in educational research, the go to comparative has been the medical field to explore novice teacher practices, the relationship of the teacher candidate learning and mentor teacher, and novice teacher learning (Gawande, 2002; Grossman et al., 2009; Jordan, 1989). I believe the my comparison illuminates the way creativity in practice engages resources. The comparison moves beyond the implicit and sometimes explicit elevation of education as a field to meet the aspiration of the medical field. By removing the valuing argument of an alternative field, the

comparison allows a space and dialogue to form that centers the concept and its elements rather than the fields. I acknowledge it presented an apples to orange comparison. Each field contains distinct practices and theories. However, the fields intersect through operating within social and cultural spaces. Teachers and chefs engage in practices and learning that build from forms of resources.

The use of resources as learning tools and elements of practice allow me to speak of the sociocultural gap in research studies about creativity and in particular within the teacher education. Moreover, the research bridged the two fields by building a uniform creativity in practice. While I highlighted both cognitive and sociocultural studies, I drew from Leone's (2018) theoretical framework of creativity. Her theory shaped a sociocultural view of creativity that recognized various patterns of practices, which also linked with educational theories of disciplined improvisation (Sawyer, 2000, 2004, 2011), and communities of practice (Gutiérrez & Rogoff, 2003; Lave & Wenger, 1991; Barbara Rogoff, 1994).

The education field, and in particular teachers, teacher educators, administrators such as curriculum directors and instructional coaches, gains an enhanced view of creativity in practice. The culinary field provides a bridge as to view practices in a way that those within education fields may overlook – a way to make the familiar strange. Mansilla said, metaphors allow an “epistemological correspondence, in which the knowledge of the source domain, normally more basic and familiar, makes possible and facilitates the reasoning, the expression, or the understanding in the target domain more abstract and complex” (2003, p. 38). The use of the culinary field will serve as a way to view and connect elements of their practices to creativity in practice. The comparison may affirm educators' view of creativity and add nuance to existing research of creativity in practice. The affirmation will add another voice that strengthens the

existing research in education. The nuances complicates how education research and practices view creativity in practice by mapping new voices, connections, and ideas.

The purpose of the research examined creativity in practice. In particular, I built a conceptual understanding of creativity in practices through the use of resources. While the field of education has studied creativity, the primary focus has been to build an ontological representation of individuals. My study expanded the scope of sociocultural studies that view the epistemology of creativity. The culinary field helped make creativity in practice visible and shaped the taxonomy of practices (Leone, 2018). Although the culinary field has cognitive studies, it also has sociocultural studies that integrated creativity in practice. The comparative frame connects creativity and practices to resources through social, cultural ways. I addressed the following questions in my study:

- How do the participants define creativity?
- In what way does creativity reflect the positioning between actor and resource?
- What creative practices emerge when individuals choose to use, or not use, resources?
- How do resources mediate creativity?

In addressing the questions, I constructed a uniform understanding of creativity in practice. In particular, the study made visible the nexus of creativity in practice. Although I recognize that the case study may not be generalizable, the shared narratives from the teachers and chefs constructed a more concrete understanding of creativity in practice as mediated by resources. In bounding the study to resources, the findings may speak to the social, cultural, and even critical impact on creativity. The use of resources will speak to the way learning and practices form layers for creativity in practice.

In the next chapter, I will frame the conceptual understanding and define creativity as it will be used within my study. The culinary and education fields' research on creativity reflect a historically cognitive focus and a recent trend of sociocultural studies. My study looks to add to the existing research by building upon the few sociocultural studies. The section will also build out the connections between the two fields and the way creativity works in practice. Then, I explore resources as a mediator for creativity. The section will review resources and how they are used by learners. I show how resources shape social learning practices through communities of practice that ultimately leads to a nexus of creativity in practice. The nexus of creativity in practice allows me to build from Scollon's (2001) mediated discourse theory, MDT. The theory framed how I view resources as a mediator of social creative practices and discourses. The final section articulates the justification of the culinary and education fields. The reasoning addresses the professional characteristics of both fields and how expertise links to the social resource of communities of practice.

In Chapter 3, I provide the rationale for the method of inquiry and the qualitative tools that I used for coding and analysis. I provide more insight into the teachers and chefs who shared their stories and ideas about creativity in practice. Their stories formed the foundation of the research.

Then, Chapters 4-7, I share my findings for each of the research questions. Chapter 4 explores the elements of creativity from both fields. It sets up the foundation for a uniform view of creativity and explains the conceptual discourse of what is creativity. The elements of creativity allow me to frame and lead into the role of resources.

Chapter 5 builds the conceptual layers of resources and its impact on creators and practices. Although I define resources in Chapter 4, I show how they shape the sociocultural

frame of creativity. In particular, I illustrate the positions that form between resources and creators. The relationships provide an opportunity to view how creators use resources in creative and critical ways.

Chapter 6, I examine the four categories of creativity in practice: imagination, improvisation, experimentation, and trial and error. The nuances of creativity reveals how *recreativity* occurs. It links to the intertexted resources by creators. At the same time, *recreativity* enables (*re*)creators to transition into creativity. Throughout (*re*)creativity, the creators embody their resources in practice.

The final findings chapter, 7, shapes a complete view of how resources and creativity in practice intertwine through mediation. It builds from Scollon's (2001) mediate discourse theory as a nexus of practice to illustrate the dialogic nature of resources and creativity. The layered resources make visible the complexity of creativity.

Finally, I close the dissertation, Chapter 8, by examining the nexus of creativity in practice. The purpose of the chapter allows me to deconstruct creativity in practice as messy. The messiness highlights the recursive nature of learning and creativity in practice. Then I connect the study to teacher educators, teacher interns, and even preservice teachers. I reflect on the potential impact on teacher educators as they demystify creativity in practice for preservice teachers and teacher interns.

## CHAPTER 2: CONCEPTUALIZING CREATIVITY

### **How the Fields View Creativity**

#### **The Culinary Field**

Creativity has many meanings. Within the culinary field, creativity builds from social practices and spaces (Bouty & Gomez, 2013; Gefen & Caracostea, 2015; Leone, 2018). Other culinary scholars place creativity as cognitive centered, focusing on the person and the individual's ability to decipher and practice (Gill & Burrow, 2017; Kaufman, 2016). Creativity produces new and useful ideas, and moves beyond outside-the-box thinking or problem solving (Bouty & Gomez, 2013). For some creativity and innovation offer distinguishing processes or become synonymous (Bouty & Gomez, 2013; Diakidoy & Kanari, 1999; Lane & Lup, 2015; Pilar Opazo, 2012).

Some scholars recognize creativity and innovation as two distinct yet related processes. Lane and Lup (2015) took care to differentiate the two concepts on an organizational level and recognized their similarity. "Focusing on either creativity or innovation is not highly problematic, as long as idea creation is seen as a precondition and positive predictor of organizational innovation" (p. 657). They recognized that creativity of an idea forms prior to the social production of the idea. In other words, creativity and innovation represented a continuum of an idea process toward a social construction of the product. Their differentiation revealed the tension between the cognitive "thinking of new ideas" (p. 654), creativity, and the social implementation of those ideas, innovation, for individual chefs and the organization team within haute cuisine restaurants. That is, a tension rose between the chef's creativity and the business operations demands of haute-cuisine standards and economics.

Similar to Lane and Lup (2015), Opazo (2012) separated innovation from creativity. Innovation moved beyond the creativity phase to produce a product. Opazo defined innovation as

“a process that is produced in practice by participants in a given field... [and] defined as contextually situated, that is, as novel ideas...” (p. 83). Although Opazo differentiated the two processes, creativity in relation to innovation appeared to be implicitly linked. The implicit differentiation contrasted to Bouty and Gomez (2013) clear distinction between creativity and innovation. They framed creativity as a “specific phenomenon, different from innovation...” (2013, p. 82). In addition, Bouty and Gomez argued that creativity remains “nothing but the sterile generation of idea(s)...” (2013, p. 91) without the creative team to implement the idea into materiality. For them, innovation moved to be the primary driver rather than creativity. Innovation built from the creative idea generation into implementation at the organizational level. Within the culinary field, the head chef’s creative idea forwards to the culinary team to be made into a material dish. The research distinguished the two practices of creativity and innovation. Although for some scholars, the two practices link as the idea transforms into production.

The distinction between creativity and innovation matter to show how the ways the culinary fields separate the two practices. Even though both form parts of the whole to creativity, I raise the distinction to highlight the ongoing dialogue between researchers to build a conceptual view of creativity. Ultimately, the significance of the views tied creativity to innovation as the practice of idea generation before its implementation.

Leone (2018) similarly differentiated creativity and innovation. Leone dissected the role of creativity in Italian haute cuisine by interviewing chefs and noting their practices. For her, creativity generated and shaped ideas, while innovation, enacted ideas into a product; yet, she conflated the two within her theoretical frame of creativity. The conflation of practices illustrated the difficulty of separating them. She acknowledged the challenges to understand the two terms



within the field. While she viewed creativity through a business organization focus, she unpacked creativity to show how the elements unfold in practices. Leone's theoretical framework showed the variability of creative practices chefs used.

Leone's (2018) theory highlighted five patterns: *improvisation*, *trial-and-error (analytic procedures and in general)*, *experimentation*, and *imagination*. Leone noted that each contained diverse *triggers*, sources or inspirations, that resulted in different planning. The planning influenced how the creative phases unfolded and what extent trialing occurred. Each of the patterns highlighted ways chefs practiced creativity. *Improvisation* illustrated little to no planning where ideas build from various paths and resources. Although paths and resources are not defined, Leone said it builds from a bricolage of routines, knowledges, and sensory stimuli. *Experimentation* happened throughout the process but leaned more on advanced planning with defined structures of time and space. The experimentation involved multiple parallel trials outside of work time. *Trial-and-Error (through analytic procedures)* represented a highly planned and structured process. The chef focused on a specific technique, an ingredient, or an idea and continually learning by repetition or replicability over time. The chef conducted trial-and-error through sequenced trials to provide structure to the process. *Trial-and-Error (in general)*, in opposition to analytical, contained little to no planning or structure, process evolves throughout the production of the product. The triggers changed throughout the process. While seemingly spontaneous, the chefs' knowledges and experiences guided their practices. *Imagination* also resulted from a spontaneous idea and evolved to structured and reasoned practices based upon memories and knowledges before the chef creates. The chef predetermined the design and practices prior to actually enacting it. Although appearing purely cognitive, it represents social practice by drawing from collective experiences and knowledges. Although,

Leone said, most of “the trials are carried out entirely through a cognitive process” (2018, p. 15) before moving to live practice, and sometimes in a team environment.

Leone’s theoretical view of creativity acknowledged it as social practice and multifaceted. Even though she connected Imagination to a cognitive function, my stance on learning situates the chefs’ epistemology through social means. She acknowledged the possible social resources that influence the imagination. “The different phases of the creative process, starting from ideation, through the composition of multiple elements, and the final result are mixed up with memories and knowledge” (2018, p. 15). The significance refocuses creativity from the cognitive and individual focused to understanding the sociocultural impacts and influences. In addition, Leone’s findings made visible chefs’ underlying structures and practices of creativity. For the study, I used Leone’s (2018) taxonomy as the theoretical frame of creativity.

Even though creation and innovation illustrate two distinct but related practices. A connection links them as a continuum of the idea to the final product. A simplified distinction resembles the practice of meal preparation and finding the ingredients, the creation of an idea, and then the construction of those ingredients into a meal, innovation. Yet, that analogy misses the complexity and nuances of each process involving the creative practices that unfold throughout the created meal. While I recognize creation and innovation as separate practices that build from one another, I also view them as complementary toward the whole of creating a product. Therefore, my aim is to construct a conceptual understanding of the practices under the umbrella term of creativity.

For the purpose of the study, the culinary field will act as a comparative field to make visible creativity and creative practices in teaching. The culinary field provides an entry point to

study creativity. In comparison, the education and literacy field's literature about creativity indicates an opening to explore the concept. In fact, few literacy scholars explored creativity in practice. Instead most studied creativity as a concept or examined *creative writing* through learning or teaching. Even secondary classroom texts shape creativity as a genre of writing with a prescriptive how-to check list (Sebranek et al., 2001). In emphasizing creativity as a cognitive function, scholars centered the individual through traits and decision processes. Most of the culinary studies focused on framing creativity as cognitive (Bouty & Gomez, 2013; Gill & Burrow, 2017; Lane & Lup, 2015; Pilar Opazo, 2012). The cognitive culinary studies do well in highlighting the individual creative processes; however, they potentially overlook the social elements of creativity and creative practices. Leone's (2018) theoretical frame on the other hand, built from the individual to view creativity in practice.

### **The Education Field**

Even in education studies, a common trend of creativity studies focused on cognitive ideas of motivation, achievement, and thinking as problem solving toward a new or novel outcome (Diakidoy & Kanari, 1999; Fryer & Collings, 1991; Kaufman, 2016; McGuinn & Stevens, 2004; Sternberg, 1986). The history of research about creativity focused on cognitive practices and learning (Feldman & Benjamin, 2006; Kind & Kind, 2007; Pringle, 2013; Ryhammar & Brolin, 1999; Sawyer, 2000, 2012). Creative teaching and learning showed education as focused on cognitive elements such as divergent thinking, which is generating a number of possible solutions to open-ended problems (Sawyer, 2011). Research connected the cognitive to the social in reframing divergent thinking to *possibility thinking*. The reframed view of thinking shaped a connection to habits of mind such as questions, play, immersion,

innovation, risk, imagination, and self-determination. It formed a link to 21st Century thinking skills.

While cognitive practices and learning studies seemed to dominate creativity research (Feldman & Benjamin, 2006; Kind & Kind, 2007; Pringle, 2013; Ryhammar & Brodin, 1999; Sawyer, 2012), even the culinary field's view of creativity featured cognitive studies, there has been some push to understand creativity socially. Some scholars viewed creativity as sociocultural in practices and learning (Certeau et al., 1998; Sawyer, 2004, 2011, 2012). However, the social understanding of creativity contrasts to the education view of creativity. Researchers built a cognitive dominant focus on the individual, teacher and student. Creativity became a means to an end of practice or a byproduct from teaching or practice within a domain. Three studies, Diakidoy and Kanari (1999), Sternberg (1986), and Fryer and Collings (1991), attempted to quantify creativity through survey data of teachers and student-teachers. Diakidoy and Kanari (1999) surveyed 49 pre-service teachers in their final year with a two part questionnaire featuring short answer response, yes/no, agree/disagree, conditionals, and Likert style questions. Sternberg (Sternberg, 1986) sent his survey to three different groups: professors of art, business, philosophy, and physics; and laypeople who answered an advertisement in the local paper seeking participants. Sternberg said he averaged 25 respondents per group to his Likert surveys. Fryer and Collings (1991) Likert survey had a sample,  $n = 1028$ , teachers from 57 schools and across the United Kingdom. The survey data from each study provided a general overview and quantified results validating constructs. Certainly, the use of data to provide numeric value helped indicate a range of teacher values and beliefs of creativity. However, the focus on creativity as a cognitive trait pigeonholes the view to motives and traits of the individual. By centering on the individual, it pivots the focus away from the practices to the

ontology of the creator or their final product. The cognitive focus on the individual reflects the history of creativity research.

Childhood creativity learning in the United States traced to Freidrich Froebel and Dewey (Feldman and Benjamin, 2006). Froebel viewed education as a means to nurture creativity through imitation and direct instruction. Froebel's sociocultural frame of creativity education differed from the modern focus of individual traits such as originality and self-expression. Dewey moved the focus from recitation to direct experience and play. In the 1950's, Guilford (Guilford, 1950) influenced the American Psychology Association into creativity studies. The focus applied to genius studies and measurements in order to highlight the way certain elements of creativity could not be explained through generic tests and instead focused on specific cognitive tests of creativity toward divergent thinking. Then a shift centered Piaget's cognitive development stage-based theory to creativity research. The impact emphasized how youth generate original ideas or produce new actions. Vygotsky's cultural-historical theory shifted the focus from the students to the adult's role in building creativity in children. The role of the teacher as planner and scaffolder of children's creativity shaped the dialogue in the 90's.

The thematic trends showed the developments of educational creativity research in four key areas: 1) person who creates; 2) creative process; 3) influential factors in environment; 4) final product (Ryhammar & Brolin, 1999). Ultimately, the focal domains, cognitive and behaviorism, influenced the way researchers defined and viewed creativity. For instance, cognitive studies looked at the individual's process, production, and motives, while behaviorists viewed creativity as changes through behaviors. The challenge of researchers viewing creativity as a phenomenon reflects the focus of each field. Regardless of the field, the criticism has been on the reliance upon a narrow set of individual types, reflecting the top percentages of IQ or

Torrence Test results. The results formed lists of testing intelligence qualities rather than creative qualities or creativity in the everyday (Ryhammar & Brolin, 1999; Sawyer, 2011). The focus on intelligence and test results appeared to contradict Guilford who said all levels of abilities showed similarities amongst creative processes. “Creative acts can therefore be expected, no matter how feeble or how infrequent, of all individuals” (Guilford, 1950, p. 455). Although Guilford said that all may be creative, his research focused on select levels of intellect and testing. The polarity of research history showed the dichotomous focus on creativity through behavior and intellect.

Diakidoy and Kanari (1999) illustrated creativity through the view of a student teacher. They found several influences of the views on creativity. Three categories shaped influences: domain, personality, and environment. Domain connected to the student teacher’s field of study. That is to say to what extent the subject area shaped creativity conceptually and as a skill. Personality layered elements of how individual or social the thinking/reasoning to distinguish cognitive learning. And the environment revealed a social layer of what was emphasized in class and supported by other student teachers. The student teacher views revealed a focus on the individual’s ability to generate “novel outcomes” (1999, p. 235). Interestingly, Diakidoy and Kanari’s conceptual view of creativity built a cognitive focus on the individual rather than social practice. To be fair, they hinted at social practices through the environmental impact. They found, “almost all student teachers perceive the environment to play a critical role in the manifestation of creativity” (p. 235). However, the study highlighted the cognitive impact, rather than the sociocultural, within the individual and toward their thinking and motivation.

Diakidoy and Kanari’s (1999) study reflected earlier cognitive studies such as Sternberg’s (1986) study of intersecting elements that shape creativity. His study examined how

intelligence, wisdom, and creativity intersect. He surveyed professors from various fields about associative behaviors for each concept and how interrelated those traits are to each. The results showed that people felt intelligence strongly linked to creativity, but creativity to wisdom was not a strong link. Respondents also noted that too much intelligence or wisdom may blunt creativity. Sternberg's survey revealed six elements of creativity: "lack of conventionality, integration and intellectuality, aesthetic taste and imagination, decisional skill and flexibility, perspicacity, drive for accomplishment and recognition" (1986, p. 181). The six elements highlighted how researchers defined and framed creativity as they evaluated individuals.

In another survey of teachers, Fryer and Collings (1991) surveyed educators throughout the U.K. about teacher creativity. The common traits of creativity identified "imagination, originality, and self-expression" (1991, p. 212). Within the study, unfortunately, those traits remained undefined. Interestingly, the results showed that few teachers thought themselves to be creative. Although it was outside the scope of the research to understand why teachers thought so, Fryer and Collings indicated a possible disconnect with creativity development in school and teacher training. They also implied a possible link to teacher practices, domain, and gender. For example, the findings showed females and arts-based curricula as valuing creativity more than males, math, and science-based curricula. While I am not directly viewing the impact of gender on creativity, I remain open as it may emerge as a thematic point to consider with the participants.

Kaufman (2016), more recently, provided another cognitive perspective of creativity. He defined creativity as an activity that produces something new and "task appropriate"; but not necessarily novel (p. 25). In further detail, the novel idea moved beyond presenting something new for the sake of newness. The act of presenting new ideas because they are new represented

chaos rather than creativity. Instead, the novel idea must forward task appropriate moves beyond what has been done, rather than repeat. And yet forwarding task appropriate moves stems from what has been done through the layering of prior knowledge and experiences. Moreover, creativity engaged multiple sets of skills and practices which “tend to be domain-specific as opposed to domain-general” (p. 26). Kaufman elaborated more about creativity containing different levels, The 4-C model: mini-c within learning; little-c of everyday creativity; Pro-c of professional/expert level; and Big-C of legendary creative genius. The Big-C level of creativity remains elusive for most people. Most people stay within the mini-C and little-c through small actions. Each level highlighted the multiple ways people engage or exhibit creativity. People become creative because they “want to” through engagement in activity. Kaufman reiterated that creativity is not through a magical muse, but through “hard work, revision, failure, extensive knowledge and persistence” (p. 27). So Kaufman alluded to the way creativity built from people’s heteroglossic knowledges and experiences. His acknowledgment of multiple ways people enact creativity connected to Leone’s (2018) model of creativity. Both theoretical models reflect ideas of creativity illustrating different practices and levels. Yet Kaufman’s focus on creativity as levels seemed to place more significance toward the Pro-C and Big-C traits.

A pivot from the cognitive to sociocultural view of creativity occurred in McGuinn and Stevens (2004). They began by viewing the British National Advisory Committee on Creative and Cultural Education’s cognitive version of creativity, “imagination, pursuing purposes, being original and judging value” (p. 31). They argued holding the cognitive notion of creativity promotes a teacher focused classroom and product oriented view of learning by the students. McGuinn and Stevens noted the notion of originality as paradoxical that nothing and everything



can be original. They argued that creativity should be viewed through a cultural lens to promote social meaning making.

Using a cultural lens shapes understanding to the multiple views of creativity in multiple spaces in a student-centered way. The cultural lens enables teachers to celebrate the notion of *relative originality* as the student product relates to their peer group in that particular setting. The practice illustrated *meaningful creativity*. That is, how creativity works in the classroom through imaginative and critical teaching practices. Imagination and criticality combine to shape creative practices for the teacher connecting the material to the students' broader cultural understandings. The teacher serves as a guide for building student creativity to promote critical thinking and empathy. Although McGuinn and Stevens framed the students' learning as sociocultural, the teacher remained framed within an isolated and cognitive context. They said, "the mindful teacher is also a mindful learner that is open to their perspectives, and receptive to information from the learner" (2004, p. 39). The sociocultural connection builds from a teacher's creative practice of collaboratively learning and planning with the students. The classroom may focus on creativity through active discovery and exploration through a cultural lens to promote individual and social growth. McGuinn and Stevens viewed creativity for the students through a sociocultural lens to promote understanding and for teachers to critically evaluate their own planning practices.

Kind and Kind (2007) unpacked elements of creativity and creative science teaching. Although creativity in science frames the study, Kind and Kind illustrated several connective points to teaching and learning. They built a frame for creativity in teaching science. Their study highlighted the challenges of creativity in education. In particular, it separated teaching *for* creativity and creative teaching (2007, p. 4). The former stressed creativity as an outcome, while

the later showed creativity as a characteristic of teaching. In addition to the binary views of practices, they found that value characteristics shaped as a result of seeing creative practices versus non-creative, or traditional practices. Creative practices focused on student-centered learning through engagement of interesting content and building excitement. Meanwhile, they found traditional practices focused on a teacher-centered practice, individualized work, lectures, among other similar practices. A challenge with the *creative* label remained the lack of theoretical perspectives to warrant and justify the claims of practice and why it matters. “This is not to say these efforts are not valuable or lacking in positive outcomes as examples of ‘good’ teaching and/or cross-curricular links” (2007, p. 26). The binary of good and bad practices highlighted a possible tension for teachers as they build practices. Kind and Kind suggested creativity as a “positive aim that may guide” teacher organizing and managing learning (2007, p. 5). Creativity for them built new knowledge within the learners. While they acknowledged the challenges of having students imitate scientific thinking and doing, Kind and Kind showed research that focused too much on the micro level of creative practices and missed the social elements of creativity and learning.

On one hand as some scholars showed, creativity remains an exercise of originality and constructing the novel product. On the other hand, Sawyer’s (2000, 2004, 2011) *improvised creativity* and *disciplined improvisation* counter the claim of originality and novelty. Creativity forms from existing knowledges leading to an improved or different product. Sawyer (2004) equated teaching to improv theater. In the analogy, the teacher and learners classroom interaction and functions formed from a disciplined structure and knowledges of action and reaction. For the teacher, while it may seem like improvisation, the creativity took shape from aspects of practices as they built from layers of knowledges

and practices to collaboratively build a lesson. The teacher built a disciplined improvisation “... because it always occurs within broad structures and frameworks” (2004, p. 13). Among those structures and frameworks are existing norms, routines, and practices that experienced teachers have in their repertoire. Sawyer framed creativity through the practice of teaching and having the foundational knowledges to make collaborative choices. Sawyer’s framing of creativity links to Leone’s (2018) highlighting how chefs drew from their existing knowledges to shape creative practices.

Both Sawyer (2000, 2004, 2011) and Leone (2018) reframed the idea of an individual’s spontaneity to be more based upon disciplined practices. In other words, individuals’ creativity shapes from a foundation of knowledges and structures. That set of knowledges and structures represent social practices and learning. Sawyer (2000) explained *improvisational creativity* by examining jazz musicians and improv theater actors. Both sets of artists collaboratively crafted the frame of music or the scene from prior structures and knowledges. In both instances, the artists’ shared sense of knowledge shaped their creative abilities. Whether the actors resemble a jazz ensemble or improv troupe, a collaborative connection happens between individuals’ skills and knowledges that moves to create. Sawyer’s social construct of creativity seemed to remove the spontaneity of creativity. The disciplined structures exist through knowledges and experiences that allow creativity to take shape.

### **Culture and Creativity**

Although researchers have staked cognitive or social claims of ontological or epistemological creativity, it is not clear of the cultural impact on creativity. For the most part, culture remained an implicit force in research. For instance in Kaufman’s (2016) and

Fryer and Collins (1991) studies, they mention the element of domain. To each, domain meant to highlight the contextual subject area and perhaps even the space in which creativity occurs. McGuinn and Stevens (2004) explain creativity as a student-centered practice that may enable cultural focuses. Through the social space of a classroom, the students embody their cultural experiences through their literacies and language practices (Heath, 1983; Pahl & Rowsell, 2010). If culture impacts practices, then Sawyer (1992, 2004, 2011) only implicitly mentioned it through the social practices of jazz musicians and improv theater actors. It stands to reason as members of communities of practice, they shaped their creativity by drawing from their knowledges and experiences. A part of those knowledges and experiences likely formed from cultural elements such as their home and community (Bannister, 2015; Gutiérrez & Rogoff, 2003; Lave & Wenger, 1991; Barbara Rogoff, 1994).

Interestingly the culinary research implicitly talked of culture's role in creativity. Leone (2018) spoke about the social implications of building a recipe and drawing inspiration from others. Perhaps, culture is so explicit within the culinary field, that it need not be mentioned. I argue that the essence of food represents culture. Giard said, "Humans do not nourish themselves from natural nutrients, nor from pure dietary principles, but from *cultured* food-stuffs, chosen and prepared according to laws of compatibility and rules of propriety unique to each cultural area" (Certeau et al., 1998). That is to say, cultures dictate flavors and combinations of spices, and perhaps even techniques due to natural resources and available resources. Food speaks to culture and histories. In an episode of *Ugly Delicious*, Chef Reem Assil said, "'I could learn about the lifeline of my people through bread.' Like, that's kind of amazing. Like, that can tell an oral history and

that's something that's so universal to so many cultures" (Jason Zeldes, 2020). While food speaks to the culture in seemingly explicit ways, cultural elements of creativity in education and literacy related studies remain implicit. The research of creativity should make visible the sociocultural impacts and in particular the cultural elements of creativity.

My initial definition of creativity recognizes creativity as social and draws from both culinary and education research studies. Creativity as an action produces a new thing that reflects a multivocal layer of influences and knowledges (Kaufman, 2016; Leone, 2018; Sawyer, 2004). That *thing* may be abstract or concrete and may be directed toward a problem, big or small, physical or mental, real or imagined. The sociocultural view on practices and learning shows a potential entry point into the conversation. In drawing upon a sociocultural view and the multivocal layer, I recognize Bakhtin's (Bakhtin et al., 1981) heteroglossia as shaping a dialogue between languages and practices of individuals, communities, and cultures. So creativity, in illustrating the multivocal layers, reflects the intersection of an individual's languages and practices with their communities and cultures.

As individuals speak of their creative ideas and actions, or engage their practices in action, the individual embodies the heteroglossic layers. The layers represent a complex epistemology of social experiences, practices, and knowledges linking Leone's (2018) theoretical taxonomy of the social to the cultural. Leone's theory (2018) explained the social elements of creativity and avoided the hierarchal differentiation between levels of Kaufman's (2016) creativity theory. Even though Leone's theory included the social elements of creativity, it only implied the cultural. To make the social link of creativity to the cultural more clear Gutierrez and Rogoff's (2003) examined cultural ways of learning.

Cultural approaches offer an alternative to understand and characterize groups without establishing hierarchies of cultural practices. I view learning as layered and as a process of ongoing activity connecting individuals and contexts. One of the issues Gutierrez and Rogoff (2003) found showed treating cultural differences as traits generalized the teaching and learning practices of communities. More specifically, Gutierrez and Rogoff said teaching individuals within group traits can overgeneralize and establish a homogenous approach. “Individuals participate in varying and overlapping ways that change over their lifetimes and over historical change in a community’s organization and relationships with other communities” (2003, p. 21). In other words, individuals forward their histories and knowledges to their present event impacting actions and practices. The impact on actions and practices allows adaptations through learning within a community. The cultural element forwards the way creativity and practices may represent a multivocal layer of experiences, knowledges, and cultures. It provides a way to examine creativity and acknowledge cultures as a layer.

A sociocultural view will shape the conceptual understanding of creativity and practices. The use of a sociocultural lens on creativity and practices will make visible an epistemological view of creative practices. There are two focal areas of the study: creativity and resources. The focal areas will show how the culinary field and education field intersect in practices and learning through a sociocultural lens. More to the point, the sociocultural lens highlights creativity in practice in a way that links both fields through how teachers and chefs engage and use resources. Prior research viewed the construction of creativity as a result of an actor’s skills, learning, and gifts. The research from both fields, culinary and education, missed examining the social and cultural spaces of each

work environment. That is, teachers and chefs work in social spaces that are dependent upon interactions with others be it students, colleagues, staff, customers. I believe the sociocultural lens provides a link of social and cultural practices and learning to creativity and resources. The lens highlights the largely unexplored view of the participants' stories of creativity in practice and their use of resources. Moreover, the sociocultural lens connects to Scollon's mediated discourse theory, which recognizes practices as social.

In the next section, I will address how research defined resources and examined their use for teaching and learning. Resources will help form an understanding of the sociocultural and epistemological layer of creativity.

### **Resources and Learning**

While creativity forms the conceptual framework, resources shape the focal point of viewing creativity in practice. Within the scope of the study, I view resources through a sociocultural lens. The sociocultural lens frames how individuals learn and engage practices. Within learning and practices, language, values, and beliefs represent social layers of interactions between many cultures and communities such as home, school, work, the internet (Bakhtin et al., 1981; Handsfield, 2016; Quinlan & Curtin, 2017). Interaction examples include: talking, writing, texting, social media posts, listening, and even playing. Within communities and cultures, interaction occurs between family, friends, teachers, fellow students, and even strangers. In turn, those experiences and practices impact meaning making and understanding (Gutiérrez & Rogoff, 2003; Heath, 1983; Pahl & Rowsell, 2010; Purcell-Gates, 1997).

Research illustrated three categories of resources: conventional, social, and intellectual as impacting learning (Manz & Suárez, 2018; Stroupe, 2016). Conventional

resources include books, websites, facilities, time, and planning tools. Social resources include teacher interactions with colleagues, students, mentors, even other people through social media interactions. Intellectual resources adapt over time due to the teacher's understanding of theories, content knowledge, and even practices. The three categories of resources show the multiple ways people engage and use sources for learning and practices. The use of resources impacts teacher practices in complex ways. Stroupe (2016) found experience levels impact the way teachers use resources. Stroupe's findings showed experienced teachers recognized and used student ideas as resources for instruction toward collaborative lesson building. Novices, on the other hand, viewed students in deficient ways and believed they are to correct students rather than collaborate with them. The use or non-use of student knowledge and ideas as a resource influenced the teacher practice.

Meanwhile, Manz and Suarez (2018) found teachers using several resources as they built their practice. Resources included assumptions about student learning, existing practices, curriculum, and district policies. Teacher practices showed how they framed problems of practice, made their practice visible through reflection of *replays* and *rehearsals*, stance on students, teaching, and disciplinary knowledge formed in their talk. They focused on PD sessions as a resource for teachers. The sessions caused confusion for teachers about roles, tensions with school or district policies, or even own values. Teachers then had to negotiate ways to include or not those learned elements into their practice.

In both studies, resources reflected an epistemological social lens. Stroupe (2016) found teachers using social resources such as colleagues and classes to learn. Manz and Suarez (2018) saw talk amongst teachers during PD sessions. Within the talk they negotiated their tensions with curricula, national standards, and their own practices and pedagogies. Additionally, other forms



of sociocultural resources included mentors, district or institutional scripts, and professional development (Bunn, 2013; Macbeth, 2010; Nilsson & van Driel, 2010; Sawyer, 2004, 2011; Young et al., 2017). The use of mentors also served as a bridge to school cultures and communities of learning (Bannister, 2015; Gutiérrez & Rogoff, 2003; Herrington, 1992; Lave & Wenger, 1991; Barbara Rogoff, 1994).

For the purpose of the study I use a broad sense of the term resources that draws from Stroupe (2016) and Manz and Suarez (2018) to include, mentors, conversations in person and text-based, mentor texts, sentence stems, rubrics, websites, textbooks, prior lesson plans that includes activities/projects/assessments, professional development, among many others. The broad view allows me to incorporate Bazerman's (2004a) definition of intertextual sources. The use of intertextuality forwards the heteroglossic view of language, culture, and the position of the individual interacting with the resource. That is, intertextuality may highlight the extent to which resources impact individuals through the expressed intertexted ideas.

A common interaction between novice and experienced teachers occurs with their mentor teacher(s). The use of mentors as a social resource builds from trust (Young et al., 2017). Young et al. (2017) highlighted how some teacher candidates had to construct a creative way to work within a space that may have been different or more confined than the university ideal. One element that helped teachers was the amount of trust between candidate and mentor teacher that allowed the candidate to pursue and mediate new practices. The mentor's advice and guidance may serve as a social resource for learning and growing in practice. Young et al. also found some teacher candidates, instead of outright defiance by teaching how they wanted or against their formal knowledge, found ways to negotiate the two opposing pulls. In this instance, the teacher candidate may not fully trust the mentor's advice or approaches to practice. As a result, they find

ways to teach within a system and according to their values. Both instances revealed how teachers may engage resources toward learning and growing their practice.

### **Communities as Resource**

As teachers join in conversation with their mentors or other colleagues and even their department, they join communities of practice within the school. Bannister (Bannister, 2015) explained communities of practice as a social theory for understanding learning from observation, talk, and engaged action of practice. The community's knowledge forms through collaboration and it is shared across all members. Wenger's (1998) communities of practice framed the actions of group members as: 1) engaged in activity; 2) collaborative effort to problem solve; 3) shared set of practices. As practices and knowledges build through a community, they shape meaning through experiences. So the social resource of mentors and communities of practice provides a base of knowledges, structures, and practices that mentees or members engage. Although Bannister and Wenger represented social resources as people, social forms also include district and institutional made sources of knowledges, values, and practices.

Through the use of resources, learning occurs for the user. Within a community, learning builds from a process as *transformation of participation* (B. Rogoff, 1995; Barbara Rogoff, 1994). Learning development functioned through transforming roles and understanding in the learner's activities. Ideas reflected communities of practice and the building of discourses. Community of learners model showed learning as a process of transforming participation focusing on responsibility and autonomy of learners. All learners and guides took active roles in sharing and collaborating discourses. It promoted dialogue across participants rather than the adult-run model of IRE. The model moved beyond a compromise of adult and child run models. That is, in adult run models, learning became a product of transmission. Teachers focused on

ways to package the content and motivate the learners. Teaching built from a prescriptive of teaching that pushes testing and pace.

Meanwhile the child run model showed learning as a product of acquisition. Learners construct the knowledge and the teacher may represent a possible impediment to learning. The problem of the model shifts the burden of learning on the learner due to the non-interfering teacher. Rogoff recognized the challenge of avoiding assimilating into either model. That is, participation in each model shifted the relationship of the learner to the information and impacted the engagement in sociocultural activities. “Schooling is by nature a specialized setting devised by adults which focuses self-consciously on learning, and thus differs importantly from a community of learners in which children learn in an unselfconscious way by being involved in the mature activities of the group with the support of their elders” (Rogoff, 1994, p. 217). Rogoff found the community model provided agency for the learners and increased engagement. It built the learner’s self-responsibility and accountability to learn and learn from failure should it occur. Teachers served as facilitators and leaders guiding the learner’s reflection. The community model furthers the sociocultural learning through a community of learners. For teachers, the use of a community links to a resource type that teachers may learn from and with to further their practices and creativity.

Sawyer (2004) illustrated another example of how a community of practice built from a collaborative space. He showed how the social resource of knowledges and learning builds from the classroom community. The teacher and learners collaborated in the construction of class and neither can predict what will happen. Through engaging in those structures and frameworks, the teacher represented a facilitator rather than sole proprietor of knowledge. It moved the teacher from “sage on the stage” to co-creator of

knowledge and understanding through progressive turn-taking through talk. The use of talk and dialogue enabled the view of *multivocal* learning through collaborative voices.

Ultimately for teachers, the use of resources formed from existing structures and frameworks, and shaped their improvised actions.

### **A Model Resource**

In another example of resource use toward creativity, Sawyer (2000) explained the role of the *ready-made* within improvisational creativity. He defined ready-made as existing forms and structures, motifs or cliches. Sawyer recognized a tension between the ready-made and the original and novel. In most creative events, the actor draws from an existing frame or structure, but critics point out the lack of originality, downplaying the artistic merit. Sawyer acknowledged the counterpoints that genuine art remains free from repetition, and that art which contains recombinations from prior works illustrate a mechanical, lesser, form of art. Even though some scholars said mechanical forms of art lack aesthetics, Sawyer (2000) argued *ready-made* exist to inform the artists' creative practice. In fact, the use of the ready-mades reflected a domain's set of conventions, techniques, and knowledges. Ready-mades, as a resource, connect with the use of models as a template for creation. Perhaps more importantly, ready-mades signal that creativity produces a revised, but original product for the new context. Creativity then becomes a way to *reconstruct* and forward a similar end result.

Within the literacy field, models as mentor texts represent textual resources that teachers and students use. The use of models resulted in a mix of effective and ineffective teaching practices and learning events. Ryan (1986) revealed the use of models for narrative and expository writing to be ineffective. The student use of models may have

helped provide markers for readers to note elements of a narrative or expository writing. However, in terms of transitioning from reader to writer, as writers, the students missed elements in their writing or wrote the same for both genres. Although the study focused on the student writers, the teacher practice indicated an ineffective pedagogy. On the other hand, Bunn (2013) constructed the teacher practice of using mentor texts for direct instruction. The findings showed that model texts along with direct instruction can motivate learners to read and write. Bunn showed research that indicated learners are already motivated to learn about writing, especially when they have external motivators such as future careers. Bunn's examination of the teacher's role in the use of model texts illustrated the effectiveness of a direct instruction approach to constructing the writers' knowledges. The teacher's direct instruction of resources demonstrated and explained techniques and strategies to build knowledges (Bunn, 2013; Smagorinsky, 1992). Even though Ryan (1986) and Bunn (2013) focused on the student writer, the use of models as an epistemological resource highlighted types of teacher practices and potentially mirrors the effect of resources on teacher creativity. Perhaps the use and effectiveness of resources on creativity may align with Stroupe's (2016) point of teacher experience. Additionally, Sawyer (2000) found the more experienced teachers better understand ways to engage and use resources toward creative practices.

Similar to Ryan's (1986) study, Charney and Carlson's (1995) focused on student learning using resources. Charney and Carlson conducted an experimental study with students, divided into two sets, given models for writing. The constant received all exemplary models, graded A. The variable received models that ranged from okay to excellent, C-A grades. Then within the variable grouping, half received models that were labeled with the grades and the

other half just told they were getting a variety of models. They found the use of models did impact student writing; however, the extent of the help was limited in scope.

Charney and Carlson (1995) echoed the importance of experience and knowledge showing that the writer must know how to adapt their practices for the intended genre. They acknowledged the challenges and difficulties novice writers, in their study undergrads, have with structure and adapting to genres. The writer must know how to adapt their practices for the intended genre. The findings showed how “counter-examples” or poor models may also have an effect on writers. Students who see models are more likely to use elements, for better or for worse, from the model text. An interesting result of the study showed the more simpler topic and easier to write about were based upon prior knowledge and language used in the model. Students wrote better using the easier model than the more complex model with more complex language. While models did not have an “automatic benefit” to student writing, they did *influence* the writing organization or other concepts that students forgot and would not include otherwise. Therefore, the model displayed an immediate element of what to include. The epistemology of model use for learning parallels Stroupe’s (2016), Sawyer’s (2000; 2004), and Smagorinsky’s (1992) studies showing the importance of having experiences and knowledges of structures. Learning with models, regardless of teacher or student position, appears to depend on existing knowledge of structures.

The teaching practice of using model texts is not new. Model texts, like other definitions, are used to imitate and serve as examples for students. Models Charney and Carlson (1995) argued, when used by a teacher, are chosen because they exemplify particular qualities within a genre. Charney and Carlson revealed a potential downside to the practice of models. Models implicitly, and teachers perhaps explicitly, push an authoritative view of writing and what is

valued (Charney and Carlson, 1995). Smagorinsky's (1992) explained the role of the instructor in selecting the models focused on what is selected, why, and how it is used. Smagorinsky highlighted that models may be helpful with instruction if elements are explicit within a text and even contain some flaws to allow a discussion to form about writing. The two studies provided a brief insight into the selection and use of resource models by teachers for students. However, both studies did not include much of the teacher voice to examine why and how particular models were chosen.

### **Critical discourse using resources**

The critical discourse proved to be a missing element in most of the studies about resources. Stroupe (2016) highlighted the critical elements of the novice teachers' decision making for why they chose or not chose resources. Critical resource elements included focusing on the ambitious science framework, student participation, openness to collaboration with students, to management of building a safe space, student organization, and balancing with the school's pedagogy. Stroupe found that participant critical discourse and resource use was not defined by context. And yet I remain wondering what allowed some of the teachers to repurpose and reimagine resources to build student-centered practices, while others focused on teacher-centered and their school's prescribed pedagogy. For teachers, critical discourse illustrated the impact of resources toward learning, and mediating actions and decisions (Fairclough, 1992, 2012; Stroupe, 2016). Stroupe concludes that more research is needed for understanding how novice teachers use critical discourses with resources. Teacher learning depicts a way to view critical discourses in action through the engagement of resources.

Rogoff et al. (2016) examined underground learning, the tactical innovation toward critical use of resources. Their study showed the result of learners using critical discourse to

forward their values and discourses into a curriculum. Teachers as learners construct communities of practice through informal learning. Although Rogoff et al. preferred a different label to informal learning, they said it identified the *how* of learning as organized and as supported. Similar to Stroupe's (2016) point of context, they said less important is *where* learning happens. So learning and use of resources is not bound to solely schools and the classroom. The significance of unbounded spaces provides a way to show how people engage resources in different spaces and domains. In addition, Rogoff et al. said variations of learning impact happened across settings due to instruction and guidance practices. Informal learning can be a part of how learning is designed and organized for learners as dialogic and interactive between people. Rogoff et al. showed learning built from the individual's interest and engagement with the content, while existing knowledges "innovate, developing new ideas and skills" (2016, p. 360).

Rogoff et al. described learners' informal learning as underground learning. It formed a part of the hidden curriculum or underlife of the classroom. Learners poached strategies that moved from teacher-dominant discourse to a "counterscript" that allowed them to forward their discourses, which are not recognized in the traditional adult as instructor script (2016, p. 377). The counterscript allowed sense-making from the learners to clash with the dominant discourse. It positioned the learner knowledges and discourses on the same level as the classroom knowledges and discourses. In other words, the counterscript equalized and perhaps inverted the power dynamic of a curriculum or even the instructor's role toward the learners. Learners assume power by asserting value to selected classroom knowledges and their own knowledges in order to build practices. The counterscript represents a creative learning practice with the use of resources. At the same time, the hidden curriculum could also negatively impact learners of the



unsaid rules and discourses that promote shame, product over process, gender rules, etc. in other words, social control and dominant norms (Rogoff et al., 2016). Even though some counterscript learning experiences may be negative for individuals, the point remains that the counterscript provides an opportunity for learners to exert power through creative practices.

In both the learning of the school, as a dominant discourse, script and the counterscript, learners draw from their histories and cultural discourse practices to participate in communities. The counterscript represented informal learning. Rogoff et al. explain informal learning as “embedded within meaningful activity; builds on the learner’s initiative, interest, or choice... and does not involve assessment external to the activity” (2016, p. 358). Informal learning moves away from the formal structures and power dynamic of schools and classrooms between teachers and students. It is not to say that formal spaces and learning structures negatively impact learning. Rather, the significance of informal learning links to critical ways resources may also be used as a learning tool. Within all settings, the counterscript valued creativity as a practice. Rogoff et al. (2016) explained in family and community settings, a goal of contributing to the family or community involved forming new ideas and improving ways of doing things. In non-institution informal settings, it similarly focused on construction of knowledge and new ideas and approaches to practices. Learners shaped a shared community of creative values. Practices represented the motivational engagement of learners. Play, as a central learning practice, allowed experimentation of learning in activities. While in formal spaces, even in “innovative schools” play remained linked to curricular goals rather than being the only objective. In contrast, “participating in family and community endeavors, learning is based more on observing and pitching in to ongoing productive activities” (Rogoff et al., 2016, p. 390). The use of observation as a practice illustrated one of many ways of learning.

## Heteroglossic layers and intertextuality

In examining the way resources may impact individuals, the sociocultural perspective helps note the layered elements. The use of a counterscript builds from learners' community and cultural backgrounds and combines that with the poached strategies of the school script. The dialogic interplay of learners' scripts formed a heteroglossic resource. Bakhtin said, "The word in language is half someone else's" (1981, p. 293). The use of resources shows the impact within practice. Stemming from the way individuals mediate resources such as a mentor, model text, professional development, etc., the ensuing action or practice represents the impact of influence. It may be that, as Leone (2018) explained, an inspiration to forward a recipe. For educators, it may lead to prescriptive practices and use of a scripted curriculum or provide a scaffold for a lesson activity. Bakhtin (1981) and Stroupe (2016) link to make visible the extent to which resources influence practices. It is not enough to show the dialogic layers of discourse, rather the significance forms from showing the critical ways in which individuals use the resources in practice. The way resources build from layers and allow the teacher to seemingly improvise when in fact, they enact a disciplined improvisation (Sawyer, 2004). Bakhtin explained heteroglossia as "*another's speech in another's language*, serving to express authorial intentions but in a refracted way. Such speech constitutes a special type of *double-voiced discourse*. It serves two speakers at the same time and expressed simultaneously two different intentions" (1981, p. 324). Language as imprinter and framer of experiences and knowledges provides a structure for the actor to shape a disciplined decision. Moreover, heteroglossia indicates the impact of the resources through how the actor forwards the language into their own practice. That is to say, the use of intertextual references reflects the way the actor embodies the language into their talk and practice.

Intertextuality, while a method of analyzing text, recognizes the influence of other voices and texts. It makes visible the heteroglossic layers of discourse. Bazerman explained, “and when we read or listen to others, we often don’t wonder where their words come from, but sometimes we start to sense the significance of them echoing words and thoughts from one place or another” (Bazerman, 2004b). Intertextual elements represent an opportunity to view the connections of where phrases start and when they are repeated, the echo, providing a deeper understanding of the resource impact. Intertextuality highlights the way one person interacts, responds, and understands texts. Texts, within Bazerman’s and Wynhoff Olsen et al.’s studies, are written or spoken language. Bazerman (Bazerman, 2004b, 2004a) explained that intertextuality shows how authors position themselves in relation to other texts, people, and cultures. Wynhoff Olsen et al. (2018) forwarded Bazerman’s echo view of intertextuality as written texts forming dialogue with other texts by: transforming, adding, rewording, and deleting words. Both Bazerman (2004b) and Wynhoff Olsen et al. (2018) examined the categorical traits and intertextual writing practices recognized within texts. Wynhoff Olsen et al.’s heuristic for intertextual connections defined the categorical traces and moves made by writers (2018, p. 66). Wynhoff Olsen et al. (2018) and Bazerman (2004b, 2004a) make visible the heteroglossic elements of resources. Intertextuality shapes a way individuals construct their own text. For the purpose of this study, it provided a way to view how individuals engage resources in their creative practices. At the same time, the use of resources also extends to show the extent of its influence on the individual’s practices. In other words, intertextuality can make visible the power of the resource upon the individual’s voice and practices.

## **Intertextual discourses and power**

De Certeau examined the role of power and discourse through the way institutions built specific knowledges and determined strategies for use of the knowledges. “Power is bound by its very visibility. In contrast, trickery is possible for the weak ‘by being transformed into tactics’” (1984, p. 37). Tactics subvert the strategies placed by the dominant discourse. Rogoff et al.’s (2016) counterscript acted as a creative tactic for the learners. It manipulated the imposed dominant strategies of the classroom or institution by forwarding the learners’ own tactical knowledges into the discourse. For instance, the counterscript, as a critical discourse, illustrates a way to view resources that individuals forward to others. At once, the counterscript represents an action, a practice, and it reflects individuals’ engaged resources. That engagement of resources forms a dialogue between the individual’s resources and the classroom, institution discourse. The produced texts highlights the intertextual dialogue between the individual’s valued discourses and the resources. Similar to the way the counterscript pulled from home communities and cultures, intertextual uses of resources “can stay within a specialty, disciplinary or professional domain, or may reach into different fields, different times, and different places” (Bazerman, 2004a). Bazerman’s point highlighted the way resources contain multivocal layers and domains. Still, Bazerman (2004a) and Olsen et al. (2018) noted, intertextuality shows more than which and how resources are used, but more importantly the positionality between the person to the resource for making their own statement.

Fairclough’s (1992) examination of intertextuality spoke to the way power and discourse highlighted the influence of resources. “Intertextual analysis draws attention to the dependence of texts upon society and history in the form of the resources made available within the order of discourses” (1992, p. 195). Fairclough’s use of critical discourse analysis, CDA, helped show the

impact of a resource, text or person, through language. Fairclough linked CDA and intertextual analysis to Bakhtin. The focus on sociohistorical resources within texts showed how text reinforced genre elements, and how text diversified genres. The connection of CDA to heteroglossia tied a critical view of discourse to language in order to reveal what textual layers of a resource are included and excluded. In other words, it addressed to what extent the resource impacts the individual. In viewing resources through a critical lens, it may illustrate two critical practices: how individuals select resources (Stroupe, 2016; Fairclough, 2012); and to what extent the resource imposes strategy or moves toward a tactical use (de Certeau, 1984; de Certeau et al., 1998).

Moreover, it may extend the understanding through a cultural lens by asking questions about the broader epistemology between creativity, practices, resource, and power . Fairclough's (1992) CDA moves the dialogue to view power structures within the intertexted layers. The power structures may reveal how individuals decolonize notions of creativity within broader practices and use of resources (Rogers, 2018). Critical discourse “theories help us understand the top-down and bottom-up forces of power and how power lives and changes across literacy practices” (Rogers, 2018, p. 4). The institutional or system resources imposed upon teachers may reflect the top-down impact of certain resources. For instance with teachers and the 2013 InTASC Standards, a keyword search for “creative” yields seven results (CCSSO, 2013). Six of the seven results connect creative as an adjective to thinking and therefore link creativity to a cognitive perspective of outside the box thinking and problem solving. The one instance of creative positioned it as a result of planning.

Planning focuses on using a variety of appropriate and targeted instructional strategies to address diverse ways of learning, to incorporate new technologies to maximize and

individualize learning, and to allow learners to take charge of their own learning and do it in **creative** ways (CCSSO, 2013, p. 11).

Within the Common Core English Language Arts, CCSSI ELA, creative appeared twice, creativity zero times (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010).

In both instances, creative formed a byproduct of the teacher's practice and student learning. Therefore the use of CDA provides an opportunity to analyze the practices of teachers and the way resources such as InTASC 2013 or even the Common Core English Language Arts impact teacher creativity. It may be that teachers form something akin to Rogoff et al.'s (2016) counterscript as a way to invert the standards or to construct something new because it is missing. Perhaps it may be that the standards promote a cognitive view of teacher practices and that creativity provides an outlet for sociocultural practices to emerge and take shape. The tactical counterscript makes visible the way teachers actually link their creativity to standards, or even the way standards impede teacher creativity. Therefore the intertext discourse of standards or prescribed practices showed their impact in the participants' practices.

The intertextual studies focused on language by showing the way writers dialogize with other texts into their own. I argue that intertextual practices also include textual discourses use of gestures, actions. de Certeau et al. (1998) examined cooking practices through cultural and critical lens. They found that home chefs subvert culinary practices with their own ways of cooking and shopping. Cooking, as a practice, represented the heteroglossic layers of time, space, and family. Techniques acted as a mirror to the observed and imitated ways of cooking that become refined and personalized to the home chef. Giard explained the gesture, "In the gesture are superimposed invention, tradition, and education to give it a form of efficacy that

suits the physical makeup and practical intelligence of the person who uses it” (de Certeau et al., 1998, p. 203). A person’s gestures modeled itself from social resources where others’ sequenced actions, energies, and forwards itself from memories through trial and error. The use of gestures broadens the view of intertextual practices beyond text.

### **Mediated Discourse Theory as a nexus of practice**

The sequence of mimicked actions builds into a practice. Scollon’s (2001) mediated discourse theory, MDT, provides a way to recognize and make visible how resources are used and intersect within the nexus of practice, NoP, through discourse. The nexus of practice links a social actor’s practices and discourse through a mediated means, object, at a site of engagement. In linking practices and discourse, MDT connects to the sociocultural view of learning.

“Learning proceeds from social interaction through processes of social interaction to the reproduction on the intramental plane of human psychological structures” (2001, p. 9). The nexus of practice illustrates the laminated layers of a person’s history of a particular practice, an object, and the place of action. The connection of those elements highlights the linked and unlinked Discourse practices that emerge from the person at the given moment of action.

### **Elements of MDT explained**

Scollon’s MDT extends Wertsch’s mediated action as a way to understand relationships among actions and discourses. He drew from Gee’s Discourses to frame the nexus of actions into practices that forward a broad spectrum of language and non-language, “power relationships, embeds an ideology, and privileges not only people and groups but their symbol systems as well” (Scollon, 2001, p. 146). Therefore, the nexus of practice highlights the Discourse layers of an action’s history and complexity. Social action revealed a jointly distributed construction through actions of the participants, in Scollon’s study B and her mother. The impact of a person’s habitus

in action or failure of action links to social interactions and “language and cultural identity” (2001, p. 44).

In referencing habitus, Scollon pulled from Bourdieu, Nshida, and Wertsch to note learning from social and cultural interactions. He then forwarded habitus to reflect networked practices as complex, and linked and unlinked. The practices may be linked or unlinked across Discourses such as cultural, class, even communities. Yet, Scollon raised questions about habitus and argued that it shaped a rigid view of communities mediational means. Scollon found the action to be social, each participant of the action contributed to its operation. For instance, Scollon observed many instances of handing between a child, B, and the child’s mother. Both B and the mother shaped their actions of handing from the physical to verbal acts. The interactional sequence of a practice showed cultural discourses that built into their practice. The observed handling practices revealed practices and discourse as sociocultural.

MDT furthers the sociocultural elements by linking individuals to community of practices. Revealing learning and Discoursal identities as members of communities, Scollon recognized complex Discourse systems. The central concept of MDT highlights a socially mediated action at a site of engagement. The site of engagement embodies a history of situated Discourses where the practices occur. The mediated action links to an object, sometimes multiple objects, as the mediational means. The social action becomes a practice through repetition across time rather than a one-off moment. The action as representative of a layered history reflects the nexus of practice to reveal the individual’s linked practices and Discourses at that site.

In building MDT, Scollon (2001) examined social action and discourse in order to show how social action is possible and to what extent discourse serves in that action. Within the theory, three principles organize MDT: social action, communication, and histories. Social action



represents the *mediated action* to illustrate discourse as social action and the extent of its significance. It embodies the *habitus* of the individual as an aggregate of experience and linked practices. And it impacts *positioning* of identity claims through the habitus of social actions with the nexus. Communication acts as *social* through a *common* and shared *system*. The mediational means, MM, builds meaning through shared language, gestures, objections, and institutions. The means may be *multiple* and have a *complex* connection. Historical builds from social action as *interdiscursive* elements overlap in communication, and shows multiple even conflicting communications. Meanwhile, the *intertextual* elements borrow discourse in a *dialogic* communication as a response to prior and anticipated forms of communication. The principles organize the way social action and Discourse link through language and experiences.

### **Applying MDT to creativity**

Scollon's MDT provides a particular theory to connect the study of creativity and resources through a sociocultural frame. Since MDT draws from a person's history and experiences, Bakhtin's heteroglossia reinforces the layered elements of discourses. Moreover, MDT reveals more than a link between practices and discourses. MDT connects to critical discourse analysis, CDA, through the mediated action. Scollon (2001) noted that practices and discourses reflect past actions and histories associated with the practices. In addition, practices represented discourse through the use of language. The critical connection of MDT shapes a view of the way language and practice forms from Discourses. Because Scollon forwarded Gee's Discourses into MDT, it provided a space to question the nexus of practice through viewing the role and impact of histories, sites of engagement, and mediational means.

Scollon recognizes the need to study discourse practices ethnographically. He said, "we can learn relatively little about discursive practice from the direct and exclusive study of

discursive acts, and less about the linkage between discursive acts and other social acts from single, decontextualized, or isolated instances” (2001, p. 110). I agree with Scollon about the challenge of learning about the linked acts from a single, decontextualized instance. Scollon clarified that “we can learn much from studying the very specific and concrete set of actions which form the linked chain...” (2001, p. 110). In other words, the live plan observation offered some insight into the linked chain of the participants’ history and actions. Moreover, Scollon examined the ontogenesis of B’s practices. He observed B from newborn through toddler age. Scollon revealed the ontologically linked habitus actions of B. I, however, turned my focus toward revealing the epistemology of the nexus of creativity in practice.

### **Mediated means and sociocultural layers**

To view the social actions as a nexus of practice, mediational means help differentiate the difference between a one-off use and practice. Scollon distinguishes between appropriation and use. *Appropriation* aligns more with mediational means and how the actor shapes and is shaped by the habitus formed from the tool for practice. *Use*, on the other hand, implies more of a one time and non-impactful event. The significance of appropriation over use represents the impact of resources on the individual. The mediational means, MM, has three traits: 1) acquired over time through individuals’ habitus and actions in society; 2) allows certain actions like memory; 3) constrains other actions. The MM may have a duality of positive and negative impacts. That is, MM acts, as a cultural tool, to show complex social practices as multiple and building over time within an individual’s habitus. The object forms a dialogue with the user of meaning and history through practice. At the same time, the MM may reveal embedded power structures within a practice through the layered history. That is, the MM reveals the role of discourse as a constructor of the individual.

Discourse shapes MM as the individual's action to highlight practices and habitus of an action. Language acts as discursive practice enters habitus as MM mainly through practice and without reflective construction in social interactions, the appropriation of MM within a specific action.

Perhaps this is simply another way of saying that we do not talk about our practices, we engage in them; but we do talk about ourselves as social actors of particular kinds and practice is implied to flow from those social actions (2001, p. 136).

### **Linking the nexus of practice to creativity**

Scollon's nexus of practice shapes the ways social action, practice, and Discourse build from a person's identities. The nexus of practice revealed that practices have history and part of habitus as a practice. "Social practices intersect, never perfectly, never in any finalized matrix... but as network" (2001, p. 122) forming basis of identities produced through social actions. Community of practices connect to the objectified nexus of practice by social actors bounded by communities to gain access and membership. The nexus represents a network of linked practices intersected by single action at the "site of engagement" (2001, p. 147). The nexus defines a comprehensive and myriad collection of practices. Practice defines a specific and narrowed action. Within a nexus, there will be multiple practices but some may not be simultaneous, linked, and some may represent new and different combinations. Practices separate from a one-time action as a link to "repeated linkage of practices over time" (2001, p. 167).

Scollon (2001) acknowledged that social practices are grounded in particular social, cultural, class groups, although he raised questions about communities of practice. In raising questions, he wondered if practices move across the social and cultural boundaries, specifically, if a Japanese mother and child enacted handing similarly to a Scandinavian mother and child.

Scollon asked, to what extent does culture, language, materials, etc. impact the teaching and learning of a practice? He found that practices represent similar structures of actions that move across cultures. At the same time, Scollon considered that as the nexus of practice objectifies practices, people are objectified as groups within communities as members, not members, bounded to social groups. Then, the individuals within the communities show that they have or not have, value or not value, practices. Ultimately, the focus shifts from individuals to their developed practices. To combat objectifying individuals and practices as bounded to particular communities, I remain cognizant of how I recognize and identify individuals and their practices. I avoid generalizing practices as homologous across communities and instead make the practice visible through the individual's nexus of practice.

The focus on resources as a mediator of creativity and creativity practices centered individuals' nexus of practices. In linking a broad view of resources I pivoted from learners using models in literacy practices to explore teacher practices (Charney & Carlson, 1995; Herrington, 1992; Macbeth, 2010; Manz & Suárez, 2018; Rish, 2015; Barbara Rogoff et al., 2016; Smagorinsky, 1992; Smagorinsky et al., 2010; Stroupe, 2016). More importantly, the mediation of resources made visible teacher creativity in practice. Some scholars found that resources informed the creative practices by providing necessary structures and knowledges (Sawyer, 2000, 2004, 2011; Smagorinsky, 1992; Stroupe, 2016). The sociocultural lens, another layer of the study, revealed the multivocal layer of resources and to what extent it impacts practices (Bakhtin et al., 1981).

The sociocultural lens provides a way to highlight the impact of resources through an intertextual lens. Language forms a sociocultural element. I recognize language as layered histories impacting understanding and discourses (Bakhtin et al., 1981; Bazerman, 2004b;

Fairclough, 1992; Wynhoff Olsen et al., 2018). The intertextual lens provides a way to view how the discourses of a resource weaves into practices through language and gestures. Meanwhile, the critical lens builds from the intertextual lens to consider the impact through power and influence through the teacher practice. CDA shaped the analysis of teacher use of resources to make visible which voices appear or disappear in the creative practices. Figure 1 illustrates how the conceptual elements connect.

Although creativity may seem of concern to only a small group of scholars and educators, it should in fact concern anyone who cares about the use of resources in any classroom. The purpose of the culinary field moves beyond the framing of creativity. In fact, the culinary field serves as a comparative to a cross-field analysis of how creativity emerges with the use of resources. Within the culinary field, the sociocultural view of resources also broadens the scope beyond recipes to people (Leone, 2018). Even though creativity and resources move across fields, use of the culinary field as a companion and comparative point to education remains unaddressed. In the next section, I will examine the two fields as professions.

**Figure 1.**

***THE EXPLAINED CONCEPTS (SO FAR) LINKED***



Note: Figure 1 shows the how the explained concepts link.

## **Constructing Knowledge and Expertise**

Grossman et al. (2009) expressed a concern about comparing professional fields. “Cross-professional comparisons can be risky, in part because the nature of the work and status of the occupation can differ so dramatically” (Grossman et al., 2009)p. 2057). The variables within culture and professional fields shape questions about the efficacy of community of practice. So it remains fair to ask if the two fields, education and culinary, may engage in a dialogue, forming a larger community of practice, with each other about creativity and practices.

Scholars have compared elements within the medical field (Gawande, 2002; Jordan, 1989) to elements within education, while others have compared education to psychology and the clergy (Grossman et al., 2009). The comparative studies did not disparage education practices nor did they make how-to claims of practice. Rather the research showed how other fields engage and learn practices and questioned the idea of standardization. Through the study, I hope to contribute to the ongoing conversations about education practices by introducing a different comparative field to explore creativity.

The cross-field study of the culinary and education fields does raise questions about the comparison of two seemingly unrelated fields. On one hand, the culinary field studies focused on business management, and culinary philosophies and practices. On the other hand, the education field studies focused on learning theory and practices. Beyond the surface of the research, the fields do show an intersection through building knowledge. Both fields elevate knowledge from novice to expert levels. The use of resources reflects one way in which individuals construct knowledge in each field from novice to expert. Still, there remain questions about each field as representing artists or professions. Then it moves from questioning if the field represents a

profession. Ultimately, the purpose of examining the idea of professions leads to understanding why the culinary and education fields may speak to and with each other.

### **What makes a profession?**

The construction of knowledge and theory in practice shapes professions (Hatano & Wertsch, 2001; Nilsson & van Driel, 2010; L. Shulman, 1987; L. S. Shulman, 1986, 1998). An individual's knowledge of theories and practices informs their ways of doing. The ontological and epistemological foundations shape the individual and their field. That is to say, how identities and the ways knowledge build form a baseline for a field. At the same time, what makes a field a profession?

According to Shulman (1998), professions have six characteristics: 1) *Service* to use morals and ethics to guide practice through technical skill and theoretical knowledge. 2) *Theory* having knowledge reference to research, development, understanding. 3) *Practice* occurs in a particular place and has a quantifiable, testable, knowledge base. 4) *Judgement* bridges theory and practice "To transform, adapt, merge and synthesize, criticize, and invent in order to move from the theoretical and research-based knowledge" (1998, p. 519) to practical knowledge to engage work. 5) *Learning from experience* enters into dialogue with the academy to inform and problematize experiences; requires theoretical knowledges and fluid reasoning of practice through a "membership in a community" (1998, p. 520) because learning does not occur in isolation. 6) *Community* helps overcome limits of learning and practicing as individuals; experience happens from a communal setting by building shared wisdom, "distributed expertise can be shared, and standards of practice can evolve" (1998, p. 521).

The six characteristics framed Shulman's view of education as a profession. He framed teaching foundations through theoretical content knowledge and education principles as essential prior to practice. He drew from Dewey's laboratory and apprenticeship model argument about teaching as a profession. Shulman forwarded the two models by marrying the theoretical content knowledge of apprenticeships and general practical knowledge of laboratories into his six characteristics. He argued practice represents "a significant source of the evidence on which new theory development can be based" (p. 523). Practical experiences provide opportunity to create and test theories of practice, professional knowledge and learning. Meanwhile effective apprenticeships teach "practical, judgmental, and intellectual work" that represents crafts and occupations "with reflective and elaborative mechanisms that characterize higher-order thinking" (p. 523-524). Shulman explained a way to view teaching as a profession through how novices grow and gain knowledge. While it is not to say that all novices develop into experts, rather Shulman constructed a view of teaching as a profession that values reflection of theory and experience.

The culinary field shares elements of Shulman's professional characteristics. Horng and Lee expand the definition of the culinary profession as "a context or environment in which creative culinary artists can express their feelings and creativity" (2006, p. 13). Even though they examined the culinary field as a profession through the discipline of "culinary art" (p. 5), they argued that culinary artists should have professional knowledge, skills, and training in order to elevate the profession. In other words, to differentiate between the amateur home chefs and professional chefs, knowledge and skills must continue to grow. Their argument builds from the need of creativity in the



profession to push professional artistry and techniques to construct new knowledge.

Another way to build professional knowledge and practice is through mentors.

Mentors and apprenticeships in kitchens teach novice chefs how to produce emotion in and through food. The space allows the chefs to embody their passion, knowledges, and creativity within the foods they make. Within that kitchen space the kitchen brigade system reflects more of a military organization chart from busser on through the executive chef. Each chef has a station and duty as a member of the kitchen team (Jones, 2014a, 2014b; Starbuck, 2017). The significance of the kitchen brigade system reflects a similar practice to the teacher intern and mentor teacher relationship. Each space has mentors that build knowledge and practices through a community. As the chefs move through culinary school, then they gain theoretical knowledge of foods and practices. Even if chefs do not attend culinary school, then chefs may learn through mentors and experience of how theory works in practice. All of this is to say that the two fields share similar professional characteristics to build a dialogue about experiences of learning and practices.

### **Keeping fields separate**

While the two fields may share similar professional characteristics, Abbott (2014) argued professional domains should remain separate in practices and knowledges. He argued professional tasks and the approaches to problems differentiate the profession from the non-professional or artisan. Abbott explained that professionals' see problems as objective, subjective, and jurisdictional. Objective views a problem through facts, whereas space, time, and culture influence the subjective problem. Jurisdictions show the impact of

culture, and it also forwards specific frames within a profession by specialty groups, who have particular ways of operating within or outside of the profession.

The shaping of problems form elements of professions, which influence practices. Moreover, the approach to practices builds jurisdictional claims that recognize new jurisdictions based on social claims to legitimize responses and professions. In other words, Abbott argued that as professions blended approaches and practices, subjective views became objective through jurisdictional views. He used alcoholism as an example to explain objective qualities. On one hand, science explained alcoholism through motor and sensory functions. Those traits revealed objective facts. Meanwhile, subjective definitions arose through how cultural groups examined and “treated” the problem. For instance, religious groups argued about the sin of alcoholic behaviors. The interpretive phenomena between groups occurred through jurisdictional claims. Reinterpretations may also occur between professionals and novices. The reinterpreted claims do not always represent objective facts, but appear to have qualities of objectivity and expertise. Instead, the reinterpreted claims can change as cultural responses change. Therefore jurisdictional claims are not fixed but moveable through time. And for Abbott, the variability of jurisdictional discourse represented one of the problems with professions crossing over into one another’s field.

Abbott framed professions as domains that should remain separate to maintain power and control over their own practices and standards. Abbott said that “tasks are created, abolished, and reshaped by external forces...” (2014, p. 33) and in doing so, makes professions susceptible to being taken over by other professions and by extension lose the expert reputation. By taken over, he means that discourse and practices will reflect another domain and its values. The

examination of new jurisdictions forming from professions revealed the vulnerabilities of professions and their practices. He defined vulnerabilities as a weakness within the practice and problem solving, which then leads to new jurisdictions or other professions assuming control over discourse. Abbott's heuristic of professional practices formed "... essential cultural logic of professional practice" (2014, p. 40). Diagnosis, inference, and treatment shape professional practices. The professional knowledge systems structure the problems and the practices. He acknowledged in the treatment practice, identification of problems emerge from diagnostic tools for all professions. Even though professions may share similar classification practices, they remain distinct. The distinction preserves the professional identity, allowing it to separate from amateur practices.

Abbott does make a clear point about other fields crossing over and laying jurisdictional claims as unwanted interference. For example, in education the neoliberal capitalists push privatization, charter schools, and banking knowledge as learning (Kumashiro, 2010; D. Labaree, 1992; D. F. Labaree, 1997). The neoliberal perspective emanated from the business community who influenced politicians and the general public on how to improve education. Neoliberal views influenced the diagnostic, inference, and treatments of school reform. Abbott (2014) explained that other domains impact subjective and jurisdictional approaches when concepts become unclear for the public. As other professions influence diagnosis and treatment practices, the general public understands it more. At the same time, that influence downgrades the profession's practices by removing the concentrated and specialized nature that occurs within a domain.

I agree to an extent with Abbott's argument about the importance of professions maintaining their identity through practices and approaches to problems. The impact of other fields may indeed downgrade the professional practices due to their influence. The downgraded

profession can be viewed in education through the neoliberal school reform models and even within the literacy field's Great Divide debate between oral and written literacies (Collins & Blot, 2003). The outside impact by other fields on education and, even within domains of education toward literacy, illustrated a shift in discourse that reflects the new values. Abbott said that professions exist within an interactive ecology that feeds into competition and structural adaptations. Unfortunately, Abbott does not reveal the objective of the competition, so it could be discursive control, independence, or legitimize their profession as experts, or a host of other reasons. The reasons only matter to the extent that the education and culinary fields compete against each other and for what purpose. Yet, as with any ecosystem or ecological structure the relationship between organisms and their habitat reveals a complexity. That complexity reaches beyond a competition to also include diversity, adaptation, development, regulation, among other beneficial effects. Abbott's focus on competition highlighted one aspect of the profession *ecology*. While he explored the tradeoff of competition, benefits also exist. Although the education field has experienced the competitive trade-offs through the application of outside standards, it has also experienced research benefits of mixing communities such as linguistics (Gee, 1996), anthropology (Glesne, 2006), arts (Winn, 2011). Abbott acknowledged that practices can be redesigned, revised, and stopped due to outside influences.

### **Joining fields to form a community of practice**

Communities of practices reflect another way to view outside influences. A community supports and builds knowledge and practices rather than compete to take over. Education and the culinary field resemble similar fields due to the shared professional characteristics from Shulman (1998). Moreover, the impact of communities of practices builds the case for the interfield dialogue. (Charney & Carlson, 1995; Herrington, 1992; Macbeth, 2010; Rish, 2015;

Smagorinsky, 1992; Smagorinsky et al., 2010) study about writers learning language, values, and strategies showed writers must place themselves within a community through practice, talk, and meaning making. The purpose of communities of practice constructs a shared set of values and learning from members (Barton & Hamilton, 2012; Gutiérrez & Rogoff, 2003; Lave & Wenger, 1991; Barbara Rogoff et al., 2016). However, the shared values does not necessarily mean one field controls the discourse.

A professional learning community, PLC, represents another way that communities build practices. PLCs share practices and critical dialogue promoting growth and learning (Prenger et al., 2019). PLCs represents a way to build professional learning within a designated field. For instance in education, it provides an opportunity for teachers, no matter the subject area, to form dialogues that promote practices and learning from and with each other. It may very well involve a mentor and mentee relationship amongst some within the PLC. With chefs, it may resemble Leone's (2018) case of chefs talking with other chefs.

Another challenge of Abbott's argument formed a binary between one field as expert and the other as novice or other. The view presents a counterintuitive view of sociocultural community learning. Instead of a binary, the two fields can be reframed as a dialogue of a larger community of practice. The significance of the dialogue allows the two fields to make a community of creativity. Metaphorically, the dialogue forms a fusion between two fields that can enhance educational practices and understanding. Within the culinary field, fusion allows chefs to forge links between cultures through techniques, ingredients, and taste (Stano, 2015). Fusion constructs a culinary bridge. Though some argue that fusion represents bastardized flavors or poor culinary experimentation. Hass (2006) said that blame rests upon the chef, although he distinguished between chef and cook, "a chef has mastered the art and concept of the recipe,

while a cook often experiments simply for the sake of being fashionable and does not understand how ingredients, flavors and textures actually combine” (Haas, 2006). On one hand Hass’s point fed into Abbott’s binary of the expert and novice. On the other hand, a community, which may recognize skill or knowledge discrepancies amongst its members, still builds everyone through shared knowledge. The two professions can merge through creativity and build a stronger epistemological understanding of creativity in practice using resources.

Abbott’s notion of field specific knowledges and practices connected to Diakidoy and Kanari’s (1999) finding of how teachers thought of creativity. Their study surveyed teachers and students. The results showed teachers and students framed creativity as reflective of a field’s way of thinking and doing. Feldman and Benjamin (2006) also reflected Abbott’s position about field specific views. They recognized that the creative talents such as practices and knowledges in one field may not necessarily work in another. “Conceptualizing creativity as domain specific highlights the importance of subject matter knowledge” (Feldman and Benjamin, 2006, p. 330). Yet it is important to recognize the differences between fields and individuals when building and scaffolding creativity. That is, tying the individual to their field and vice versa essentializes the linked subject. Scollon (2001) reflected that objectification of communities and practices. He worried about bounding practices to particular communities and thereby reducing individuals to essentialized traits. By reducing the subject, individual or field, to general traits or practices, it mitigates their complexities, and feeds into a more cognitive viewpoint by focusing on the individual.

At the same time, some scholars within the education and culinary fields represented creativity and practices as having similar values (Horng & Hu, 2008; Horng & Lee, 2006; Kind & Kind, 2007). That is to say, they saw practices as non-field specific. In

particular, social practices shape knowledges and practices in both fields (Horng & Hu, 2008; Horng & Lee, 2006; Leone, 2018; Windschitl et al., 2011). The sociocultural view connects to Bakhtin's view of language and cultures as forming layers. "Creative acts can therefore be expected, no matter how feeble or how infrequent, of almost all individuals" (Guilford, 1950, p. 455). Guilford's cognitive theory even acknowledged creative abilities vary from one creative act to another and in *all* people. Therefore, creativity, as a trait and as actions, move across and within all fields and people.

Ultimately placing the two fields into dialogue with each other provides a way to understand and build a study about creativity through the use of resources in practices and learning. The use of resources as learning tools and elements of practice allows me to speak of the sociocultural gap in research studies about creativity and in particular within the teacher education and literacies fields. Moreover, the research can continue to forward the practices by bridging domains, which may enhance elements of adaptive or disciplined improvisation as creative practices in education (Fairbanks et al., 2009; Sawyer, 2004, 2011; Young et al., 2017).

In the next chapter, I explain the research methods, data collection, and data analysis. The section also provides further exploration of the application of theories toward the analysis of data.

## CHAPTER 3: METHODS

The purpose of my research attempts to build a multifaceted understanding of creativity in practice. The study used a comparative case study of creativity in practice and how it intersected and diverged within two fields, culinary and education (Bartlett & Vavrus, 2017; Duke & Mallette, 2011). I focused on creative literacies and practices through the use of resources by teachers and chefs. The study constructed a deeper conceptual understanding of creativity. In particular, it made visible how actors mediate resources toward creativity and their practices. Practices as everyday events link to values, ideas, actions, and building upon prior actions (Dyson & Genishi, 2005; Grossman et al., 2009; R. Scollon, 2001). The study of two spaces allows a cross-field analysis of how teachers and chefs engage creativity or *recreativity* when they use resources. By resources, I draw from Stroupe (2016) and Manz and Suarez (2018) to mean the use of textbooks, curricula guides, books, social interactions with others such as teachers, students, and colleagues, models, and recipes. To understand teachers' and chefs creativity in practice, I ask these questions:

- How do the participants define creativity?
- In what way does creativity reflect the positioning between actor and resource?
- What creative practices emerge when individuals choose to use, or not use, resources?
- How do resources mediate creativity?

The comparative case study helped me understand the role and impact of resources on creativity in practice. I acknowledge on one hand the culinary field appears distinct and separate from education and the English classroom. And yet, the culinary approaches to teaching, learning, and constructing creative practices enhanced the view of creativity. Shulman (1998) talked about the need to enter into dialogue of practices to problematize experiences in order to learn from them. The ensuing dialogue between fields about practices moved separated



communities of practice toward a unified community. Therefore, the analysis of the participants' experiences using resources was examined toward the way creativity enters into practice to inform broader implications toward theoretical and conceptual understandings. The broader view mattered to construct a more concrete view of creativity. I framed the study from a sociocultural approach to expand the notion of creativity beyond the heavy cognitive-based research. The dialogue built a multivocal layer of discourse across fields.

### **Participants**

A diverse set of experiences using resources and conceptual understandings of creativity formed from eight participants (Bartlett & Vavrus, 2017; Duke & Mallette, 2011). Although it may be a broad set of participants to some degree, it may still not be generalizable to educators or teacher educators. However, I hope the use of narratives may allow connections through the situated context of teachers' or chefs' narratives. The contextualized experiences of the teachers and the chefs highlighted how creativity in practice emerged. The participants' narratives showed how they embody creativity and humanize creativity (Wertsch, 1997). To investigate and collect data that helped me address the questions, I worked with and learned from four participants from each field, culinary and secondary English education. The broad acceptance of participant experiences allowed further exploration of the sociocultural elements of creativity and resources. The use of a sociocultural lens highlighted the inferences about social resources and the impact on the individual's practices. Finally, the broad set of participant experiences constructed a stronger view of the critical practices of participants and how they engage resources.

## **Teachers**

The bounded study to secondary English teachers formed a unilateral view of creativity in teaching from a specific subject and grade level. Bounding the study to secondary English teachers limited the extended research into other subject pedagogy and may enable some generalizability due to the experiences of the participants. However, gender, ethnicity, type of school, experience level, and location were not bounded elements. I built the participant list by sending out an email invitation, cold calling through the phone, and even Twitter direct messaging to several teachers. I asked the teachers, who accepted my invitation to participate, if they knew of any teachers who would like to participate. Unfortunately, none of the networked teachers were available to participate. The teacher participants represent a wide range of school experiences, and experience levels. I knew three of the teachers through prior work experiences, so their participation reflected convenience sampling. The final participant came after meeting for a few minutes at a national conference and an email request.

**Gertrude.** She is a teacher of color and entered her third year teaching at a large urban public school in a large midwestern city. The school has a diverse population with students of color as the majority. Her school also has a high reduced and free lunch program. She teaches sophomore English. Her teaching philosophy focused on social justice teaching and culturally responsive concepts and materials into the curriculum. She often supplemented the curriculum with multimodal texts as a way to bring representation so the students can see themselves in what they read and watch.

**Monica.** She is a white female teacher at a suburban school outside of a small city in the Midwest. The school is mostly white and middle class. One third of the students take advanced placement courses. For Monica, she teaches some of the pre-AP students in her Honors English

10, Creative Writing, and The *Bible* as Literature courses. She participated in a university writing program for teachers. The writing program influenced her pedagogy to build writers through social writing peer groups and dialogic practices. She engaged in reflective practice with her English department colleagues. She is a new mom and has taught for over a decade.

**Beatrice.** She taught in a large urban school district before moving to a Midwest suburb. Beatrice teaches AP English literature at a suburban high school. Her school is majority white, with few students of color. Beatrice still feels new to the AP world of teaching even after having taught it the past few years. She enjoys teaching students and seeing their learning growth throughout the year. A part of her teaching includes the use of humor and making personal connections to each of the students. The personal connections extend to finding ways the texts relate to the students' lives. Beatrice identifies as a white female and has taught for over 15 years.

**Peter.** He is a white male teacher. He teaches English at an urban school in a Southern midwestern state. The student population is diverse with 60% as students of color and over 50% of the school utilize the reduced and free lunch program. Peter created a food literacy program that combines English literature and food. The food literacy was inspired, in part, by his past experiences of being a cook before he became a teacher. The food literacy course was designed to build community and engage the students with the texts in different ways. He believes in empowering students by allowing them to build their voices and sharing their stories. Freire's (1996) "humanizing pedagogy" represents a core value of his practice.

## **Chefs**

My definition of chef included any of the brigade system roles: pastry, sous, executive chef, chef de cuisine (Jones, 2014a, 2014a; Starbuck, 2017). The chef separates from the cook

and the home chef through experience, knowledge of theories, techniques (Hass, 2006). And yet, some of the chef participants invert that ideal of the classically trained chef through exploring culinary knowledge and theories through experience rather than formal training. Each of the chefs' culinary experiences provide a unique blend of experiences. Some of the chefs have national following and notoriety amongst foodie culture. Because I do not have any chefs in my direct network, I had to ask within my network if anyone knew a chef whom I may contact. I also sent out many emails and Twitter direct messages. The chefs received emails or direct messages after I read about them in a newspaper article, local midwestern city paper and national newspapers. I went to their restaurant website and found the contact information. Two of the four participant chefs came from my national search. One came from meeting them at a national conference. And another came from a network connection. The location, the restaurant type, gender, nor their ethnicity mattered to the study. The only bounded element was that they had culinary experience as a chef.

**Anne.** She identified as a white female. She teaches culinary skills and food preparation to inmates inside of an East Coast prison. She went to culinary school in the 80's and has had various roles within the kitchen brigade system such as pizza chef, saucier, sous, chef de cuisine. However, she has never been the executive chef of a restaurant. She also currently teaches writing and is a part of the technology department at an East Coast university.

**Kate.** She runs and operates a nationally recognized bakery in a large city in the Midwest. She was nominated for a James Beard award. Even though she did not go through culinary school, she learned through working at several award winning bakeries in a large East Coast city, and staging for a short time at two midwestern bakeries. Kate returned to the Midwest and began selling baked goods from her parents' kitchen. The food was so popular she opened a

bakery. Being an active community member and choosing a city center neighborhood was by design. Kate worked to build community relationships and ways to involve the bakery in community projects and social justice activism. She values paying living wages and constructing a democratic environment with her employees. Kate has written and published a cookbook, and teaches cooking classes.

**Clarke.** As a child growing up in the Yucatan, he learned to cook working his way through the brigade system. He began at age 11 as a dishwasher and moved his way through various roles inside hotel kitchens. In the late 80's, he immigrated to the United States in his 20's to a Midwest southern city. He started work in construction before seeing an opportunity to go back into the kitchen with a food truck. The food truck's popularity grew and he opened his first restaurant in the late 90's. Since then, he closed and opened a new restaurant that focused on his Mayan Indian heritage. His food has been nationally recognized through newspapers and magazines. As a community member of a southern city, he appreciated the responsibility that he has to build relationships and be an active member that fights for social justice.

**Francis.** He began learning from his father at an early age with the family restaurant. Francis did not attend culinary school. Instead, his schooling was learning from and with his dad and using the internet to build a supplemental knowledge of techniques. He has owned his own business for over 40 years. His restaurant sits within a blue-collar suburb community outside of a large midwestern city. Francis made a strategic decision to locate his restaurant in that community due to the access of several thousands of employees for a strong lunchtime crowd. For him, cooking represents a connection to his father and their Italian heritage. At the same time, he sees himself as more than food with an Autism foundation he built. He is a father of an Autistic son and the foundation helps him give back to local schools in need of sensory rooms.

**The Setting(s).** The setting of the study occurred in an online space. The online only space is a result of the current COVID-19 pandemic that has plagued the United States. The interaction happened through an online software program such as Zoom, and phone calls. The use of online software programs or phone conversations allowed the dialogue to be recorded and transcribed. For my part, I conducted the interviews from my home. The participants interviewed from their homes, and place of work.

### **Data Collection**

To understand the phenomenon of creativity, interviews represented the majority of data, and more to the point, the participants' shared narratives. The COVID-19 shelter in place required a use of remote interviews using Zoom software as the main source of data. The use of interviews provided a way to humanize the participants through their shared stories and practices. I received artifacts such as notes, lesson plans, curricula guides, websites (**Appendix C-D**). The artifacts acted as supplemental data. The use of artifact resources allowed the participant to share their stories and experiences around a focused object (Pahl, 2004; Pahl & Rowsell, 2010; Roozen, 2010; Smagorinsky et al., 2010). The artifact, in some instances, embodied their narratives of a creative experience that can highlight a positive or negative event (Pahl & Rowsell, 2010; Smagorinsky et al., 2010). The artifact as an interview tool provided a ready-made talking point to explore their creativity in practice and layers of connected resources (Bakhtin et al., 1981).

I conducted two semi-structured interviews with each participant (**Appendix B**). The interviews took 25 minutes to an hour. Each of the interviews and live plans were recorded. A transcription service transcribed the interviews. The first interviews began with structured questions to establish a theme or point of interest (Glesne, 2006). I asked all participants to

define creativity and resources. In asking all the participants to define the terms, it formed a baseline to reveal how the fields intersect and diverge in understanding and practices. The second interviews began with follow up questions seeking clarification or elaboration that stemmed from the first interview.

The semi-structured interview allowed the participant to guide the interview based upon their responses and allowed a natural dialogue to form. The participant's voice and story led the interviews (Stroupe, 2016). During each interview I wrote notes using thick descriptions with logged details (Glesne, 2006). Besides the interviews, I conducted a live plan with the participants. The live plan allowed me to observe the participants providing meta-commentary of their practices. They voiced their thoughts and decision making using resources while planning (Prior, 1995; Stroupe, 2016). Even though I only conducted one "live plan" observation with each participant, I recognize within that observation of an action, the participant will embody and reflect their layered practices.

At the end of the second interview, I informed the teachers and chefs of the live plan's purpose and function. The purpose of the live plan provided an opportunity to observe teachers and chefs talk through their planning of a lesson, activity, project, unit, meal special, or preparation of their kitchen in order to hear critical practices, what, if any, resources are used, and how they use resources. Each participant had 20-25 minutes to plan. Three of the live plans went over time because the teachers wanted to continue planning.

In two instances, the participants took me through their post-planning or preparation efforts. Beatrice designed and made several key documents and her Google Classroom. She explained her process and reasoning. Francis recapped his morning food preparation routine and explained what he did and why. Then, Clarke took me through a hypothetical planning for how

he does the menu specials. Of the four chefs, Kate conducted a live plan for her Thanksgiving menu. Anne constructed her plan of a menu and the day one plan for her culinary course. Three of the teachers engaged in a live plan a lesson, activity, and unit.

After each live plan, I conducted a quick interview with each participant asking clarifying questions about practices or connected resources. I individualized the questions for each participant based upon their live plan and my notes (Table 1).

Table 1. LIVE PLAN FOLLOW UP PROTOCOL.

Topic of Interest	Example questions
Resources: To investigate more about the mediation or sociocultural layers.	<p>You mentioned your PLC as an influence, could you tell me more about how the PLC originated? How does the PLC function?</p> <p>How did you hear about the Facebook group?</p> <p>What conversations do you have with other teachers?</p>
Practices: To investigate about the practices and in what way they reflect: imagination, improvisation, trial and error, experimentation	<p>How did you decide the use of, the 60 Minute clip, or Teen Vogue, Vox. Now see this. Now hear this or that?</p> <p>How do you decide which recipe to use?</p> <p>Is this technique in terms of the practice of going through the texts and going through websites and then going back to your team, is that something you learned in your other [place of work]?</p> <p>How did the idea [of questions] come about?</p>



After completing each interview and the live plan, I wrote a reflective memo. It allowed me the opportunity to record my thoughts and initial analysis of the participants ideas and practices (Glesne, 2006). The memo contained my initial thoughts and analysis of the interview and live plan experience. It served as a supplement to the interview data (Dyson & Genishi, 2005; Glesne, 2006).

### **Methods of Inquiry and Analysis**

A transcription service transcribed the interviews prior to analysis and coding. I reviewed each transcription with the audio recording and made a few corrections to the document. Indecipherable words and phrases received a [-xxx-] mark. I conducted three coding cycles of data. Coding of data “manifests what theory would say about data and makes the researcher’s theoretical perspective on the data corpus explicit, without precluding other ways of looking at it” (Smagorinsky, 2008, p. 399). The coding cycles shaped layered views of the data that addressed my research questions, applied theories, and tools of analysis (**Appendix A**).

#### **First Coding Cycle**

The initial coding represented the participants’ words and ideas as descriptive codes (Saldaña, 2013). Descriptive coding enabled me to index the participants stories and ideas into categories. I focused them into general questions that simplified the research questions:

- What is creativity?
- What creative practices do they engage?
- What resources do they reference?

The initial categories reflected the simplified focus of the research questions: creativity, practices, and resources. The simplified approach to the first cycle of coding helped organize and view the research topics (Saldaña, 2013). I then coded the participants’ words into one of the

three categories. Descriptive coding made visible the initial index of what the teachers and chefs said. Table 2 highlights examples from the teachers and chefs in each category.

Table 2. FIRST CODING CYCLE.

Descriptive categories	Participant examples
Creativity	<p data-bbox="820 451 1414 695">Creativity is the ability to express yourself in multiple ways. When it's able to take various mediums, it doesn't just have to be with words. It can be with art, it can be with music. And it really has to come from a place of wanting to create and do something.</p> <p data-bbox="820 741 1406 947">Like giving a unique flavor to them that they like. Not necessarily make it original, but something that they adjust it to the palette, so being creative and being resourceful, and for them to understand your point.</p>
Practices	<p data-bbox="820 1039 1406 1245">I tend to ask questions. Like if I'm conferencing with a student, for instance, and I see a spot where there could be more development of the creativity that they've put forth in other places</p> <p data-bbox="820 1291 1398 1455">But the moment you call it, it gets put on the grill. So you've got to look at a ticket and figure out what's the longest thing in this ticket and start calling it.</p>
Resources	<p data-bbox="820 1501 1414 1581">My parents always encouraged me to just be a storyteller.</p> <p data-bbox="820 1627 1414 1791">The ingredient list is just the way my dad's been making it forever, same as pretty much everything else I do. I tweak a few things here and there, that I've learned.</p>

## Second Coding Cycle

In the second coding cycle, I focused on building out the domains from the first round. By building out, I moved from the simplified descriptive coding into a focused taxonomy using Leone's (2018) categories of creativity practices, and Stroupe (2016) and Manz and Suarez (2018) categories of resources. Both taxonomies helped me view the details of the coded responses from cycle one and address three of the four research questions: 1) How do the participants define creativity?; 2) In what way does creativity reflect the positioning between actor and resource?; 3) What creative practices emerge when individuals choose to use, or not use, resources?

Leone's categories shaped a more concrete view of creativity and showed practices of: imagination, improvisation, experimentation, trial and error (Table 3). It helped to organize and frame the elements of creativity and highlight engaged practices. Leone's specific practices enhanced a detailed view of cycle one domain of practices. A challenge occurred in the classifying of practices in that some practices could fit within multiple categories, and others showed fractional fits. In one example, Monica said:

... with risk taking in creativity, you always set out with a plan for what you want to do, but you have to be willing to let that plan evolve. And if it starts to head in a different direction that you're unsure of, you have to be willing to potentially follow that path, to see where it ends up.

Based upon the Leone's (2018) definition of experimentation, Monica's description of risk taking with a plan connects to making decisions based upon a focused idea or plan and analytics guide actions. At the same time, her description also fits trial and error due to adapting to a new situation based upon her uncertainty and new direction. Ultimately, I coded it as experimentation

based upon the key point of having a set plan and seeing the end result of changes. I explain later in the next chapter of the coding challenges of multiple category fits.

Table 3. SECOND CODING CYCLE: CREATIVITY.

Creativity	Imagination	Improvisation	Experimentation	Trial and Error
	<p>I want to really workshop. You know what? That's going to take like four days. I don't know why I said that. It's going to take four days.</p> <p>We're going to workshop the letter as a class. Focus on hook, evidence, pathos. All of the rhetorical devices.</p> <p>I'm thinking constantly when I get something in, for example, my house or the menu, just how can I do this with the many ways I can manipulate this vegetable? So I just pull, I just open my mind</p>	<p>I was like, "Okay, guys. Dump your water. The water that you used for your paintings, let's dump it all in the same bowl.</p> <p>I'm very much the type of person in the bakery who doesn't always measure. I like consistency to an extent, but I also like the way that things change with how the buckwheat is growing or how tart the fruit is and I'm not hell bent on.</p>	<p>... with risk taking in creativity, you always set out with a plan for what you want to do, but you have to be willing to let that plan evolve.</p> <p>And if it starts to head in a different direction that you're unsure of, you have to be willing to potentially follow that path, to see where it ends up.</p> <p>Lots of alcohol, it seems to go well with apples, but I'm going to steer away from that too, probably. And then I'm going to kind of take it in a weird direction and put sweet potatoes on this list and maybe star anise and vanilla.</p>	<p>In the process, I found that I would create one thing, one piece of this whole escape room, and then I would create the next thing, and then I'd have to figure out how those fit together.</p> <p>if you're going to use hot water or warmer water, you better plan on using the faster. It will taste like stale bread.</p>

Stroupe (2016) and Manz and Suarez (2018) provided a way to view resource types such as conventional, social, and intellectual. Like Leone's creativity and practices, coding challenges continued in resources with multiple fits. For example, Beatrice talked about her use of social media as a resource through AP Literature teacher groups on Facebook and Twitter. She said:

I can go find that post. Sometimes there's a thread where they talk about it. Or I just go through the materials and I find the materials on it and then see what their directions are and what they include and all of that, the lesson plan.

On one hand it links to social because of the forum that Beatrice used to engage the content. On other hand, I questioned if the use of social media groups have become a de facto element of teaching and thus a link to conventional. And it possibly could link to intellectual, if the content thread moved into talk of praxis that built dialogue of learning. In the end, I placed it as social due to the forum. I also explain the challenges of organizing the data into resource categories in the next chapter. In Table 4, I provided an example of the coding of teachers' and chefs' resources using Stroupe's (2016) and Manz and Suarez's (2018) taxonomic categories.

Table 4. SECOND CODING CYCLE: RESOURCES.

Resources	Social	Conventional	Intellectual
	my professional groups on Twitter and Facebook there is a group of AP teachers that share activities...	I've been working with this book. It's the <i>Common Core Companion, the Standards Decoded...</i>	Allied Media Project hosted it. It's through the Educational Justice Network here
	I get it [customer feedback] both ways [in person and online], but I get it mostly right directly to me.	I found this country fair cookbook from, let's see, 1975.	K-A-T-A, I think it is. I think that's what it's called. It's a scientific way of thinking, I guess, when you're trying to solve problems.

While Leone's categories provided a stronger view of creativity and practices, the coding missed addressing the final research question about Scollon's (2001) MDT, How do resources mediate creativity? So, I expanded practices by applying Scollon's (2001) MDT of *appropriation* to view the history and *action* to note engaged practices that did not necessarily fit in Leone's categories. In taxonomic coding for MDT as NoP, I began to view the connections between resources and practices (Table 5). For instance, Monica shared how the Escape Room happened:

I think we had, I don't remember if it was PD or a conversation with just someone else in the building, but I found out that we had breakout EDU boxes and I was like, I need to plan something for those, I need to figure out how those could work. And I ended up deciding to just go for it and try it with that unit.

Monica's interview passage showed how she linked the planning of the Escape Room with the resource of the breakout box. Although the initial connection illustrated imagination, Monica's origin of the breakout box plan happened as a result of the colleague talking about the box. The anecdote showed the mediated resource, colleague, with the action of planning. Meanwhile for appropriation, I coded statements that conveyed the history of or past moment of a practice. Kate said, "I have some good questions. I don't feel like I should move forward too much without running this by some people on the team. Because that's how I typically go about recipe testing." I coded the example as appropriation because she explained her recipe testing practice as a reoccurring practice. Table 5 provides examples from teachers and chefs of coded appropriation and action passages.

Table 5. SECOND CODING CYCLE: MDT AS NOP.

MDT as NoP	Appropriation	Action
	...our unit at the end of the year in honors nine, we do a Gothic literature unit...	I don't think there isn't a time when I'm not planning, honestly. Even at the children's museum yesterday, or just thinking about how do we learn.
	Usually [pre-covid], we use really beautiful micro greens. We use some lettuce from the farmers, we use just fresh Arugula from the farm. It's just something that's very delicate, fragile...	So the prep is to organize the food. So the first thing I have to do actually is to order food from Peapod.

The second cycle allowed me to think through the data of how they defined and practiced creativity, possible trends in resource types, and mediated practices. However, there remained questions about the critical positioning between the resource and actor, and the mediation of resources. So it necessitated a third cycle of coding data that focused on critical discourse analysis.

### Third Coding Cycle

I viewed the coded data of the resource domain, the MDT as NoP category, and creativity domain. In addition, I reviewed the transcripts as well. Coding for critical discourses provided insight into the practices of using resources and how resources mediated practices (Table 6). It helped me view the data for power relations, and included and excluded voices (Bazerman, 2004b; de Certeau & Rendall, 1984; Fairclough, 1992, 2012; Rogers, 2018; Barbara Rogoff et al., 2016; Wynhoff Olsen et al., 2018). Table 6 provides teacher and chef examples of the coding

for critical discourse and intertexted resources in the domains of creativity and resources, and MDT NoP.

The examples represented an additional coded layers of existing coded dialogue. Coding critical discourse helped me recognize the elements of culture and power through creativity, engaged resources, and even practices. Peter said, “[b]ecause in designing this course and putting the keys in their hands...” I recognized that as empowering the students by giving them a say in the curriculum. He inverted the curriculum power structure. In other examples, the critical discourse forwarded culture as a voice over the dominant discourses by chefs and teachers. Critical discourse showed the element of power pushing back through mediated sociocultural resources. Using critical discourse also provided a connection to view and code the intertextual layers of resources and mediated resources. The intertextual layers highlighted use of language to reveal the histories, experiences, and multivocal significance of resources. “Intertextual analysis draws attention to the dependence of texts upon society and history in the form of the resources made available within the order of discourses” (Fairclough, 1992, p. 195). In other words, intertextuality shows the impact of resources and who or what influences the individual.



Table 6. THIRD CODING CYCLE: CRITICAL DISCOURSE.

	Critical discourse	Intertextual
Creativity	<p>Because in designing this course and putting the keys in their hands, I'm putting a lot of faith in them but I'm also really going to be listening closely and saying, 'All right, if it didn't work for you to do this, then we don't want to do that. If your teachers didn't give you a lot of choice and that's what you really needed, I want to make sure you have choice.'</p> <p>Each person has their own season. My mom has that season, and maybe my aunt has better. I have no idea. It's one of those things I'm trying to figure out even today.</p>	

Table 6 (cont'd)

Resources	<p>I went to this NCTE session with Ibram X. Kendi. I looked at one of his articles in the <i>Atlantic</i>, “Who Gets to Be Afraid in America?”</p> <p>That's a recipe that, to me, really ties to those places and isn't quite as in touch with my own deep creativity of myself.</p>	<p>one of our professors was like you should do an interest inventory at the beginning of the year. I think it was just like, ‘Oh, yeah that's a first day thing. Let's do it first day. I'll do this interest inventory.’ But it's been something that I've done pretty much every year.</p> <p>In a way, Amy's classes and my classes were collaborating with each other on that without even knowing it, because we were keeping notes on the things that they were bringing up during discussions, and then we were coming together and we were saying, okay, there's this in common. Our kids are all picking up on this big understanding, so we're going to make sure that we pull this into the escape room. They were part of the design without knowing that they were part of the design, and so they weren't setting out to be a part of it.</p>
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Table 6 (cont'd)

MDT NoP	<p>I would also like to have black women be at the center of this unit, if you will." Because especially with Breonna Taylor, with say her name, black trans women. There are so many women who are ignored, who are beaten, who are killed that I'm like, "We need to center this conversation on, what does it mean to be a woman?</p> <p>I see the dish as how can I do this? Or make a twist out of this and make it like more unique. From my area. So I'm thinking about, well, how would it do it back home? Would they braise it? Would they the grill it? What would they do to it?</p>	<p>this document I created off of a template that someone in those Facebook groups posted.</p> <p>One of course, is sour cream So I know that, that's something that I will start with, and then kind of a butterscotch just popped out to me, maybe kind of thinking about the combination of caramel apple pie and sour cream apple pie. Maybe that's where that's sort of coming from. And I'm going to skip over the cheese because I'm trying to get away from that.</p>
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The focus for discourse analysis varied by the research question (**Appendix A**). The questions dictated how I analyzed the data, and what theory framed the findings (Smagorinsky, 2008). The research questions guided my coding process and ways to view the data using particular frameworks such as intertextuality (Bazerman, 2004; Wynhoff Olsen et al., 2018), critical discourse (Fairclough, 1992; Rogers, 2018). In particular, the coding focused my observation of the trends that emerged within the data concerning creativity, use of resources, and practices within and across the fields. The coding process allowed me to notice theoretical connections to Leone (2018) and Scollon (2001) in order to construct an understanding of creativity in practice.

The past two chapters introduced my conceptualization of creativity in practice, the participants, and the methods of analysis. In the next chapter, I will present the findings beginning with: 1) defining creativity; 2) how creativity or *recreativity* reflects the positioning between actor and resource?; 3) the creative practices; and 4) how resources mediate creativity.

## CHAPTER 4: CONSTRUCTING THE NEXUS OF CREATIVITY IN PRACTICE

In this chapter, I will share the findings to the first research question that builds an understanding of creativity in practice. The first section explores the conceptual elements of creativity. The teachers and chefs shared ideas and stories shape the view of creativity against the existing research. Next, I explore resources and its positioning to creators. Then, I show what practices creators use when resources are engaged. The final section illustrates how the elements of creativity, mediated resources, and practices form the nexus of creativity in practice. On one hand, the findings reinforced existing research. On the other hand, the sociocultural view shaped a nuance of creativity in practice that has not been fully explored.

### **Creativity defined versus practiced**

Existing research focused creativity as a cognitive reflection of select “gifted” individuals, problem solving abilities, from a muse, or a new product (Diakidoy & Kanari, 1999; Fryer & Collings, 1991; Kaufman, 2016; McGuinn & Stevens, 2004; Sternberg, 1986; Feldman & Benjamin, 2006; Kind & Kind, 2007; Pringle, 2013; Ryhammar & Brolin, 1999; Sawyer, 2000, 2012). Throughout the interviews, the chefs and teachers shared their views of creativity. They offered definitions, reflected about creativity in practice, and even provided a live demonstration of creativity in practice. The first research question asked, what is creativity? One of the challenges with current research, from the culinary and education fields, showed in the limited framework of creativity as ontological and cognitive (Feldman & Benjamin, 2006; Kind & Kind, 2007; Pringle, 2013; Ryhammar & Brolin, 1999; Sawyer, 2012). Research missed building a sociocultural definition. Interestingly the participants’ definitions of creativity reflected the ontological and cognitive constructions.

## **Chef definitions**

The chefs used words such as ability, new, and internal, which aligned with existing research. One of the chefs, Kate said:

I think creativity is being able to make something out of nothing and go with it. I connect it with what I think of as improvisation. I think the emphasis on the creation in the word, you're inspired by something in the world. You then make something out of it... really accessing what's deep inside of you and that's the creation of something new.

Her definition of creativity echoed creativity as ontological by focusing on the novel product and from nothing. The chefs' and teachers' definitions reflected how creativity builds from the individual.

Others shared Kate's framework of creativity focusing on the self. Francis, another chef, spoke about being self-taught:

So, everything I do, I'm self-taught. So basically what that means self-taught is I try something and I'm not scared to fail. So I try it and if I like it, I go with it. If I don't like it, maybe I tweak it. And if I don't like it at all, I just stop what I'm doing and move on to the next thing.

His constructed view focused on himself as independent and embodying creative identifiers. The identifiers of self-taught, fearless, and willing to try form from the person:

I think where it starts is you have to be yourself. And being yourself makes you creative... makes you the person who you are. If you try to be creative by looking at somebody else's project or what they're doing or what they're saying, it's just not going to work. So being creative, we've all got it, but you have to be creative within yourself. That's the only way you're going to succeed, is being creative.

At first glance, Francis aligned with the cognitive and ontological form of creativity. It emanates from within and by the individual. Francis' creativity reflects *his* person and *his* success. However, a shift occurred in Francis' discourse about how he learned his creative practices. He lovingly spoke of his father:

My father was never a chef, but he could have been a chef, and I could never be anything close to what my father was. Watching my dad over the years, I followed him around, I watched him. My dad could do things, growing up in Italy, he might have had a third-grade education. Back then in the 40s, it was a lot different. But he could do anything. To use an old saying in the Boy Scouts, two sticks will light a fire. I mean, my dad was that type of person, so when it comes to being a chef, my dad, he could have been a world-star chef. And I learned from him, and I still haven't learned enough to be on his level.

But I've learned enough.

Francis's father taught him the pizza business and shared the recipes. A paradox formed from his view of creativity. While he reflected a cognitive and ontological definition, he demonstrated a more sociocultural frame and epistemological construction as he talked about how he learned and developed his creativity.

### **Teacher definitions**

The teachers expressed a similar reflection of cognitive creativity by associating it to an ability, imagination, outside-the-box thinking. Peter, a teacher, said, "I think of it as an inner expression, this idea of creativity is like something that's already inside of us... I think sometimes creativity is just thinking about a new way to do something." Beatrice reinforced the idea of imagination, "Thinking beyond the norm in part somewhat with imagination, being able to utilize the imagination in order to help you create or make." Gertrude's definition linked to an

ontological construction of self. She said, “it has to be integral to who you are... it's more of just wanting to showcase your ability, because everyone has different traits and different styles. But, to be creative is like, ‘I'm going to think outside the box and I'm going to be proud of what I can produce.’” The constructed views of creativity by the chefs and teachers appear to reinforce the long-held belief of cognitive and ontological representations of creativity.

Yet, similarly to the chefs, as the teachers spoke about how they learned creativity, their perspectives shifted from the cognitive and ontological to the sociocultural and epistemological. Peter talked about the creation of his Food Literature course:

thinking about the conversations in the class and what they let us do pedagogically. And also just like in the broader sense of just thinking about how we were as teachers and students, this relationship. The third piece of this, and I'll just go to the Bread Loaf connection, is I took a class and this like blew my brain.

He entered into a conversation with his co-teacher collaborator, Joe, to design the course with the approval from their principal. Peter acknowledged the collaborative input from the students as well in shaping the course through their feedback. A Bread Loaf School of English course represented the final voice in the conversation to build the course.

Peter, and the other participants from both fields, may be correct in viewing creativity as an inner expression and existing trait; however, the significance revealed a more complex view of creativity. It may be said that Peter's example lent itself to a sociocultural view too easily. Yet in another example, Gertrude talked about the social contexts that inspired her to become a teacher:

So I would say by ninth, 10th grade, I was like, ‘Oh, I'd love to be a teacher because I want to encourage creativity.’ In my head, I thought like, ‘I want to be what Mrs.



Trombley was for me. I want to give that to other kids.’ Give them the chance to really believe in their art and their production skills.

Gertrude’s experiences with teachers and their support of her writing, helped shape an epistemological construction of her creativity. Moreover, she also recognized that teachers have a sociocultural responsibility to foster creativity with their students. Gertrude’s view of creativity highlighted the inspirational and collaborative elements of creativity.

The definitions from the chefs and teacher defined creativity cognitively. However, learning creativity and in practice occurred socioculturally. The contexts of conversations, mentor encouragement, embodied family practices recentered creativity through more sociocultural reflections. It revealed an epistemology of creativity.

### **Learning creativity through sociocultural experiences**

Sometimes, the idea of creativity occurs as a result of an inspired muse or *ah-ha* moment of serendipity. That view misses the layered voices that help shape ideas and practices. The layered voices represent the sociocultural element of resources. In turn, the resources provide the nuanced teaching and guidance for building the epistemology of creativity. As I explore creativity through a sociocultural frame, I am illustrating how resources reflect a heteroglossia of Discourses through a variety of resources such as: experiences, family, texts, media, etc. (Bakhtin et al., 1981; Manz & Suárez, 2018; Stroupe, 2016). The resources help shape the creator’s creativity in practice.

The teachers and chefs shaped the sociocultural and epistemological frame of creativity through their shared experiences with family, teachers, and colleagues. Many of the participants talked about family members such as parents or their children within their explorations of

creativity. The experiences with family and colleagues represented a touchstone upon the participants' creative growth.

The social and cultural connections of family, colleagues, and mentors illustrated the heteroglossia of creativity. Besides Francis' loving reflection of his father as a key figure in the development of his creativity, Kate said her parents supported and allowed her to be:

I think it [her creativity] probably comes from wanting to be the center of attention all the time when I was a kid. I was very much a natural performer. My parents let me do that. I was the older sister, I was bossy.

Her parents' support became one ingredient that formed her mix of creativity that she embodied as the owner and head baker. Kate's creativity grew from her parents' support and freedom to be and do. Prior to opening her own bakery, she learned in two New York City bakeries and produced a YouTube baking show. The show illustrated her background in theater and improv, which grew from her parents' encouragement. Instead of a show, she moved on to teaching pie demonstration classes. Teachers also shared the social significance of family impacting their creativity.

Beatrice shared a story that reflected the paradox of a cognitive, ontological view against a sociocultural, epistemological creativity:

there's always a repurposing of materials, especially within art. My mom is an artist and I consider myself an artist too. And I find that I see things and see, oh we could use this for something else. Not just the Danish butter cookie repurposing as a sewing kit, right? Or the Country Crock being a Tupperware in the fridge.

While she self-identified as an artist, a trait shared with her mother, her creativity through repurposed materials formed from her mother and father. Her father also demonstrated creative acts through repurposing materials.

My mom always buys boxes of wine, right? And the cardboard on those boxes is really sturdy and thick. And my dad, instead of just pitching the boxes, he would rip the bag out and rip the plug thing from the bag, the wine inside. And he would cut the boxes to hold papers. He would cut the boxes to be magazine holders that you would pay a lot of money for... But instead he saw a lot of potential in that single artifact and being able to use it in such a wide variety of ways.

Both of her parents represented creativity through finding value and potential in materials to be repurposed. In her teaching practice, she forwarded the creative repurposing into a teaching activity. She bought pipe cleaners, balloons, wax, and other cheap materials from a dollar store. The activity pushed the students to repurpose materials into Grendel as they saw him based upon the text, *Beowulf*. She challenged them to see the potential of the materials just as her parents showed her. In both fields, chefs and teachers pivot from the self-labeled, isolated creative individual to a socially and culturally constructed creator.

### **The resource as teacher**

In each of the participants' shared stories, continuous learning highlighted another element of creativity. The learning produced creativity in direct and indirect ways for the chefs and teachers. Chef Clarke talked about learning from other chefs:

To me as a personal chef, I keep adapting. Even though I'm getting older, I'm 52, but I'm attached and I was watching the young chef coming along and I just vision and watch what they do. And how can I incorporate that into my cooking? That's how I see it. So I

keep getting those ideas and create new ideas with the new evolution as it goes along. I'm not really close minded in that aspect to that. I keep learning every day, honestly.

Clarke's admission about learning from younger chefs illustrated the sociocultural epistemology of creativity. The practice of observing and talking with younger chefs added to his notions of creativity. It illustrated a bricolage of voices and experiences. Even though the example may be convenient due to the learning reflected in a social environment of the kitchen, Clarke's learning through observation reflected how he learned new techniques. He never enrolled in culinary school. His schooling occurred through experience in kitchens since he was in middle school:

I start working in the early '80s as a dishwasher, and then I started working making quesadillas, basic stuff. Sandwiches, stuff. I think what I learned over the years is that... I worked for French chefs back home in Akumal. I worked with Spanish chef. Germans, not a whole lot, Italians a little bit. Obviously each one has their own techniques to do stuff.

Clarke worked with and learned from international chefs to shape his understanding of practices. The continuous learning forwarded new ideas and practices that may be used in a future creation.

Even for teachers, creativity built from continuous learning highlighting multivocal layers of social and cultural resources (Bakhtin, 1981). Gertrude took a summer professional development program of Abolitionist teaching practices:

Allied Media Project hosted it. It's through the Educational Justice Network here in [the city]. A couple of my friends had organized it. Really, we were talking about reimagining the space and applying... or reimagining schools and what that looks like, looking at zero tolerance policies. Looking at the prison school pipeline. Looking at curriculum. It was great because it was led by the youth. They were the ones asking questions... Where it

was very much student led. We as teachers, the adult allies there, we're just there to listen.

Gertrude forwarded many of the learned ideas into her live plan for the 2020-2021 school year. Similar to Clarke, the continuous learning reflected rooted elements of Gertrude's practices. Both fields mirrored each other in defining and framing creativity.

The views of creativity by both fields illustrated how initial definitions reflect existing cognitive and ontological representations. At the same time, a paradox formed from their exploration of their experiences learning and developing creativity. Their sociocultural and epistemological constructions of creativity revealed the complexity that research underdeveloped. Creative layers of practices form from experiences (Certeau et al., 1998; Sawyer, 2004, 2011, 2012). The layers illustrated a heteroglossic creativity emphasizing learned practices from and with family, friends, mentors, and colleagues (Bakhtin, 1981). Moreover, the significance of mirrored ideas showed the two fields connect through social and cultural experiences. The parallel ideas signified two fields that complement each other rather than attempting to discursively dominate (Abbott, 2014). The participants also revealed an element of creativity that has yet to be explored in depth by research, inhibitors.

### **Inhibitors**

Although the participants spoke of what made their creativity, they also spoke about creative inhibitors. One of Leone's participants mentioned the idea of "constraints" (2018, p. 10). The context of constraints showed the meaning to be a self-imposed restraint on time or cooking. My research illustrated inhibitors, external and internal, presented pauses or halts to creativity. The acknowledgement of inhibitors added a nuance to creativity that research overlooked concerning practices. Within the scope of the research, inhibitors, when they occurred, limited or

paused creative practices. Inhibitors frequently acted as a linchpin for creativity. Rather than prohibiting practices and the completion of a product, inhibitors produced creativity from the individuals and their practices. The creativity of practices came from having to find a different way of operating that allowed continued progress toward completion.

**COVID.** The COVID pandemic and quarantine represented an unintentional external inhibitor for all participants. The interviews occurred during the early to mid-summer of the quarantine. COVID and the quarantine policies acted as an inhibitor to some of their practices. It shaped and seeped into the anxieties of the participants. Clarke acknowledged the challenge of owning and operating a restaurant during the pandemic. “It's been hit hard because there's COVID, and a lot of restaurants are, some are closing, some are not, some are just holding up, and all kinds of barriers.” The pandemic shaped uncertainty and anxiety amongst the participants. Kate said:

I mean before COVID, yeah, it was very much able to run without me, but now I am there much more because I'm really the only one ... I'm the most consistent one handing things to customers, outside of a couple of other people.

As the chefs grappled with the pandemic as inhibitor, so did the teachers. During the second interview in July, Monica expressed her anxiety about the upcoming school year. “I mean, obviously we're all looking for these sorts of things that we can possibly do with our students. And I don't know that any of us are feeling particularly creative right now, just because we're so overwhelmed.” Monica directly linked the pandemic as a creative inhibitor. Beatrice, and a few others at the time of their interviews in July 2020, remained uncertain to their districts’ plans for teaching:

we haven't been told by our district what that will be. I knew that I'd want to talk about those things on a digital platform, because even though we were remote since the 13th of March, the expectations for the end of the school year were not what they are going to be this year. This year we're actually going to be teaching whereas last year it was like a review and just trying to stay connected to students.

For both the chefs and teachers, the pandemic shaped a new set of contexts and uncertainties that altered their approaches to practice. It shaped uncertainties that bled into their practices. The chefs grappled with new business practices, loss of potential income, resource availability, and the responsibility toward their employees. Teachers faced new practices in the virtual environment, new expectations, questions of resource availability, and the contexts of their students' lives. However, even though the pandemic inhibited the participants, they saw ways to work around the uncertainties rather than succumb to a prohibition of practice. Beatrice, who acknowledged the inhibitor, also inverted the uncertainty into a possibility of practice with the teaching materials she found for the Fall semester. "I've been copying a lot of it and just holding it and saying like, 'Well maybe I'll be able to get to use this,' and now I can."

Similarly, Kate inverted the inhibitor to be a possibility for creativity in practice. For Kate, as a business owner, her responsibilities and practices move beyond the baking into managing. Like teachers, the expanded notions of practice move beyond initial job title turned gerund. Kate saw COVID as an opportunity to rethink her managerial practices rather than a prohibitor:

Also, I think being there so much during COVID and now kind of being around my employees all the time, so every employee that's working there has a relationship with me because every single one of them works a shift with me now. Whereas before, there were

some employees who I never really interacted with that much, other than to just say hi or to have their employee review. Now, I'm getting to see firsthand their work, how they're doing and what their questions are and what their concerns are.

While the pandemic impacted all of the participants to varying degrees, the participants used it to spur new practices. Each of the participants also spoke of other external inhibitors to their creativity. In particular, teachers spoke about standards and mandated curriculums. Meanwhile, other participants' external inhibitors referred to the availability or lack-thereof of resources such as technologies, other people's knowledges, and ingredients due to the growing season.

**Standards.** The role of standards as possible limitations impacted Peter's practice and his live plan. Standards appeared to lock him into a mandated curriculum and particular approaches. However, in his respective practices, Peter found ways around standards. Peter understood how standards limited teaching. "So, the standards, I think they can be limiting. If we're getting kids ready to take a common assessment on Friday about textual evidence and then we say, 'You haven't gotten it.'” Through the mandated use of a common assessment, it presented a view of students as data. He explained the use of standards and assessment as grouping students as binary categories of those who mastered and those who did not. Peter explained that standards could act as a bridge or stopping point:

the standards don't have to limit, that they can encourage, and that there can be a sort of porousness between them. They're not so set. Either between each other or between us and them... what if we try to get you ready for AP. If we get you ready for AP, you're going to have all those standards pretty well. So, it's like trying to see above the standards, too, and try to get the kids to say, 'This isn't a standard of conformity. This isn't a standard of limitation. This is something that we can go way beyond.'



## Seeing past inhibitors toward the possibilities

It is through his creativity, that Peter sees possibilities. He said other teachers may be confused or hesitant to see the possibilities. Even students, he added, lock onto one and cannot see the layers that build unit after unit, lesson after lesson. Peter problematized common assessments and how they pigeonhole student success to a percentage and mastery. Teachers and students miss out on the work completed throughout the unit. Peter's creativity with the standards sought ways to humanize and reinterpret data by building transparency:

I don't want to surprise you guys. This is the work we're going to be up to. Textual evidence, themes, central idea, conflicts, characters. This is our work. But this is not our only work. But this is what we will be ... This is the language of our work. This is the skill work we're going to be doing. This is the nuance work we're going to be doing and also we're going to come back to all this.

He reimagined how transparency of standards can work with the students' agency and ownership. Instead of accepting standards and prescriptive curriculum as an unchallenged inhibitor, it spurred his creative practices to find ways beyond the inhibitor.

**Unthought and unknown.** Although Peter enacted creativity to work around standards and curriculum, Beatrice, in contrast, welcomed the AP Standards and curriculum guide. The standards worked as an external inhibitor for Peter, whereas with Beatrice, they became an internal inhibitor. She struggled with an inherited AP Literature course and its dated curriculum framework:

The [AP Literature] framework before was much looser and much vaguer and the attitude was kind of, well you should know. You don't know what your kids need to know? Well,

you should know, kind of thing. And it was also text heavy in terms of needing to know a text, even though that text is not necessarily what they're assessed on at all.

Beatrice's struggle represented the internal inhibitor of the unknown impacting her practice. The inhibitor built multiple layers upon her lack of knowledge. Not having the standards and guide produced a lack of confidence and knowledge of the revised AP curriculum. Even though Beatrice has over 15 years of teaching experience, she began teaching AP English Literature two years ago. The teacher who taught it moved on to another position in another district. That teacher left the old curriculum guide, in which the texts were not current to the revised AP test. To Beatrice, the prior teacher's scope and sequence felt too confined to structure and not student centered. She said, "I didn't feel like I was following it very well and I didn't understand parts of it." Additionally, she struggled with only relying upon the Common Core:

I've been really, I was struggling only having the common core to guide me when I knew that the test wasn't really testing the common core. And these skills accomplish the common core as well. It's not like it ignores it, they just kind of go hand in hand. It's just, I mean if an administrator asks, well what common core base is being done with this lesson? You have to dig a little bit and explain it, but it's all easy to do.

Beatrice's experience helped make use of the Common Core standards as a stand-in. She recognized a clear distinction in skills and objectives between the AP and Common Core. She taught and built the course from the existing curriculum and standards:

I didn't feel like I was following it very well and I didn't understand parts of it and she's not available to ask because she's left the district and this, that and the other. So I scrapped it and went with following the skill spiraling. And there are some suggested

activities that I mostly did and supplemented with other things that I felt were beneficial or worthwhile.

The unknown of the course inhibited her best practices. However, she still taught and provided supplemental materials to enhance the curriculum. In the end, the inhibitor impacted how confidently she planned and guided the curriculum for the learners.

As a point of contrast between Beatrice and Peter, inhibitors limited and restricted elements of practice such as planning and knowledge of the curriculum. While Peter thrived, Beatrice survived. The inhibitor for Peter acted as a momentary pause and propelled him to reconsider his curriculum and create ways to engage the learners. Meanwhile for Beatrice, the inhibitor paused her potential and forced her to navigate the unknown AP Literature curriculum with more caution and a different lens, the Common Core, to explore objectives. The contrast of the extent to which the inhibitor limited practice could be explained by the curricular knowledge and experience. Peter reconsidered creative ways to engage learners with his created and known curriculum, Food Literature. Beatrice, on the other hand, navigated a new curriculum with little familiarity of the scope and sequence. The contrast speaks to the varying degrees to which inhibitors affected creativity and practices. What remains an unknown is what allows one's creativity to thrive versus survive when experiencing an inhibitor? Based upon the two cases, it may be the amount of experience and perhaps available resources.

### **Culinary prohibitor**

Chefs also experienced their own external and internal inhibitors. For example, Anne's provided a view of an external inhibitor that resulted in a prohibitor of creativity. Working for a chain restaurant lasted a few days due to the limitation to her independence to think and create:

I worked in a Red Lobster for four days, and I couldn't take it. I just couldn't take it. And that was absolutely zero creativity. It was a production line. And I physically couldn't do it. I was just going nuts.

To her, the prescriptive operations within the chain restaurant stifled creativity. The repetition of the phrase, “couldn’t take it” further reinforced her dislike for the lack of creativity. Equating her work to a production line emphasized the lack of thinking involved and the result was a lack of enjoyment:

I mean, the restaurant world, I think that the idea of creativity is a necessity. You're going to, in the restaurants that I worked in, small, they weren't chain restaurants, these were chef-driven restaurants. And so working as a sous underneath the chef, it was always like, ‘Okay, what are we going to do tonight? Let's mix it. Let's somehow hone in on our skills so that we can draw the customers in.’ It wasn't a chain where you just kept doing.

Anne juxtaposed the chain restaurant experience to working in a chef-driven restaurant. The faux conversation of question and response of mixing it revealed the feeling of joy and responsibility toward creating. The implicit subtext of “hone in on our skills so that we can draw the customers in” illustrates her significance of creativity toward the culinary field and building a customer base for the business. Anne represented the only participant who offered an example of not overcoming their inhibitor. Perhaps the argument could be made that Anne circumnavigated it by quitting as the sole creative act for survival - albeit to a lesser extent than Beatrice’s surviving through her inhibitor.

**Inhibitor outlier.** In a point of contrast, Anne’s time as a sous chef did not require her to be creative, that responsibility lay with the Chef:

Being a sous-chef is super fun. You don't have the pressure of being a chef, of coming up with the creative stuff. But you do have to reproduce. And the guy who came there last Thursday and got the Chicken Alfredo, wants exactly what he had last Thursday, whether you were on the line or not. So it has to be, there's a certain way that this restaurant does this. I liked that role, not because it was the most creative role, but because I got good at orchestrating. That was the challenge. And I think that's where that production element of innovation comes in.

Within Anne's description of her responsibilities as a sous chef, she acknowledged the inhibitor of limited creativity. The chef created the menu and the brigade team recreated. Initially, the idea of recreating a set menu appeared to parallel her time in a chain restaurant. However, the role of the sous chef highlighted the difference in creativity. Unlike the work in the chain restaurant, she found creativity in managing the kitchen and meal tickets.

Anne represented an outlier to the other participants with creative practices and inhibitors. Instead of using the inhibitor as a mechanism to pursue creativity, she found that her only way to survive was to quit. Perhaps the example showed a restrained creativity. It could be argued that quitting represented a bold creative practice for Anne, yet her experience as a sous chef reflected a stark contrast to how creativity thrived. Anne's moment of quitting also showed a resolute and bold act that none of the chef and teacher participants replicated. She also represented the only chef with culinary school experience. The other three chefs, Kate, Francis, and Clarke, learned through experiences.

## **Learning through experience means freedom to roam**

Initially, I thought the lack of culinary school experience would be an inhibitor. The chefs acknowledged their non-culinary school background, but they never indicated it as an inhibitor.

Kate talked about the freedom of not having the culinary training:

I've sort of always liked that I didn't have as strong of a culinary background kind of holding me back from just doing things the way that work for us. But also kind of, I think allowing that mindset and flexibility, for us to know that there's always ways for us to improve.

Kate viewed the lack of culinary school as a boon for creativity. She noted the flexibility of an open mindset rather than a fixed mindset to play with food and flavors.

Clarke acknowledged the lack of culinary background as well, but noted that he learned from the many international chefs. The lack of culinary background only inhibited his practice of manipulating flavors through spices. In fact, he mentioned an internal inhibitor of laziness as having a stronger impact on his practice:

It's just sometimes I'm lazy. I mean, I agree with him [taking time to learn herbs and spices]. It's just like, I like this finding and becoming like more of like a spontaneously done, but sometimes it works great and sometimes not, but I don't know. I think I should more often to clarify more things than I guess. I don't know.

Clarke acknowledged the benefit of the practice with spices for flavor combinations. Similar to Kate, he felt a more disciplined approach to cooking may limit his creativity.

This is not to say that schooling constructed a hardline approach to food theory for Anne, rather Kate and Clarke's creative practices reflected a larger point about creativity. Inhibitors illustrated an element of creativity's messiness. The participants' shared stories and practices

made creativity appear to be seamless serendipitous moment. The fact of the matter is that the messiness of creativity illustrated the nonlinear nature of practices and inhibitors. The practices moved the completion forward, and an inhibitor paused that momentum, before the actor considered new approaches to continue forward.

### **Messiness**

The chefs' flexibility to address and accommodate the inhibitor helped move them forward to adapt the situation. At the same time, the chefs do not see them as limitations per se. They readily accepted the messiness of creating. Messiness referred to the non-linear start to finish production practice. Clarke talked about the messiness of creating a menu special only for it to not work out well:

I mean, not always work out the way I think. Sometimes: oops. You know what, this doesn't go after actually finish the product and raise a service. There's a point where we need to do like a last minute call and tell the service, Hey, you know what? This is not working out. Let's just switch it to something else. So I have to come up with something new. So this is the challenge sometimes.

To some extent teachers accepted messiness in creativity as well. Monica explained the risk of creativity as messy:

creativity is risk-taking for one thing. I think whether I'm coming at it from just my perspective as a person or as a teacher. When we ask for creativity, we ask for originality and risk taking and a willingness to make mistakes and a willingness to revise. And I think it's a willingness, being creative requires a willingness to be expressive and authentic in that expression, but not be fearful that something's not going to be perfect.

The idea of messiness was a part of creativity for a few chefs. Perhaps the idea of messiness relates more to play. The chefs and teachers seemed to accept that failure will happen and then one learns and forwards that into the next iteration of the idea into creation.

### **Triggers**

The teachers' and chefs' inhibitors revealed creativity as a result of a triggered response. Triggers move the actor to action or alter a course of action based upon external stimuli, a specific resource, mistake, or the serendipitous moment (Leone, 2018). Triggers moved creativity beyond the function of mere problem solving, which research posited as a creative function to an issue (Diakidoy & Kanari, 1999; Fryer & Collings, 1991; Kaufman, 2016; McGuinn & Stevens, 2004; Sternberg, 1986; Sawyer, 2011). The trigger acted as a starting point of practice for an idea or pivot point that transitioned to a new idea (**Figure 2**). For example, upon receiving the updated AP Literature Course and Exam Descriptor binder, she felt relief:

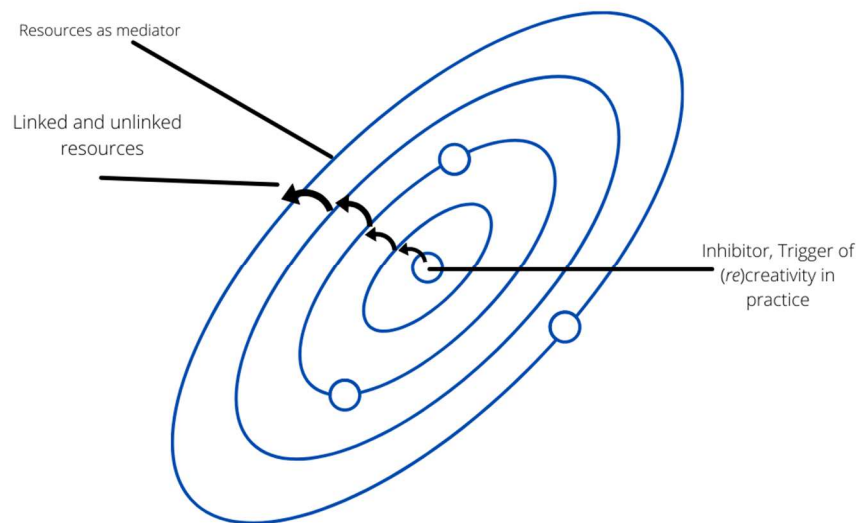
I was so thankful when I heard that they're coming out with it and this year's been kind of defunct, but I've really appreciated having it to guide my stuff around because even if I don't follow exactly what they say to do because the nine units are structured around the type of material.



The AP binder helped her reset and plan the course structure in a more coherently. It provided that confidence of sequencing units to build the students' knowledges.

**Figure 2.**

*INHIBITORS AND TRIGGERS LINKING RESOURCES*



Note. Figure 2 represents a visualization of how inhibitors and triggers serve as a starting point or pivot to a new idea. The large concentric rings represent resources that inhibit or trigger creativity in practice. The arched arrows show the movement linking resources. The small circle show the possible inhibitor or trigger as resources mediate creativity.

Triggers rarely served as a mechanism of problem solving. In many instances for the participants, triggers occurred during the live plan as layers of connected resources. For example, Gertrude showed a series of linked resources that triggered ideas:

last year, I focused a lot on race and class. I'm like, 'We're going to watch *Misrepresentation*. We're going to watch *The Masked Woman*, and we're going to watch *Disclosure*.' Because I didn't know what texts were available for, tell me about what it

means to be transgender. I was like, ‘Bet. This documentary came out? We're going to watch it.’... This summer I've just been thinking, how do I connect this to talking about systems of oppression? I feel like that's my job now. My job as a teacher is to empower my kids, and to make them see the world as it is. I don't know if you've read... let me show you. I did a book club a couple weeks ago. It was super inspiring, especially too, the seeds were already planted at [college]. But there was no actual work for it. We read *We Want to Do More Than Survive: Abolitionist Teaching and the Pursuit of Educational Freedom* by Dr. Bettina Love, which was so good... I'm reading it and I was like, ‘All of this philosophy feels so familiar.’

She realized the connections with her book club to their college professors and curricula. The trigger moved from a central theme, unit idea, to link media to texts to knowledges to her sense of purpose and duty as a teacher.

### **Resources**

The use of resources highlighted a view of creativity in practice. Like a recipe for a chef, resources presented a guide of ingredients and tasks leading to creation. Resources provided a base of knowledge, context, theory, practice, and even experience. Resources also represented concrete materials such as texts, foods, and money. Research showed three types of resources: social, conventional, and intellectual (Stroupe, 2016; Manz and Suarez, 2018). The use of resources reinforced a sociocultural and epistemological frame of creativity through the construction of learning and growth of practices (Bunn, 2013; Macbeth, 2010; Nilsson & van Driel, 2010; Sawyer, 2004, 2011; Young et al., 2017; Bannister, 2015; Gutiérrez & Rogoff, 2003; Herrington, 1992; Lave & Wenger, 1991; Rogoff, 1994). Although the categorization helped shape types of resources, the participants’ stories and uses revealed blurred boundaries

between the social, conventional, and intellectual. For instance, Monica joined an AP teacher Facebook group:

I do follow an AP literature teacher's Facebook group. That's actually where the original idea for stations kind of built from... a lot of cool stuff that these teachers ask their students to do that gives kids sort of a way to shape their own thinking about the literature that they're reading.

The group has several hundred teachers and teachers exchange lesson plans, activities, and questions. It represents a social resource, and at the same time, could be considered an intellectual resource due to the discussion of praxis, theory and practice:

A lot of conversation of the very formulaic AP rubric and things like that. But then the thinking that they're doing outside of that, they're engaging kids with the very test prep formulaic writing that they need to be prepared for. But at the same time, they're also still getting kids to be creative in their thinking about what they're reading and creative in their communication about it, when they're not engaged with test prep.

Similarly, as Francis continued to learn and develop techniques for pizza, he consulted YouTube:

yeah, I went on YouTube a little bit. The world we live in now, you can get anything on YouTube. I mean, I fixed the sink just by watching YouTube. I just wanted to see what people would say or had to say about those techniques which helped me, and it did help me. So, I learned that way as well.

On one hand, Francis' used YouTube as a conventional resource for gaining knowledge of techniques. On the other hand, YouTube also contains social elements of others sharing information and ideas in the video and comments. Additionally, his use of it focused on

techniques, which blends elements of theory and practice. Monica and Francis' examples highlighted the challenge of defined resources.

### **Active and Passive Resources**

The teachers and chefs defined and talked about resources broadly rather than categorically. In practice, resources represented a learning aid or material good to be used. Although it may be of interest to categorize resource types, the in-practice use of resources showed no significance to the teachers and chefs other than if it helped. Instead, resources constructed their creative practices in active and passive ways (Table 7). The teachers and chefs showed active resources as linked to a creative practice. For instance, Monica and Beatrice joined Facebook AP Teacher groups. Those groups gave them immediate ideas and practices such as Monica's use of an escape the room box and Beatrice's musical chairs activities. Each of them spoke of the immediate link to a practice. Similarly, Kate and Francis used resources linked to their practices. Kate used recipe books and websites during her live plan. The resources shaped her understanding of pie filling styles and ingredients as she designed the Thanksgiving pie.

The passive use of resources showed a loosely linked connection through a series of moves to a practice. For instance, Gertrude told a story about her childhood and representation in books. Her mother made it a point to find books that had a Black protagonist. "My mom would go out of her way to be like, 'Oh, I found this book with a black protagonist. You should read it.'" That value carried over into her teaching practice as she also makes it a point to integrate a representative curriculum for her learners. On a similar level, Clarke referenced his childhood when talking about cultural cooking techniques and flavors. Gertrude and Clarke's examples are

not to say that all passive resources are cultural touchstones from the past. Passive resources reflected indirect links to a present creative practice.

Table 7. ACTIVE AND PASSIVE RESOURCE EXAMPLES.

Resource Type	Defined	Teachers	Chefs
Active	Direct link of the resource to the trigger or practice and immediate impact toward creativity. Resource unbound by time and space.	“And then this document I created off of a template that someone in those Facebook groups posted.” - Beatrice	“I've got this book, Rustic Fruit Desserts, that I like, and I'm going to see if they have a sour cream apple pie.” - Kate
Passive	Indirect and unlinked from the trigger or occurring practice. Resource foundationally forms a base of practice. Resource unbound by time and space.	“And then you think of the books that would be at Scholastic Book Fair, every kid's favorite day of school. I don't remember seeing stories that had just different people, just different stories.” - Gertrude	“what I remember in my childhood, mostly street food and mostly it was overcooked food. They don't know the difference. They cook the chicken, they do it outside. They cook it all the way to the bone, dry meat. We bought the cheapest meat we can possibly buy and we cook it as it was an... steak, medium rare here, but over there they just cook it full done. For me it was like, okay, maybe that's how it's supposed to be. So when I compare things like what kind of meat we buy back then and how we cook it here, I realized there's different ways to cook it in than just one way.” - Clarke

Meanwhile, Manz and Suarez (2018) found teachers using several resources as they built their practice. Resources included assumptions about student learning, existing practices, curriculum, and district policies. Teacher practices showed how they framed problems of practice, made their practice visible through reflection of *replays* and *rehearsals*, stance on students, teaching, and disciplinary knowledge formed in their talk.

For the purpose of the study, I use a broad sense of the term resources that draws from prior research such as Stroupe (2016) and Manz and Suarez (2018) to include, mentors, conversations in person and text-based, mentor texts, sentence stems, rubrics, websites, textbooks, prior lesson plans that includes activities/projects/assessments, professional development, among many others. The broad view allowed an incorporation of Bazerman's (2004) definition of intertextuality and Bakhtin's (1981) heteroglossia. The participants' use of resources highlighted the dynamic bricolage of influence for creativity.

### **Creativity in Practice**

Individuals may identify and describe themselves as creative. They may make their living through making new-ish products through food, crafts, textiles, furniture, music, the arts, etc. The cognitive elements of creativity locked the concept and view within an individual. It limited the scope of creativity to those who produce novel things or think of new ideas. Within my research, individuals repeatedly revealed creativity as a result of layered experiences through practices. Creativity represented an action of a recreated foundation with nuanced deviations to form a personalized finished product that linked resources. The idea of viewing a conceptual idea through practice reflected Scollon (2001) and Scollon and de Saint-George's (2012) view of mediated discourse as a nexus of practice. Practice represented an action that embodied a layered history and nexus of linked actions (Scollon, 2001; Scollon and de Saint-George 2012). For the

purpose of this study, practice situates within a sociocultural context to highlight the nexus of resources.

Yet, as I coded the practices through multiple cycles, their stories and live plans revealed a fusion of practices that marinated their deep histories and knowledges into creativity. On the surface, the teachers and chefs engaged in many of the same category practices in Leone's (2018) taxonomy. Their practices had variations that separated from Leone's framing of each term. Those variations formed a fusion of creative elements where one category blended with another and presented a classification challenge. The participants' practices made visible elements of creativity (Table 8). The teachers and chefs shared their definitions highlighting a cognitive and ontological frame of creativity. However, as they talked about their practices, creativity emerged as more sociocultural and epistemological. The teachers and chefs explained the use of resources to construct heteroglossic layers and shape their views of creativity and practices (Bakhtin, 1981). Inhibitors and triggers impacted their creativity and practices by slowing, halting it, or moving it forward. Leone's (2018) taxonomy of practices helped make elements of creativity visible. Her taxonomy revealed five categories of chef practices: imagination, improvisation, trial and error (*in general*), trial and error (*analytical*), and experimentation.

Across the eight participants, creativity was defined and framed as they viewed and practiced it. Many of their practices reflected Leone's taxonomy; however, the findings revealed some variations that occurred in practice. The teachers' and chefs' practices, in some cases, moved across categories and acted as hybrids rather than uniform practices of creativity. The practices matched some but not all elements with each category. Although the variations stayed within Leone's framework of each category, and no new taxonomy formed, I merged trial and

error *in general* and *analytic* into one category. The participants' trial and error practices did not differentiate between the two in significant ways. In addition, experimentation happened at infrequent intervals and with differences to Leone's framing of the practice. It happened within singular designs, not multiple, and occurred in the retellings of practices and not during in practice.

## **Improvisation**

Several of the teachers and chefs referenced their prior experiences: some from the classroom, early career experiences, as learners, and some home experiences. The referenced experiences connected to their creative practices as they described what they do and why. Leone (2018) described creative improvisational elements as: a reaction to stimuli with little to no planning based upon rationale, resources, and flexible outcomes. In the improvisation experiences, a trigger caused a pause of thought. Beatrice called it "inspiration", and for her, that happened while watching television or reading and a connection to her teaching unit forms a link:

I think I see clips from TV, movies or I read stories and it can be something totally unrelated to whatever I may teach in class. And my subconscious screams to me like, hey this is very much like Campbell's Hero's journey. Oh my gosh. Yeah, this is. I could bring this in class.

Her example built from the in-moment and unrelated media consumption that in turn became a resource for her teaching unit. The moment provided a connection to her existing teaching unit as a possible resource for a future activity that *could* build a leaning objective. The ultimate outcome from the connection remained in limbo as Beatrice considered and reflected on its meaning and how to connect it to the current unit text.



Meanwhile, Peter showed a more developed moment that occurred while teaching. During one activity, while students were cleaning, he had the students pour their paint waters into a bowl:

When we did this project where we did this watercolor project, where the kids took four pages. The whole class got four pages, four or five pages. They picked a sentence, and then they pulled a sentence, and they did a watercolor based on that sentence. Then we put our watercolors together in all the classes, and we created the novel. We created around. I was like, 'Oh, my gosh!' I did not expect ... But then I realized, I was like, 'Okay, guys. Dump your water. The water that you used for your paintings, let's dump it all in the same bowl.' We put a big bowl in the middle of the class, 'Just dump it in.' We dumped it in, and it was this brilliant, brilliant blue. It was beautiful. I was like, 'Oh, my gosh! This is a text. We've got ourselves a food pairing here. I'm going to drink this.' I was like, 'Can I do it? Can I do it? No, I went to college.' I was like, 'It's on! We're going to do this.' ... I was like, 'Oh, man! That was not expected,' but just as a result of doing this activity. Then each class, we did that with each class. They were greenish-blue, but by that time, we had these shades of blue that were also represented in the algae. I was like, 'Man, we've got the whole novel in the water.'

In that moment, his practices highlighted creativity as the reaction to a stimulus, a trigger, or as Beatrice called it inspiration. The in-moment reactive practice displayed the creative element of improvisation as a reaction. The teachers' experiences revealed how built from an inspired moment and led to practice of planning or a live teaching move.

Clarke talked about being in the moment and the joy of having to create a new dish when a planned special does not work:

I think I love the rush of the whole process. It's kind of like your mind. You mind like, goes speed out, like fast trying to figure out what to do, but like having a limited time to do it, that it makes me like crazy, but it brings me the energy. Whether consequently I have to do more work, but I like the drive.

As Clarke created in the moment, he improvised *and* drew from his imagination to reconfigure the special. Creativity, for Clarke in this moment, included improvisational elements of being in the moment and use of the imagination. Creativity forwards the onset of emotion, joy. A hybrid of practice blends improvisation and imagination:

You think is putting all the stuff in perspective, so to use, and then something doesn't work out. I mean, not always work out the way I think. Sometimes: oops. You know what, this doesn't go after actually finish the product and raise a service. There's a point where we need to do like a last minute call and tell the service, Hey, you know what?

This is not working out. Let's just switch it to something else. So I have to come up with something new. So this is the challenge sometimes.

Creativity reflected uncertainty with the outcome, “sometimes: oops.” The trigger, realizing that the original night’s special did not work, led to a new special. Clarke, in that switch, relied upon experiences and knowledges to guide his creative practices.

In both fields, the in-moment practice, the improvisation, revealed creativity to be reactive to a trigger. The trigger represented a stimulus that some may call inspiration. Existing research referenced a muse or the serendipitous ah-ha (Kaufman, 2016). Beyond the trigger, improvised creativity built from existing knowledges and discourses. Sawyer’s (2000, 2004, 2011) disciplined improvisation and ready-made templates provided points of reference to address the how, the reactive practice that made Peter’s ensuing actions, Beatrice’s follow up of

the media, and Chef Clarke's in-moment audible possible. Creative improvisation appeared to be in moment and off-the-cuff genius. However, the reality of their creativity revealed a practice steeped in discursual experiences and knowledges. Based upon experiences, I think the disciplined improvisation allowed the teachers and chefs to move beyond inhibitors. They relied upon prior experiences and practices to filter ways to move forward. The individuals drew upon learned lessons or templates allowing them to forward it to that moment. Their lived experiences became a resource - a richly layered one - allowing for transfer of past knowledges to the present.

### **Trial and Error**

The premise of trial and error, perhaps more than improvisation, reflected the accepted messiness of creativity. Leone's (2018) trial and error's approach showed the practice of trialing, designed to test and calibrate a recipe, and learning from errors for continued improvement until the finished product. Leone highlighted two forms of trial and error, analytic and in-general. Within the trial and error *analytic* practice, that calibration moved toward replication and perfection of the recipe. It attempted to mitigate mess by approaching creativity with a methodical approach. The purpose focused on technique, ingredient, and/or an idea. The *in-general* approach moved toward a solution to represent a level of perfection and with more of a focus on replicability. The in-general approach appears to be improvised due to little to no planning and spontaneous triggers that emerge and evolve throughout the creation. However, the practice engaged planning as adaptations occurred rather than planned from the start. Since there is no specific plan to begin, that allowed a flexible approach to the creative practice. Although Leone (2018) separated the two practices, the findings suggested that they may be more similar. Both practices constructed methodical elements involving degrees of planning and notation of

changes that promote learning from results. Sociocultural knowledges and experiences informed the practice of trialing and learning from errors. The difference occurred in planning practices, particularly to what extent and when, and having a specific focus or not prior to creating. As the participants explored their creativity, their practices did not distinguish between the two forms of trial and error.

For example, Gertrude's trialing during planning of her LP resembled planting seeds. She pulled from her summer PD experiences about Love's (2019) Abolitionist Teaching and book clubs that focused on social justice texts. She forwarded the social justice and Abolitionist ideas into her curriculum:

so gather articles, interviews, et cetera, about that topic. Read it in class. I'm going to say the research should take at most a week. I'll say this is one week. Okay, and then following, that following week, we're looking at brainstorming solutions. This could be an original idea, or it could be a compilation of what they found in their research. If it is not original, they need to cite who it comes from. All right. Once they have all their research, then I'm going to model. You know what? I'm going to give that two days, because sometimes it's hard to make sense of, how do we solve this massive issue where it feels like there's no end in sight? How are we going to destroy white supremacy? I don't know, hun. It takes time, but you've got to think about it.

Gertrude trial planned a unit about freedom. Her prior experience from teaching the unit last year formed the basis, a template, for proceeding forward and revisions. In the plan, two points illustrated trialing in practice. First, the time element of a week to then two days showed how trialing worked in-moment. By in-moment, I mean the live plan practice of planning. In the example, her planning resembled trialing of talking through her plan, writing notes, and then

making adjustments as triggers or an inhibitor occurred. Initially, the practice of in moment modifications resembles improvisation. The focus remained on planning the freedom unit. The focused planning highlighted a key difference between trial and error and improvisation.

Francis spoke about the water temperature for his dough prep:

the water temperature is key, because if it's hot outside, it's humid and you make the water too hot, you better plan on using that dough right away. Because if you don't, it's going to flow up really fast and you're going to taste like stale yeast if you let it sit out too, if you don't use it for a while. If you make the water a little cooler, then the yeast doesn't grow as fast inside the dough balls. And it actually feeds the sugars and everything. It gives you a better taste. So if you're going to use hot water or warmer water, you better plan on using them faster. It will taste like stale bread.

As he shared his knowledge about the water temperature, it reflected experiential knowledge of the messiness of learning. He acknowledged the trialing of dough preps with water temperatures and only to confirm his New York style pizza theory through a YouTube video:

I don't want to go to Google. I want to figure it out before I go to Google, and I'll go to Google if I have to. So I try to rely on my own feelings and my own memory whenever I can.

The creativity of trialing allowed growth and hands-on learning through triggers and messiness of creating.

## **Experimentation**

Experimentation involved an analytic position that guides practice toward finding a result. The key idea, ingredient, and/or technique moves the practice with an intentional design to shape multiple contrasting situations. The advanced planning of structures considered time

and space, and included variations based upon knowledge. On one hand, Leone's framing appeared to parallel trial and error. The separation occurred in the experimental use of multiple variations that may occur simultaneously and the non-involvement of triggers. Interestingly, no one participant engaged in experimentation as Leone framed it. The challenge for teachers involved having multiple variations occurring to test variables for a result. Although the chefs may engaged in minor experimenting as a creative practice, their anecdotes reflected other practices. Similarly the teachers, while having multiple courses sections and preparations to plan, engaged other practices as well.

Perhaps it could be argued that Peter experimented in the creation of the Food Literature course. He said, "The conversation was initially between Joe (colleague and co-creator) and me and our principal, Houston. And we said, 'Hey, any way we can start a cooking club?' And he said, 'sure.'" The club grew in numbers and student engagement. Peter and Joe then went to the administration:

When we went to our principal and said, 'Hey, cooking club is going crazy. We have a lot of kids, there's so much happening there. Would you come and just check it out?' The administration came by and then we said, 'We think this could be an English class. We could call it Food Lit. What do you think about that?' And our principal initially said, 'I'll give you a section of Food Lit, but I'm going to give you the kids who are not engaged in their English class. I'm giving you the kids who are tuned out. They're gone. They're repeat some, some of them are like seniors retaking a sophomore English.' He's like, 'Let's see what you guys can do.'

The context of a one semester Food Lit pilot course contained an experimental variable with the learners in a non-traditional instruction course, NTI:

And I don't think that class, and I'm trying to think back, it didn't continue that semester, that next. So we were on trimester. So we had a trimester. It didn't continue that third trimester, but we started the next year with two sections of it.

In the design and implementation of the pilot course, Peter and Joe appeared to have implicitly “experimented” in pedagogy and practices. They experimented in the creation of the course with the advanced planning of an NTI course and finding ways to combine food and literature. At the same time, the modifications and adaptations to the course Peter spoke of connected with trial and error creative practices because they occurred in practice. In addition, they only constructed one course rather than multiple courses at one time.

The same idea applied to chefs. Kate, as she conducted her live plan, she designed one particular pie, an apple and sour cream filling, but only did one version rather than multiple. Then any modifications that occurred, happened after the first bake instead of multiple versions. In short, even though she conducted the planning prior to physically baking the pie. The modifications and recipe revisions mimicked trial and error practices more than experimentation. So, at best teachers and chefs engaged in minor experimental creativity practices. However, it did not represent a scaled practice that they engaged with frequency.

### **Imagination**

In practice, imagination lay somewhere between improvisation and trial and error. The bulk of the practice happens as mental decision making; however, the resources cultivate from a sociocultural frame. Although mostly a mental trialing, it moves into practice with the decisions mostly set for its structure. The idea begins from the trigger and moves to predetermined resources, usually experiences and knowledges. Beatrice explained creative imagination in practice through her cooking without a recipe. Similar to the tv show *Chopped*, where

contestants are given a set of foods and they have to build a meal, she will go through her pantry and build from what is present. As she builds, without planning, she draws from her knowledges and experiences of cooking toward some determined idea, but one that is not fully realized.

Beatrice's example showed the way imagination could bleed into improvisation or trial and error. Imagination blurred the lines and yet it represented an element of creativity and practices for the participants.

Peter described his use of creative imagination as happening in the unexpected moments. He said it is a "cornucopia of serendipity. You plan it inside of a lesson but you don't know when it's going to happen..." The moments cannot be planned or seen. He equated it to a story he reads to his children, *We Forgot Brock*. A boy has an imaginary friend and he goes to a carnival and leaves Brock. The parents do not see Brock. The child goes searching for Brock and finds him with another child and her imaginary friend. The children and their respective imaginary friends form a friendship. Perhaps the story reflected a metaphor of his creativity as represented by Brock, present and a willing play friend.

Beatrice and Peter's reflection on imagination did not show it in practice. Imagination in practice appeared to be a micro moment within the macro set of creative practices. For example, Gertrude's practice illustrated the impact of the trigger that spurred creative imagination. She recalled a moment as she taught Poe's "Tell Tale Heart" and seeing boredom in the faces of her learners. The disengagement with them gave her pause to consider, why is it happening during the scary stories and horror unit:

I'm like, 'My kids aren't having fun. They're bored or they're annoyed at their partners.'

Because it was a group grade, so they're like, 'Did you do it?' They just weren't enjoying it. And I was like, 'Ah, we need to have some fun because, I love scary stuff and y'all are



ruining this for me.’ And I know a lot of them love... They just like scary stuff. And I was like, ‘Why aren't you...’ I'm like, ‘This poem is creepy.’ And they're like, ‘Yeah, I just don't get it.’ And I was like, ‘Okay.’ Again, the curriculum is like, ‘Don't teach it to them, let them figure it out.’ And I'm like, ‘Well, they didn't figure it out.’ Or they did and they're bored. And I'm like, ‘I don't want them to be bored.’ This could have been a fun unit. It was just missing something. And I was like, ‘Let's bring in the movies. Let's engage them’

Within the moment of recognizing the disengaged faces of her students, she audibled the curriculum from the prescribed curriculum texts to move to media and the use of film trailers. As Gertrude enacted her creative imagination to seek a solution, the in-moment planning reflected experience as a teacher to recognize the student body language and then to forward horror films into the unit. In the retelling of creative imagination in practice, she eventually found texts, horror film trailers, that allowed a dialogue to form between the students and the students and the media texts. The anecdote featured the messiness of creativity through scattered ideas and non-linear shifts of thinking. The bursts of spoken ideas and incomplete fragments perhaps symbolized the way creative imagination worked as ideas formed. The moment highlighted that imagination may not always result in a finished product. The practice builds the idea and places it into practice, but the results may yield more trial and error or even improvisation that seeks to make improvements.

Clarke's imaginative creative practices also illustrated the messiness of thinking:

I'm thinking constantly when I get something in, for example, my house or the menu, just how can I do this with the many ways I can manipulate this vegetable? So I just pull, I just open my mind thinking, okay, let's see. Can we do Italian? Maybe not. Can we do

German? Maybe we can some kind of put something with a vinegar or something. No.

Can we do South America? Maybe with, I don't know, middle Eastern tahini with this or that.

His creative imagination resulted in multiple questions and ideas for manipulating vegetables.

His sociocultural experiences of working with many international chefs provided the necessary background knowledges to inform the responses to his questions.

Table 8. CREATIVITY IN PRACTICE.

Leone's taxonomy	Defined	Teachers in practice	Chefs in practice
Improvisation	In moment reaction to stimuli with little to no planning based upon rationale, resources, and flexible outcomes.	You know what we're also going to do? For that first article that I give them, we're going to practice writing, how to cite it. Writing a citation. Because you know what? I love EasyBib. - Gertrude, live plan	Now, this is something I'm going to have to think about remotely. Hot wings, the sauce recipe. And what I would do is bring these in. I just type in best hot wing sauce. I have a sauce recipe in my head, which is one part butter, one part buffalo chicken sauce. There's a hot sauce that every kitchen has. - Anne, live plan

Table 8 (cont'd)

Trial and Error	Involved methodical elements featuring degrees of planning and notation of changes that promote learning from results.	I found that I would create one thing, one piece of this whole escape room, and then I would create the next thing, and then I'd have to figure out how those fit together. There were many revisions throughout the process to make sure that everything worked together, even up until the day before as we ran through the breakout room ourselves and made sure that it worked, there were revisions that were happening because we realized that things would work better in a certain way. It was an enormous process. - Monica on the planning for the Escape Room activity.	I tweak water temperature here and there, depending on the weather outside. So that's how I tweak the water. - Francis on his dough making practice.
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Table 8 (cont'd)

Experimentation	Guides practice with an intentional design involving time and space toward finding a result by focusing on a key idea, ingredient, and/or technique.	“our principal initially said, ‘I’ll give you a section of Food Lit, but I’m going to give you the kids who are not engaged in their English class. I’m giving you the kids who are tuned out. They’re gone. They’re repeat some, some of them are like seniors retaking a sophomore English.’ He’s like, ‘Let’s see what you guys can do.’” - Peter on the creation of Food Lit.	He said it as a joke and I decided that I thought it would sound good. I think I had a friend who had made a peanut butter sriracha cookie, and maybe I put together the idea of peanut butter and pepper or spice in general. - Kate on how the idea for a peanut butter paprika cookie occurred.
Imagination	The idea begins from the trigger to a mental construction of the idea and moves to predetermined resources, usually based upon experiences and knowledges.	I’d maybe want to adapt that to a virtual environment, but I don’t know exactly what that would look like. So, okay, I just threw out a bunch of ideas. This is how I plan. - Monica planning the virtual classroom set up.	I’m thinking constantly when I get something in, for example, my house or the menu, just how can I do this with the many ways I can manipulate this vegetable? So I just pull, I just open my mind thinking, okay, let’s see. Can we do Italian? Maybe not. Can we do German? Maybe we can some kind of put something with a vinegar or something. No. Can we do South America? Maybe with, I don’t know, middle Eastern tahini with this or that. - Clarke planning out menu specials.

Prior researched focused on creativity as a cognitive and ontological construction. Although the teachers and chefs individually defined creativity cognitively, their practices revealed a paradox of a sociocultural practices and epistemological construction. Leone's (2018) taxonomy featured elements that define creativity: improvisation, trial and error, experimentation, and imagination. In addition, other practices such as repurposing of materials to view the possibilities and learning make visible nuanced practices that enhance the existing structures from Leone.

More significantly, the elements of inhibitors and triggers add layers to reveal the messiness of creativity. While research mentioned synonymous ideas, they were not discussed in depth. Inhibitors and triggers impacted creativities in practice by slowing, halting, or forwarding ideas. The ideas generated from resources highlighted the teachers and chefs uses as active and passive. The active resources made direct impacts on ideas and practices, while the passive resources revealed an indirect and potentially unlinked experience to the trigger of creativity. Resources will be explored in more detail in the next chapter.

In Chapter 5, I will explore the positioning between the actor, creator, and their creativity to resources. By positioning, I mean the relationship of the creator to the resource. Some resources have intimate connections. Some reflect professional links as courses, professional development, and even conversation between colleagues. Other relationships show a more neutral link as a text. The positionality signifies a way to view the critical practices that allow individuals to engage resources as learners and collaborators. In the chapter, I also examine the creators' intertextual practices and the impact on (*re*)creativity in practice using a critical lens.

## CHAPTER 5: RESOURCES AND THEIR POSITION TO THE CREATOR

I explored the key elements of creativity in practice in Chapter 4. Throughout the teachers' and chefs' practices, they experienced inhibitors and triggers that activated or slowed creativity in practice. Their creativity in practice formed and illustrated a sociocultural and epistemological view. Creativity constructed from complex layers of resources that impacted practice. In this chapter, I examine resources, function of resources, and how that function positions the resource and creator. The exploration provides an opportunity to view resources through a critical discourse in order to frame the positioning of the resource and creator.

### **Resources Defined**

Resources represented anything that impacted the creator. Gertrude explained her view of resources as anything:

resources is just, it can be anything. What I find on NCTEs website, what I get from seminars and email lists and teaching tolerance. I just think of it as just a huge well of knowledge that can come from any medium, it can come from any kind of person. You don't have to be an educator to say, 'This is a really good text.'

Gertrude's point showed the significance of the resource is less about what it is or where it originated, and more about what it does; its impact.

I am viewing resources through a sociocultural lens to highlight the epistemology of creativity in practice. Research showed several categories of resources such as intellectual, social, and conventional (Manz & Suárez, 2018; Stroupe, 2016). However, I am positioning a broad view without categorizing due to the way resources moved across the established categories by the participants. For example, a PLC for teachers - or even chefs - could work within the established framework for social resource, intellectual, and conventional. All of the participants spoke about formal and informal PLCs that they belong to and engage. The PLC

represents the social community of teachers to learn and develop practice. On the intellectual side, it could build theory and introduce new pedagogical structures. And a PLC illustrates a conventional resource by introducing a shared text or workshop in school. Some may argue that it matters how the actor engaged the PLC to categorize the PLC as resource. Ultimately for the purpose of the research, it mattered more that a teacher used a PLC and the impact it had on practice rather than identifying what category. The research focused on the effect of the resource, not the resource itself.

To understand the effect, I analyzed the relationship between the creators and their referenced resources. The relationship between the resources and the creators' creativity in practice showed the layered bricolage of voices (Bakhtin et al., 1981; Gee, 1996). The layers revealed the intertexted layers of resources within creativity in practice (Bazerman, 2004b, 2004a; Wynhoff Olsen et al., 2018). The layered resources highlighted the positions of power between the creator and the resource through the use of discourse and practices (Certeau et al., 1998; de Certeau & Rendall, 1984; Fairclough, 1992; Rogers, 2018). The power relation showed the creative and critical practices of creators as they worked with and within systems.

### **Learning through heteroglossia**

Bakhtin's (1981) heteroglossia illustrated the layered voices of resources that informed Francis' and Gertrude's creativity in practice. Francis showed the rooted discourse from learning and practicing from his father for over twenty years before branching out on his own (Gee, 1996). Even in his own style, resource discourses from YouTube New York pizza making and Gordon Ramsay echoed into his practices. The resources helped Francis create a distinct style and pizzeria business model from his father's model. The resources shaped a relationship of guide and tourist. In other words, Francis positioned himself as a learner learning. His

positioning reflected a larger trend of the data regarding the creators to their resources.

Meanwhile Gertrude was the only one who highlighted a nuance of resources and emotional resonance.

Gertrude's complex layers of experiences mixed positive and negative moments into her practices of rewriting the curriculum. The findings showed the nuance of experience as resource through the weight of emotions as an element that carried forward. Gertrude used the experiences as resources to inform her practices concerning inclusive and culturally relevant practices. The resource positioned itself as foundational. That is, the experiences helped shape a baseline of beliefs and values that inform her creativity in practice. At the same time, Gertrude's creativity in practice showed the impact from her summer professional development with the Allied Media Project and Abolitionist Teaching webinars. The resources made an immediate impact with how she reworked her curriculum. Love's (2019) Abolitionist Teaching framework acted as an active resource that helped Gertrude think through her teaching as a form of activism and being an ally to her students. The webinars formed a teacher-learner relationship. Coupled with the summer BLM protests and activism, she continued her creation of revamping the existing sophomore curriculum. She created a culturally responsive and sustaining practice.

Both Francis and Gertrude highlighted their relationships to passive and active resources. The use of passive resources as one of the heteroglossic layers demonstrated how creators embodied resources into practices as learners. The passive resources showed how creators engaged past experiences, which may not directly link to the current creating. Yet the resource of experience informed - in both cases through schema and practices - some element of creativity in practice. The passive resource revealed a positional link to the discourses from experience (Bakhtin et al., 1981). The language and practice shaped a foundation of the creator's creativity.



## A Learning Connection

As the creators engaged active resources, the relationship moved from a deeply personal connection to a professional or learner and teacher connection. The active resources reflected a professional connection to develop and grow creativity in practice. For instance, Clarke noted a colleague shared a practice for learning flavors:

somebody told me one time: [Clarke], to learn more about flavors or herbs, to manipulate herbs, you need to take all the herbs for whatever you can, go home, put the water to boil, just boil one herb at a time and just boil basil, boil man, boil this. And then taste it yourself like with a spoon. All of it. That's a lot of work. And then basically it's kind of like school.

The active resource provided a direct technique as suggested advice to make an immediate impact on his culinary techniques. The practice enhanced his understanding of flavors and tastes of foods. The difference between the passive and active resource illustrated the shift from personal and emotional connection to an objective lesson; while both active and passive resources positioned the creator as learner.

A teacher-learner relationship formed between the (*re*)creator and resources. I will explore *recreativity* in more detail in Chapter 6. However, I will provide a quick overview of *recreativity* in practice for this chapter. (*Re*)creators intertext and adapt elements of the resource to connect to their styles, and catered it to their audience's needs. It shows a common practice of following the recipe, where the recipe represents any intertexted resource. *Recreativity* sometimes engages in adaptations, which illustrates (*re*)creators making alterations to a resource. *Recreativity* in practice revealed the positioning of the creator and the resource. The positioning reflected the relationship between them to shape creativity.

Monica and Kate highlighted that their respective resources formed a scaffold for *recreating*. Monica used her own activities to guide and scaffold her planning from an in person to virtual space. Meanwhile, Kate drew from her experiences of working in two bakeries. She said, “I took those [bakeries’ pie dough] basic things and then over time I began to understand how they particularly functioned in our world.” *Recreating* the original resource helped her learn flavors, textures, and theory in practice of food ingredients. The resources still positioned the *recreator* as learner through engaging the resources as information and guides. To what extent does the creator scaffold and intertext the resources into their creativity in practice signify the difference between creating and *recreating*? Unfortunately, not all relationships between resource and *recreator* functioned as positive scaffolding experience.

### **(Re)creator as outlier**

Beatrice represented an outlier as the *recreator* and resource as positive learning. Initially, the resource, an AP teacher Facebook group, provided the musical chairs activity, and she positioned herself as an active agent in finding a new resource for practice:

in Facebook especially there's a couple ways to go out it, because maybe someone's mentioned it recently. And I'm thinking about it like oh yeah and I can go find that post. Sometimes there's a thread where they talk about it. Or I just go through the materials and I find the materials on it and then see what their directions are and what they include and all of that, the lesson plan for it, so to speak.

The lesson failed. Even though Beatrice intertexted the found musical chairs activity, she still had to make certain adaptations to *recreate* in practice. “And I didn't change too much. But then pulling the material from the source needed to be done because it wasn't there already for that text. And then choosing the songs needed to be done.”

Her adaptations failed due to multiple possibilities. However, it may be that the adaptations worked, but Beatrice did not take time to learn the resource for implementation. She admitted the lack of change. The minimal change indicated a deference to the resource as authority. In that view, perhaps a lack of engaged learning of the resource occurred. The significance of the failed practice did not mean the resource was at fault. She said, plenty of teachers in the group praised the activity. Instead, it highlighted the variance of learning the resource the *(re)*creator must do in order to *recreate* in practice. Beatrice, as *recreator* and learner, illustrated the challenge of *recreating* a resource's creativity in practice. It also revealed that perhaps some inhibitors remained rather than leading toward creativity in practice. While Beatrice attempted to improvise in-moment for the second course section, the creativity in practice failed as well.

### **The Resource Positioning the Creator**

#### **The *(re)*creator**

The learning of resources revealed the intertextual relationship of the *recreator* to the resources and the creativity of the creator. *Recreativity* in practice showed the impact of intertexted resources. As chefs and teachers *recreated*, they intertexted elements from resources. *Recreators* positioned themselves as learners to the intertexted resources. The *recreators* engaged the resource to varying degrees for structure, content, organization, and even practices. Learning the resource illustrated a part of *recreating* in practice.

Kate learned from her experiences at two bakeries before starting her own business. "I think in the beginning, it was very influential to me when I thought about those, businesses because they were so fresh in my mind and they were really just the only experience I had." She spoke about *recreating* the gained knowledges of techniques, flavors, and food theories. She

centered *recreativity* in practice from the resource of learning experiences. The resources shaped her as learner to the discursal layers of her (*re*)creativity in practice. As she learned more on her own, she shaped her own creative style. “I keep growing and growing, not only my own confidence and skillset, but my understanding of what my favorite flavors are.” The understanding occurred through continued learning over time.

At first, Kate *recreated* versions and flavors of what she learned, then it grew into her own style and favorite flavors based upon learning through creativity in practice and learning of the local food community’s tastes and preferences. So even as she moved from *recreator* to creator, the learning continued. However, the resource repositioned from guide to foundational knowledge. She provided an example of her pie dough crimps:

The initial reasoning for those crimps, which I think was mostly based in aesthetics for [Bakery X]. And then for us, realizing what would happen when a employee crimped the crimps too small and that we would see them maybe disappear a little bit. Or even just in a pie class alone, when we would watch a student do small crimps, and then it would just kind of puff into this ring of dough. Yeah. That's sort of how we apply those kinds of lessons, I think.

She repositioned herself from *recreating* resources intertextually as a learner to creating and learning from new resource experiences.

The learning as creator helped her understand theory in practice, adding to her foundational knowledge. Kate highlighted the power of the resource upon her (*re*)creativity in practice. The use of the resource positioned her as learner to the resource as a teacher and guide. Monica moved from *recreator* to creator in a similar way as Kate. She leaned upon resources in *recreating* practices before being able to move into her own creativity in practice.

Monica represented the *recreator* as learner through the engagement with professional development resources. After her first year of teaching, she participated in the local Writing Project program. She learned dialogic feedback and the use of questions for peer review:

The questioning aspect? That's something that [the Writing Project] taught me. That's something that I, when I was in the summer Institute and we were working with writing groups on our own writing, my writing group tended to be very much like just the dialogue of questions.

She transferred that practice into how she structured peer writing groups in her English classes. The students received time to talk and ask questions to each other. In one on one time with her, Monica asked questions to the students:

I tend not to tell them exactly what they, I don't ever want to tell them, you have to do this in this part of the narrative that you're writing, but I want them to think critically about their own work. And I tend to do that with questions because that's how I ask. That's how I move my own creativity forward is by asking myself questions as I'm working.

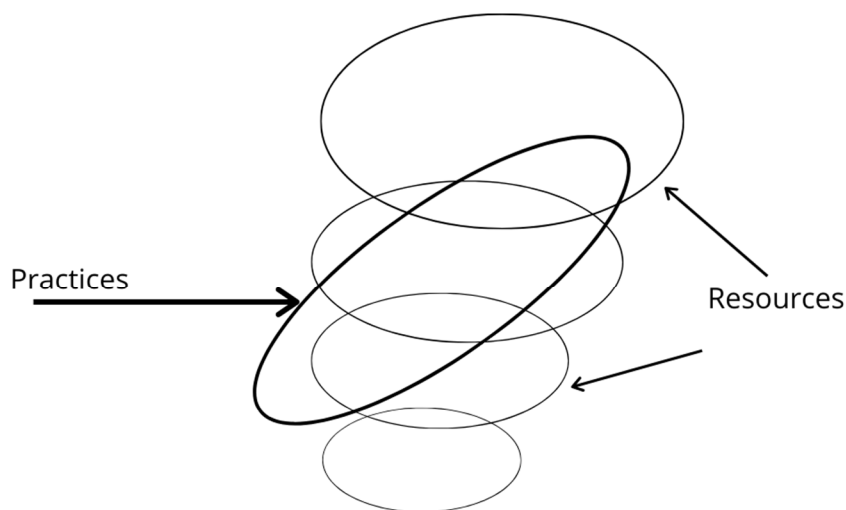
As she developed her practice over time, Monica continued to position herself as learner to new resources.

I went to [a fall teacher conference], I'm trying to remember whose session it was, [Mr. S] and [Ms. M]. And [Mr. S] briefly showed a revision decisions assignment that he had, it wasn't solely centered around that, but he talked about how he has kids go through that process. And he briefly showed a little bit of that process and how it looks in his classroom. And I ended up deciding that that was something that I felt like I needed to do and so I crafted my own version of that.

Monica, as learner, *recreated* elements from the revision activity into her own practice. She layered the resources to develop and enhance peer revision. By layering resources, the resources of experiences and knowledges shaped *recreativity* and creativity in practice (**Figure 3**). Like Kate, Monica moved from *recreator* to creator as a result of time and growth through experience.

**Figure 3.**

*RESOURCES AS LAYERED*



Note: Figure 3. The image of layered resources represents a two dimensional view of resources from **Figure 2**. A one dimensional view may show concentric rings. The two dimensional view highlights the “layering” to reveal the nuanced linked and unlinked resources that intersect with (*re*)creativity in practice.

I wanted to note that over a decade separated Monica’s first experience with the Writing Project and the conference session. Over that time, she moved from *recreator* to creator in practices by adding her style and nuances of ideas learned through experience. She explained creativity in practice happens through dialogue and in-moment interactions with students:

I think I get creative with the prompts that I give them. I think that by offering them ways to prompt their thinking outside of the box, or even just to prompt their thinking, because sometimes the box that they're in is thinking that they're not creative.

It was not enough to simply have students talk, but to prompt them through guided points to consider. The layered resources built from social and cultural discourses and positioned the resource as information and guide.

### **Creator as collaborator**

The social element of resources revealed another position of the creator, collaborator. Kate demonstrated how place as resource indirectly helped her learn more about local tastes and flavors. The example reflected how the creator as learner and as collaborator worked with the resources to continue growing in their understanding of creativity. Monica also highlighted the creator as collaborator in a more direct way:

In a way, Amy's classes and my classes were collaborating with each other on that without even knowing it, because we were keeping notes on the things that they were bringing up during discussions, and then we were coming together and we were saying, okay, there's this in common. Our kids are all picking up on this big understanding, so we're going to make sure that we pull this into the escape room. They were part of the design without knowing that they were part of the design, and so they weren't setting out to be a part of it.

Monica highlighted an approach to using social resources as a collaborator. The resources of her English department colleague and the students' responses in both course sections helped shape the creativity in practice. Monica engaged the social resources to co-design and co-plan the

Escape Room activity. Her creativity in practice revealed her position as collaborator and learner.

She did not create the idea of the Escape Room activity. She did co-create the content of the clues and make adaptations for the text, space, students, and time for task. To create and *recreate* elements of the activity, she had to learn. Monica put in time to learn the nuances of the activity:

At the end of the unit before, is when I first decided that it was something I wanted to tackle. But I was planning this thing all through the entire unit. I put it on the calendar and then I spent a month, almost six weeks, putting this thing together. It was a ton of work.

She engaged many resources such as websites, teacher social media forums, her school's literacy coach, in addition to her department colleague and the students, to learn about how to implement the Escape Room. She co-planned and learned before the prior unit ended and continued through the entirety of the Escape Room unit. She positioned the resources as information and guides. Some of the resources acted as collaborators with her in co-creating. Monica also positioned herself as learner and (*re*)creator. Although the idea of using a found activity resembled Beatrice's example, the difference illustrated the potential time spent learning, and the relationship positioning between the creator and resources. Beatrice appeared to only position herself as *recreator* rather than learner. While she poached the activity and read reviews, the time spent as learner may not have provided her with enough understanding of the resource and putting *recreativity* into practice.



## **Moving from *Recreator* to Creator**

### **Tactical learning and resources**

The transition from *recreator* to creator revealed the way learning functioned with creativity. Learning maintained the resource as a model. However, the resources from her experiences and place positioned Kate as a tactical learner. Tactical learning builds from the platform of existing ideas such as resource-based knowledges and experiences (Rogoff et al., 2016). The learner shifts toward creator as they poach knowledge from the resources to form their creativity in practice. The poaching of knowledge reflected the transition from *recreator* to creator. For Kate, the transition happened over time. She acknowledged the heavy *recreating* based upon her two years' work at bakeries in New York. She poached the pie crimp idea from one bakery and developed her signature crimp style. She poached the recipe testing practices and has advanced the practices of test recipes to be more democratic than just her vision:

I think there's certainly been recipes before where I've just sort of gone ahead with it myself, but I think I am trying to open up that experience to more people. And also that just gets more people invested in it so that when the recipe is kind of going wrong, which it inevitably will, at some point during the process, then I have someone else to bounce that off of.

In both instances, she advanced each practice by building from the existing resource to make it in her vision. The growth of her creativity happened over time and through experience. The use of time and experiences as resources provided the ingredients for her creativity in practice through experimenting, trialing, and imagining. It allowed her to shape her style and flavors that suited her bakery and her community. Within the tactical learning, she poached knowledge that

represented practices which enhanced her style and vision for her bakery. In other words, the tactical learning helped her move from *recreator* to creator.

Tactical learning and creating positioned Gertrude to the resources similarly to Kate. Gertrude, as learner, poached from resources to shape her creativity in practice. Although Kate used active resources to inform her *recreativity* and tactically adjust learned material toward her creativity, Gertrude poached from the passive resources of her schooling experiences to form her creativity in practice about social justice pedagogies.

It could be argued that the experience had no other intent and she could not shape a counterscript. However, I argue that the dominant discourse experienced did have an intent as microaggressions toward her gender, race, and ethnicity. Therefore in referencing the past, she inverted the problematic experiences to a positive output. Gertrude continued tactical learning with the district's curriculum guide:

Our office of literacy decided they want to rearrange our unit. Our first unit was about fear. What's the allure of fear? Which is actually a lot of fun. We analyze horror movies and stuff. That was not in the textbook. I submitted it. The second unit was about having an outsider. The third unit is called Extending Freedoms of Reach. The essential question is, what is the relationship between power and freedom? Which sounds really cool.

However, the texts they give are really dull.

While she acknowledged the district's units, her tactical learning of the curriculum guide helped produce counterscripts, or in this case, counter-units and texts. She continued to poach from a college text to inform her pedagogy:

I've drawn a little bit from my undergrad... The book that I had to read in 250, where it was dealing with privilege and oppression. That I drew a lot from, mostly because, we have to work all the time to unlearn our biases... And I go to that to teach myself.

The resources of her experiences and tactical learning linked with the summer BLM protests, and her Abolitionist Pedagogy professional development program. “This summer I've just been thinking, how do I connect this to talking about systems of oppression? I feel like that's my job now.” She did not construct a counterscript to her college text, the summer professional development, and current events.

However, I argue the resources represent a counterscript to the dominant discourse, and she learned from the tactical resources rather than having to tactically learn. The active resources provided direct material for her creativity in practice to revise the curriculum with a social justice lens. For example, Dr. Bettina Love's *We Want To Do More Than Survive* (2019), provided a framework for Abolitionist Teaching. Love said, “Abolitionist teaching is the practice of working in solidarity with communities of color while drawing on the imagination, creativity, refusal, (re)membering, visionary thinking, healing, rebellious spirit, boldness, determination, and subversiveness of abolitionists to eradicate injustice in and outside of schools” (2). Love's framework builds a system for students, in particular Black and Brown students, to thrive instead of survive by providing examples and strategies of resistance. Gertrude used the Abolitionist framework as a tactical resource for her creativity in practice that pushed back against the dominant discourse of the district curriculum.

To some extent, without intending to appropriate Love's framework, the Abolitionist Teaching complements creativity in practice. Beyond mentioning *imagination* and *creativity*, the framework pushes educators to think through new ideas and actions against injustice. Doing so,

would require, as she put it, tearing down old systems and thinking to reform and construct new ones. The construction of new ideas enhances tactical learning and resources for creators to engage.

Gertrude's resources made visible her position as learner, creator, and activist. In drawing similarities between the two fields, tactical learning represented an element of creativity in practice that moves across domains with all creators.

### **Critical creator, power, and resources**

Tactical learning of the resources highlighted the way a creator works within and with resources. Resources represent systems and institutions of power through discourse (Rogers, 2018; Fairclough, 1992; de Certeau, 1984). For *recreativity* in practice, degrees of intertextuality illustrated a dependent relationship upon the resource model and its discourse. However, even in creating, creativity in practice highlighted the power relation between the creator and resources. The power relation showed through the way dominant discourses from systems and institutions impacted the creators and their creativity in practice. For example, Kate used her work experiences in New York, which represented two distinct institutions and systems for baking. Anne's culinary background and curriculum represented institutional systems. The curriculums that Peter, Gertrude, Monica, and Beatrice teach, all represent district and institutional systems.

Each institution and system contain specific discourses. The discourses shape views, values, and practices. Sometimes, systems and institutions may do more than inhibit creativity in practice; however, the findings revealed that creators - for the most part - use the inhibitor as a springboard to creativity. The findings revealed various ways that (*re*)creators inverted power relations between themselves and their resources by building a counterscript through creativity in practice. That practice included tactical learning and tactical resources to allow their creativity in

practice. Perhaps surprisingly, most of the teachers' and chefs' creativity in practice enabled them to respond critically, in varying degrees, to the system and institutional discourses.

### **The counterscript**

**Peter's counterscript.** In the next example, Peter explored his relation to standards through his creativity in practice and his students. The standards presented a power dynamic between the it and himself, the teacher. He understood the limiting ways that standards operate:

I think sometimes, kids get more concentrated on the key focused standard than on all the standards that we're developing over the course of the year and their mastery as we go, that mastery is a box you check. It's like, 'Okay, so we've got theme down. What's the next one?' ... So, the standards, I think they can be limiting. If we're getting kids ready to take a common assessment on Friday about textual evidence and then we say, 'You haven't gotten it.'

Standards framed learning as a rote checklist to do and move on to the next. Standards limited the view of learning as tied to a test. In Peter's case, the standards operated as a position of power to him and his students. Peter recognized the dehumanizing way that assessments view students as data rather than people. Moreover, he raised several critical questions about standards:

But like if the work that allows us to go beyond the standards is the imagination and creativity and it's not in the standards, then are the standard standards of limitation in and of themselves? Are they in and of themselves that kind of a standard instead of kind of a bridge to something else? Are they a stopping point?

The questions showed the discourse of standards as limiting toward practice, yet Peter also questioned if standards can be viewed differently. "So, what I know is that we could do any of

these standards with that [unit]. They all come back around. I know that. So, at any given time, I think the limitation is if we just focus on one.” He viewed standards as a guide rather than a prescribed practice. In imagining beyond a single applied standard toward multiple, it opened the possibilities to create recursive layers of learning that connect the units.

Peter reframed the standards by creating a counterscript. His counterscript to reframe standards began with tactical resources of his PLC and a text, Jim Burke’s *Standards Decoded*. Peter and his PLC referenced the text to plan with the Common Core standards. The text acted as a guide to reframe the use of standards. His PLC actively worked to construct a counterscript frame to the standards. “So within my PLC there’s also the freedom to choose the way in which I want to approach those standards.” The PLC, as a tactical resource, provided a space to create and share ideas about practices. “What I love about our PLC in the sophomore year is that we are encouraged to teach whatever works we want, but making sure that we focus on the standards, obviously, in whatever focused standards we have.” The tactical resources of the PLC and text helped construct a counterscript that repositioned standards in relation to the teachers. Peter elevated his practices, his creativity, to have the same power or more than the standards. Even though the PLC positioned itself as learners with the use of the text, their collaborative practice and reflection also provided a space to create.

In addition, Peter worked to empower his students rather than the standards. He enabled the students to become collaborators by making the standards transparent. In building transparency, he positioned the students to have power in knowing the discourse rather than a teacher centered discourse. “This is the language of our work.” Sharing the language provided the opportunity to engage the students’ agency and ownership of the curriculum. His creativity in

practice repositioned the standards from a top-down power to an accessible resource. Peter collaborated with the students to cocreate elements of the curriculum:

Because in designing this course and putting the keys in their hands, I'm putting a lot of faith in them but I'm also really going to be listening closely and saying, 'All right, if it didn't work for you to do this, then we don't want to do that. If your teachers didn't give you a lot of choice and that's what you really needed, I want to make sure you have choice. Or if you guys were supposed to read *Romeo and Juliet* and didn't read a page of it, but could still do the assignments, did that work for you? Did you really learn much by doing that?'

By making the standards an accessible resource, Peter enabled the students' agency and ownership. Peter represented the various positions of learner, collaborator, creator, and critical creator. As critical creator, he reconsidered the way standards as a resource operated within his classroom and practice. The position helped him engage tactical learning and tactical resources to invert the systematic and institutional discourses that - at times - marginalized the humanness of education.

Although I highlighted Peter as an example of critical creator, the other participants also shared stories of their critical engagement of resources. For instance, Gertrude demonstrated her critical creator role against the district curriculum. She worked in active ways to empower her students with a social justice curriculum. Monica provided a different example of her department fighting to stay as a PLC against the administration's made cross curricular and grade level mix. The critical practice formed from the fight against the administration's "micromanaged" PLC structure. At the same time, Monica also empowered her students' voices by positioning them as

collaborators with using their responses in the Escape Room activity and soliciting their feedback for reflective practice.

Meanwhile, Beatrice proved to be an outlier of the critical creator positioning. She reflected a trend of bounding practice to an existing resource system. Perhaps her creativity in practice may have given too much power to the found resource, musical chairs activity. Yet, when she began teaching the AP Literature course a few years ago, she expressed a desire for the curriculum guide. Beatrice inherited the course and had no prior experience with the curriculum:

I wanted the scope and sequence so badly since I started because what I was left with was kind of a hodgepodge. It was a high minded ideal in the syllabus that was submitted to the College Board from the previous teacher that I was able to just reuse because I had no idea. I had never taught AP before and didn't know what the requirements were.

She positioned College Board's AP Literature scope and sequence as an authoritative and informational resource. In doing so, she positioned herself as follower and learner, which did not mean a lack of creativity in practice. Beatrice's creativity in practice happened within the framework of the course illustrated as activities within each unit. However, like Monica, she did not share if she revamped the curriculum nor employ a critical creator position toward the texts.

### **Tactical resources**

The critical positioning of chefs highlighted variations of the creator and resource positionings. Kate showed the use of tactical resources to learn and develop her style to fit the community she served. The use of the tactical resources moved her away from the single leader and culinary school dominant discourse. She expressed a hope to build a more democratic workplace. "I think from just a social justice perspective, I don't particularly want to continue to run a business that is so rooted in traditional capitalism." She hoped her bakery would provide a



space for voices and shared creativity. Kate understood the challenge of putting a social justice lens into practice, much less during a pandemic.

One of the challenges of that social justice business model remained rooted in building a team environment from a bakery she built from the ground up. “I still kind of struggle with because I think it can be hard to feel welcome anywhere, and a definition of what that can mean for me can mean something totally different for someone else.” While she recognized the view of others, another challenge of sharing responsibilities originated with control.

I know that when a boss or a leader isn't there all the time or isn't aware, they're just not really seeing what's going on or they don't really know how people are feeling.

Ultimately though, that person still carries all of the power to make changes. So, I've had a really hard time kind of separating myself from the business, which is why my employees have to help me take days off. It's not like they can't do it without me. It's almost like I feel a responsibility to be there all the time.

Interestingly in Kate's story, she juxtaposed one of her prior experiences. At that one bakery, the pâtissier oversaw and controlled the business and the food lab discourses. Kate noted the bakery rooted itself in culinary school practices of measured amounts, and food theory. Perhaps the lack of resources, tactical or otherwise, represented a reason why she struggled with fully realizing her critical vision. The lack of resources removed the position of learner. Kate simply had to create. While Kate's critical creativity in practice illustrated an engagement of tactical resources to learn and build creativity, she also highlighted the challenge of critical creating without tactical resources.

Meanwhile Anne used tactical resources for her critical creativity in practice. The past few years, she has taught culinary skills in a state prison. The course prepared young men with

basic culinary skills and a certificate of food safety. Anne provided a space that empowered the young men through food (Mitchell, 2001). She said, “food is a way to learn culture.” And through food, she gave the young men a space to share their cultural discourses as resources. The young men’s discourses formed a counterscript to Anne, a white woman. Their discourses represented a shared and multivocal layer of cultures and knowledges (Bazerman, 2004a). Anne viewed the culinary course as an opportunity to learn. “It lets me get to know them and their upbringing and the culture in which they were raised. I’m not teaching middle aged white ladies. I’m teaching young, typically men of color. Either Hispanic or Black men.”

Anne’s culinary experiences proved to be much different than how she teaches. While she valued the food theory, techniques, and culinary arts learning, Anne recognized the difference in time of accepted practices. She talked about the toxic environment. “Meaning if you’re not yelling at me, we’re not talking. You have to be able to be yelled at and not take it personally.” Needless to say, it is not how she teaches culinary skills. Instead, her counterscript practices reflected a human centered approach to recognize the inmates as young men. She opened herself to learning what they can teach her. Near the end of one her first cooking session, a student asked her if they could make special sauce. She said yes. “I had never tasted special sauce before I started eating with these guys. It is the most amazing sauce I’ve ever tasted. And it’s makeable by things that they can get their hands on in prison.” Had she remained steadfast of only teaching euro-centric culinary traditions or even to the planned menu, Anne would have missed. Instead, the sociocultural experience provided a resource that Anne continued to reference as creativity in practice with the course.

She embraced the creative resources that the students bring. Two years in and 200 students later, she continued inviting students to make special sauce.

Not everyone knows how to make it. It's kind of this rite of passage in prison if you know how to make special sauce and it's kind of their competition of whose special sauce is better. So that's where I would invite them to bring their own knowledge in. So this draws on their own knowledge. And it's typically ... I can't make special sauce as well as they can and they know it. And so it lets them show me a thing or two.

Anne illustrated creativity in practice through the improvised move in first accepting the student's request. Her creativity in practice built from the tactical resources of the students' discourses about special sauce and prison culture. Anne intertexted the resource and discourse into her creativity in practice of planning and teaching. The counterscript of a human-centered and culturally relevant creativity in practice juxtaposed against her own culinary learning experiences. Moreover, it illustrated a critical practice through her acceptance of the students as teachers and tactical resource.

### **Tactical creativity**

Critical creativity positioned the (*re*)creator's learning and resources into tactical moves. The move away from the dominant discourse strategy and into tactical practices for learning and using resources (de Certeau, 1984, 1998; Rogoff et al., 2016). The tactical practices reflected the underground learning that produced a counterscript to the dominant discourse (Rogoff et al., 2016). The ensuing moves highlighted critical practices that empowered the creators and their collaborators. Peter, Gertrude, and Monica made moves to empower themselves as creators and their students. Beatrice, on the other hand, proved an outlier with her desire for the AP Literature scope and sequence, and minimal adaptive structures of resources. Beatrice makes me wonder, if she is not the outlier. Perhaps, she represents more teachers, such as novices, who prefer to stay within structures of resources.

Meanwhile, Kate and Anne shared their experiences that reflected two outcomes of critical practices. While Kate engaged tactical learning and resources to develop her creativity in practice, she also attempted to build a social justice business without a similar resource. Her resources of beliefs and prior experiences juxtaposed against her view for an equitable and welcoming space and place. She remained in flux with her attempt at building that practice. She showed the challenge of creating without resources. Anne demonstrated the way resources inform and continue to impact critical creativity. Her engagement and willingness to humanize inmates as her culinary students provided many experiences that inverted Anne's dominant discourses. She opened the course as a space for the students to share their knowledges and cultures. That practice moved against her own experiences in kitchens.

Critical practices provided opportunities for (*re*)creativity in practice through the tactical learning of resources and through engaging tactical resources. Tactical resources differed from resources by who or what the resource represents to the dominant discourse. De Certeau (1984) examined the tactical practices of the people against the strategic practices imposed by the dominant power. Tactical resources reflect the voices and views of those not in power. It is not to say that resources, reflecting a dominant discourse, represent colonizers; however, the discourse reflected the voices and values of those in power - for better or for worse.

Resources formed layered voices that informed, taught, and guided (*re*)creators. The heteroglossic layers reflected the complexity and nuances of resources. Gertrude illustrated the emotional weight of experiences as resources that informed her creativity practices. (*Re*)creators positioned themselves as learners from the resources they *recreated*. As learners, they intertexted elements from the resource into their *recreation*. Over time, sometimes the *recreator* moved to become the creator. Kate and Monica represented that shift in position as they added in their

styles and voices. At the same time, Beatrice represented the challenge of learning and *recreating* from a resource with her failed lesson. Beatrice's challenge may be an instance of *recreating* highlighting the possible dependency upon resources. By dependent, I mean how (*re*)creators as learners lean on resources as teacher and guide to new practices. (*Re*)creators as learners take resources, or even new resources and rely upon them rather than forge ahead. Perhaps the creators position the resource as an unintentional power.

The power relation reflected the creators' engagement of the resource discourse. The *recreator* embodied the resource discourse through intertextual elements. Francis illustrated the embodiment of his father's practices. Other times, a critical creativity emerged and inverted the power of the resource. Creators engaged critical creativity in practice through tactical learning of resources or tactical resources. The tactical moves pushed against the strategic moves of the dominant discourse. Resources as a heteroglossia of voices sometimes reflected dominant discourses from institutions and systems. Peter and Gertrude highlighted critical creativity in practice in how they approached standards and curricula. They chose inclusive and collaborative ways to engage students in culturally relevant and sustaining ways. Their creativities in practice allowed them to improvise, imagine, and trial out approaches that questioned the system and institutional discourses. Peter engaged resources in a tactical way that helped open the language of standards for the students. While the resource may hold a heavy influence of discourse, ultimately the positioning of the creator to the resource affected the critical creativity.

In the next chapter, I reveal the findings of what practices emerge when resources are used or not used. The chapter explores *recreativity* in practice as a nuance of creativity. Through the coding cycles of practices and the intertextual lens, *recreativity* emerged after observing the way teachers and chefs engaged resources. While I briefly explained *recreativity* in this chapter,

I will explore it in more detail and its link to creativity in practice. So I will address the main question of what creative practices emerge when resources are used. I will also begin to shape how resources link to (*re*)creativity in practice.

## CHAPTER 6: (RE)CREATIVITY AND PRACTICES

The last chapter examined resources, its role and impact with creativity. I showed the significance of the sociocultural layers of resources and the epistemological structure of creativity. Resources also provided a way to view critical discourses and intertextual layers through the positioning of the resource to creator. More importantly, resources impacted creativity in practice. In this chapter, I examine the complex practices of the teachers and chefs.

As I discussed in Chapter 1, four practices of creativity emerged: imagination, experimentation, trial and error, and improvisation. The practices illustrated several key elements that framed creativity in practice. The teachers' and chefs' individual definitions of creativity reflected a more cognitive and ontological view. To them, creativity reflected prior research as the gifted individual who benefited from a muse to construct an original product. Throughout the teachers' and chefs' practices, they experienced inhibitors and triggers that activated or slowed creativity in practice.

In the first half of the chapter, I explore the nuance of creativity in practice as *recreativity*. The critical discourse and intertextual lenses revealed elements of how teachers and chefs engaged resources. A byproduct of the coding also showed that sometimes, creativity in practice became more *recreating*. In the second half, I explain how *recreativity* shifts to creativity in practice. Both practices, reflect creative elements that engage resources. I end the chapter with viewing how creativity in practice embodies place as a resource.

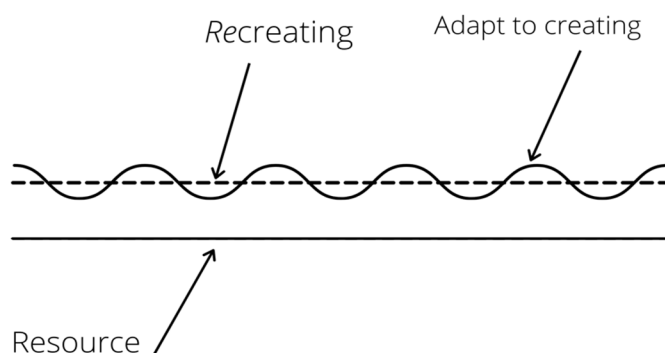
Leone's (2018) taxonomy helped construct a frame of creativity and creativity in practice. Of the four, the teachers and chefs engaged trial and error and improvisation the most. Imagination, while a practice and an oft cited trait of creativity, emerged as an implicit micropractice within trialing or improvisation. That is to say, imagination occurred as the individual engaged trialing or improvising practices. Although the teachers and chefs did not

explicitly share any narratives featuring experimentation as a creative practice, I noted that experimentation occurred in practice to some extent.

Leone's (2018) taxonomy made visible creativity in practice. Interestingly, the findings showed how the teachers' and chefs' practices moved across Leone's categories like imagination and improvisation. Peter and Kate's experimental practices blended elements of trial and error, thus making it a challenge to isolate experimentation in practice. Practices, on the whole, linked to how *recreating* shaped from the actor's use of resources. Although *recreativity* used active resources, in Francis' case, he embodied a passive resource in *recreating*. *Recreating* practices tended to intertext resources and contained adaptation as an element of practice. Resources triggered creativity in *recreative* practices illustrating Leone's categories (**Figure 4**).

**Figure 4.**

*RECREATIVITY IN PRACTICE*



Note: Figure 4 visually represents *recreating* in practice. In *recreating*, the hyphenated line runs parallel to the resource, which is indicative of the intertextual, mimicking nature of the practice. The line is hyphenated to show that at some points *recreating* can move into adapting and



creativity in practice. Generally, the adaptations are small moments of creativity within the *recreation* of the resource.

### ***Recreativity in action***

#### **Beatrice**

*Recreating* emerged as a practice that linked a resource to the creator's creativity. In some cases, the *recreation* received minor modifications. Beatrice said, "It's adapting... and then cater it to what I need." Beatrice's *recreating* practices signified a direct link to the original resource as a model for content and design. In one example, she told a story of a lesson taught a few years ago. She found a musical chairs activity from her AP teachers Facebook group:

seeing how the activity was run was there. And I didn't change too much. But then pulling the material from the source needed to be done because it wasn't there already for that text. And then choosing the songs needed to be done.

She acknowledged *recreating* practice as more of a mimicry due to the lack of change in the directions of the activity. However, she then *adapted* the lesson to her students and the unit content. "It was a text that I had taught before and the kids kind of had trouble getting into it. So, I thought this would be a good way to get them into it, thinking about the things that they're about. See the language, hear the music that is thematically related to the text from the lyrics and the sound of it kind of has the tone and mood for different parts of the novel."

Beatrice's example illustrated *recreating* as a practice that used the original resource in language and in practice. The active resource directly impacted her *recreative* practices.

*Recreativity* inverted the idea of originality or novel creation in their creative practice. Although she stayed with the original resource's structure and activity, she also shaped *recreativity* through *adapting* the resource activity for her unit text and the music playlist to her students. In using

Beatrice's framing of adapting, I am acknowledging the significance of her voice, and shaping elements of *recreativity* in practice.

The musical chairs activity illustrated the intertextual element of *recreating* practices. The intertextuality of resources echoed the heteroglossia of language through structure, and for Beatrice, planning an activity (Bazerman, 2004; Wynhoff Olsen et al., 2018; Bahktin, 1981). The intertexted practice represented the embodied creativity through trialing and possible experimenting. Perhaps in some respect, she experimented with learning and adapting a new activity, musical chairs, to engage learners and have them investigate a text.

*Recreativity* of the resource showed her experimenting practices. Beatrice normally frowned upon building anticipatory textual schema for every unit. However, she reasoned:

And I don't remember what text it was, but I know that it was a text that I had taught before and the kids kind of had trouble getting into it. So, I thought this would be a good way to get them into it, thinking about the things that they're about. See the language, hear the music that is thematically related to the text from the lyrics and the sound of it kind of has the tone and mood for different parts of the novel.

The activity's purpose helped learners engage with the text by introducing and bridging familiar schema. The resource showed an activity designed to engage and introduce learners to a new text.

So, this text, again, I don't remember what it was. I felt needed some kind of access point. And the way that other people were talking about it was so ... and I don't remember what text they were using it for, it seemed like some people did it all the time, which I was thinking, gosh, as a teenager I would get so sick of that. Oh, we're about to read a new text, now let's listen to music and go around a circle and write on the quotes. But as

something ... I try to be... kind of innovate with each thing we do, each unit, each major work we read. And change up what I do so that it keeps kids on their toes and keeps them interested and engaged so it's not the same old, same old.

For her, the resource helped by presenting a new way to introduce a text, and by what she read from the teacher posts, engage learners. In *recreating* another teacher's activity, she experimented with a particular activity in practice to build a new lesson.

At the same time, moving between one course section to the next, trial and error practice of creativity occurred in-moment as she adjusted to the experienced inhibitors of the activity. A student represented the first inhibitor.

during this task he's there like as this negative, 'Oh gee, I wonder what this text is going to be about.' Like every time he sat down for a quote. And I was like, dude, we're not talking. We're just looking at it. We're internalizing. We're listening to music. We're thinking about what the lyrics say and the mood, and we're writing about what we ...

Then the whole time he was kind of like, 'This is such a waste of time.' Bad mouthing it all.

The second inhibitor reflected the whole class discussion, "I don't know if it ended up being helpful to anybody. Because then afterwards they got into small groups and they talked..." At this point, she felt deflated about the activity. Beatrice added, "with this activity I think that I had such high hopes after everyone had built it up to be something so powerful and effective and wonderful that I was hoping it would be effective for me, too." She internalized the perceived failure of the lesson with the first course section. Beatrice attempted to restructure and adapt the activity for the next course section:

The other class period was very small. So, I had a very disproportionate number of kids in the two classes. Of the 40 I had 27 in one class and then the rest of them in the other. Yeah. So, then when it got to the other class there wasn't enough people and voices and ideas there and stuff to really make it be worth anything. I always had to include myself in class discussions and encourage their thinking a little bit further, because they were always just all happy to be like, 'Yep, surface, that's it. That's good. We're done.' And I'd be like, but what about this?

So her *recreative* practices experienced inhibitors; however, she also may have conflated the behavior of one student whom she said negatively impacted the activity with having to participate in the second section due to class size. Ultimately, in her practice addressing the inhibitor for her second class section, Beatrice's *recreative* practice failed. The example highlighted the messiness of creativity, particularly with the learning of a new resource and attempting to *recreate* it. Even with resources in hand, and for Beatrice it included multiple variations from teachers in the Facebook group, *recreating* practices highlighted challenges such as a failed experience.

### **Monica**

She framed her *recreative* practices similarly as Beatrice by using the intertexted structure of the resource and then adapting it to their respective styles. During Monica's live plan, she adapted her existing day one icebreaker activities from the in-person stations to virtual approaches:

One thing that I've done the past couple of years that has worked out well is to have students... I have them do sort of a stations activity on the first day of class and they go through a variety of different activities to help them get to know me, get to know each

other, get to know the class. And so, I'd maybe want to adapt that to a virtual environment, but I don't know exactly what that would look like.

Monica attempted to *recreate* her habitual day one community builder. For her, community shaped an integral part of her classroom practices, “building community is important to me, that it's something that I strive to do pretty quickly in the beginning of the year.” Her reasoning for the resource linked the attempt to *recreate*.

The move to starting the school year in a virtual space acted as an inhibitor to her usual day one classroom community building:

And I'm kind of at a loss for how to do that in a remote environment. I'll have all of my students on Zoom in... Or rather Google Meet will be our platform that we have to use.

I'll have them all.

Her live plan focused on adapting her old practices to *recreating* it in a new space. She planned different approaches through using available resources such as Flipgrid, Padlet, Google Slides, and Canva so students could design and construct a virtual “wall of happiness”. And more significantly, she intertexted her own plans into the *recreated* and recontextualized plan.

As she planned and talked through her adaptation for *recreating* the wall virtually, Monica's resignation toward the virtual teaching shifted to seeing possibilities:

But I think maybe asking them to do something similar, but on Padlet and offering them the opportunity to include some sort of multimedia artifact. Either they can actually do the card and they could draw it on an index card or a piece of paper and they could take a picture of it and put it up on the Padlet wall. That could work. Or they could attach a video or they could attach a photograph or some other picture. I think that could potentially end up being really cool and really interactive. And I don't have kids interact

with the wall of happiness really beyond having it up in the room every day. I could ask them to interact with each other's additions to the wall because you can add comments and like or favorite things on Padlet walls.

Monica's virtual adaptations illustrated *recreating* practices engaging imagination through trialing. Originally, students would work in stations, groupings of desks with designed tasks, and move from one to the next with a 5x8 card. At the completion, the students post their card to a wall in her classroom. The activity builds community and allows Monica to set up the significance of a social classroom.

Within her example, she intertexted the original purpose of community building and structure to adapt by verbally trialing to a new context. At the same time, the live plan in moment imagining play of ideas used a predetermined idea and experiences of day one teaching for a new context. The *recreating* practices from known resources, such as personal ones, illustrated a lower learning and adapting curve for new contexts. However, it is not to say that *recreating* from new resources results in a higher learning curve and more challenging adaptation. Instead, Beatrice's and Monica's *recreating* highlighted different experiences, but stayed within Leone's (2018) framework of practices. Moreover, adapting as a practice showed a small difference between *recreativity* and creativity. The small difference showed how *recreativity* allowed the individual some creativity in practice.

### **Francis**

In the culinary field, recipes build into *recreativity*. Francis talked about the ingredients to his pizza and sauce. He said, "the ingredient list is just the way my dad's been making it forever, same as pretty much everything else I do. I tweak a few things here and there, that I've

learned.” Close to four decades of learning and making pizzas, he continued to use his dad’s recipes:

I’m recreating it [his dad’s foods and recipes] somewhat. I make the pizza completely different than what he does. So, I guess if I’m recreating anything, it would be the spaghetti sauce, when it comes to my dad. That’s what I’m recreating.

Francis’ practice *recreated* his dad’s pizza sauce with adaptations to the pizza style. He moved from his father’s use of pizza screens to New York style pizza using boards and stones to bake. The adaptation and recreation of his father’s flavors remain in the dough mix and sauce. Francis’ *recreating* practices reflected elements of structural and content mimicry, with adaptations to the context, style, and content. In other words, he intertexted his father’s sauce and lessons into his own style for his pizzeria.

*Recreating* his father’s recipe in practice remained a neutral practice. At times, it may have reflected experimenting as he tweaked the sauce. However, the tweaks remained so minimal that only he could tell:

Am I one of those guys that taste my food all the time? No, I’m really not. I do. But if I make it the same all the time, I’m pretty confident it’s going to be okay. I may tweak adding like, there are certain ingredients I don’t put in my pizza sauce. You only put three or four ingredients. So, maybe one time I will try putting a fourth one in there and just see what it’s like. Will people really notice it, if I do it? Probably not. But, will I notice it? Yeah. And then if I like it, I might tweak it that way, but I don’t make big tweaks where somebody is going to come in and say, ‘Wait a second. That’s not right.’ Because then, you have problems on the line with that.

Francis' minimal tweaks resembled experimenting. However, because he acknowledged that customers likely would not notice, then perhaps it may be less creativity as experimental and more due to routinized practices. Similar to Monica's own day one teaching as a resource, Francis' *recreating* of the sauce - everyday - reflected habitualized routine.

### **Adapting resources as (*re*)creativity**

Active and passive resources impact *recreating* practices intertextually. In *recreating*, the resource represents an active resource. The resource directly linked to the practice. In the examples, the teachers' and chefs' use of resources illustrated the immediate impact of the resource upon their creativity. For Beatrice and Monica, as they explored a new context for planning an activity, the use of a resource provided structural and content support. Both of them represent experienced teachers. Each has taught for over 15 years. However, each explored new contexts for teaching. Beatrice relied upon her social network to inform her planning of a new activity that could boost learner engagement, while Monica relied upon her prior day one experiences with learners to inform her planning for virtual teaching.

They adapted each active resource for their particular contexts. To some extent, adapt also means revise. In Monica's example, she adapted through revising her own activities to retrofit them into the new context of virtual teaching and learning. It may be fair to say, her use of her day one lesson could reflect a passive resource. Had the semester began in person, the day one teaching practices may have been routinized, like Francis' sauce making, and been enacted without active recall for adaptation. Yet the Fall 2020 semester began virtually, and instead, she actively recalled her prior day one practices and planned ways to adapt it.

Even though Francis habitualized the routine of making sauce, his *recreating* practice illustrated intertextual mimicry, an embodiment of the lifelong recipe. Francis' use of his father's



recipe appeared as a direct link to his *recreating*. However, I argue that the embodied recipe represents a passive resource due to its routinized nature. Francis spoke about not measuring or thinking about the recipe, “But when it comes to me making, I don't measure anything. Yeah, I tweak every day, but when I'm adding my spices, I don't measure. I just know by its feel, that's how I do it.” The small tweaks reflected the non-measured, do by feel, *recreative* practices of his 39 years experience.

### **Intertexting resources as *recreativity***

Ultimately, in *recreating*, the teachers and chefs intertexted their practices with resources (Bazerman, 2004b, 2004a; Wynhoff Olsen et al., 2018). Regardless of passive or active resources, *recreating* involved adaptation or full-on embodiment of the resource. The resource provided a formidable influence on *recreating* practices. For example, Peter's interest inventory, an icebreaker activity, originally came from a Master's course:

One of the suggestions of one of our professors was you should do an interest inventory at the beginning of the year. I think it was just like, ‘Oh, yeah that's a first day thing. Let's do it first day. I'll do this interest inventory.’ But it's been something that I've done pretty much every year.

He *recreated* the resource content by adapting it into his own practice for his Food Literature course.

*Recreating* the interest inventory from the original resource allowed Peter to engage in a human centered practice. He found a way to build community, personalize the material to their interests, and build student ownership of the course:

Because my kids are there it's not as important as the actual getting my kids to share and start just knowing each other's names and everything like that. It's just I don't know. But

this interest inventory the stakes are higher. It's also going to be a space where I'm going to ask them on the first day of class to help me figure out what this class is going to be. I know what the standards are going to be and I'm going to share those with my kids throughout the course of the year.

The intertextual layer of the original content, language and idea, blended with his adaptations and revisions each year. The intertextuality of *recreating* illustrated Wynhoff Olsen et al.'s participation forms of: *tracing*, *connection*, and *resonance* (2018, p. 62). *Tracing* showed the presence of intertextuality. Peter's use of the interest inventory reflected the influence of his Master's course. *Connection* showed the action of inserting a resource into a new text. He then added the inventory to his classroom practices. And *resonance* showed the echoed ideas from resources into a new text. As Peter added and revised layers, his interest inventory carries new elements of standards and practices forward. Throughout *recreating* practices, Wynhoff Olsen et al.'s elements of intertextual participation were made visible.

### **Messiness of learning to *recreate***

In *recreating*, a learning curve existed for adaptation. As teachers and chefs *recreate* a resource and then adapt it, the bricolage of resources blend to their practice and personal resources: style, knowledge, community, and even existing or available material resources. Yet to adapt, it requires an understanding of creativity and *recreativity* as messy. By messy, I mean that creating, much less *recreating* a resource, involves inhibitors and even failures (Leone, 2018). For instance, Beatrice tried and acknowledged a *recreating* failure with the musical chairs activity. She has experience and an understanding of pedagogy after 15 plus years of teaching. At the same time, it was a new activity, a new school community, and a new curriculum for her. While the practice of teaching and guiding students may not be a new practice, attempting to

*recreate* and adapt a new resource to new personal resource layers may have resulted in the failed lesson. Perhaps, as she said, it was the class sizes; perhaps, the failure resulted from the one student influencing the class dynamic; perhaps Beatrice's music playlist did not register with the students; perhaps it was the text, or time and day; perhaps she gave too much deference to the resource. Ultimately, for Beatrice, the *recreated* lesson failed. She did not adapt the resource to her practices well.

In zooming out from the possibilities of the class size, lone student dynamic, and playlist, they all link to the students and community. Being new to the school, from having taught at diverse urban high schools before that, Beatrice may not have fully learned the suburban monocultural school culture.

Kate acknowledged, the contexts of where and for whom she worked with as coworkers and customers influenced her to adapt and create. Learning to adapt took time. Kate acknowledged bounding her creativity as *recreating* from her known resources of experiences, and the pâtissiers' Discourses. Others may rightly point out that Monica adapted from the in-person icebreaker to the virtual one seamlessly. In planning, yes, Monica made the adaptations to *recreate*. However, she did not have to learn the community. They were incoming freshmen in contrast to Beatrice's seniors. From my experience, freshmen differ from seniors on many levels. One of the differences is the freshmen naivete to high school in contrast to seniors' confidence of community. Early in the interview, Monica expressed her anxieties of not knowing what to do in the virtual environment. It took her time to talk and plan. She engaged creative practices of trialing out ideas and imagining through *recreating* her traditional day one lesson to the new context. What remains unknown is how the students engaged the lesson and took to the digital

resources. It also remained to be seen to what extent the passive or active resource in *recreating* impacted the success or failure of the practice.

Whether active or passive, resources impacted *recreating* practices. The impact emerged through *recreating*. By *recreating*, individuals intertexted discursal layers of language, structure, ideas, and even action. The intertextual layers reinforced Bazerman (2004a; 2004b) and Wynhoff Olsen et al.'s (2018) framework of intertextuality as making visible the connections between resource and embodied practice. The intertexted layers did not necessarily mean that *recreating* equated to copying or plagiarism. Instead, it revealed the echoed reverberations of resources upon creativity in practice (Bazerman, 2004b). Intertextuality also showed the positionality of the actor's (*re*)creativity in practice to the resource.

The *recreating* practices stayed within Leone's (2018) framework of trial and error, experimenting, imagination. Improvisation was not noted in examples of *recreativity*, nor in the interviews. However, it is not to say that *recreating* through improvisation cannot happen. In fact, disciplinary improvisation situated *recreating* practices as based upon known and linked resources to the moment (Fairbanks et al., 2009; Sawyer, 2004, 2011; Young et al., 2017). The challenge with seeing *recreating* through improvisation occurred through the method of the research. The teachers and chefs received previews of each interview and the live plan. Moreover, the in-moment stories told by each of them lacked contextual details that potentially live observation may have recorded.

The use of resources shaped *recreativity* through intertexted ways of adapting and catering. *Recreating's* use of resources constructed intertextual layers. The layers showed how the practices drew from the resources (Bakhtin, 1981; Bazerman, 2004b; Wynhoff Olsen et al., 2018). Some of the layers reflected the personal histories of individuals and their experiences in

the field. The practices of *recreativity* reflected Leone's (2018) framework. The use of imagination, trialing, and experimentation occurred within adapting resources.

*Recreativity* showed adapting and catering as elements of practice. Although *recreating* from perceived successful creations did not always ensure success. Beatrice illustrated the messy nature of *recreating* from resources. A part of *recreating* from resources included learning to adapt. Even experienced teachers and chefs needed time to learn to adapt resources to fit their spaces and Discourses. The learning, also grounded in their field experiences, proved challenging to observe and note other than shared narratives. The impact of *recreativity* of resources into practice acted as a trigger into creativity.

### ***Recreating becomes creating***

Through *recreating* a resource, the creative impact through practice could expand beyond the original intent of the resource. Peter's *recreating* practice impacted his practice and ability to connect the course content with the students. The shared data set up a potluck of student interests for Peter to co-construct the course with them. Even in the culinary field, *recreating* provided a link to other creative impacts. Kate worked at two bakeries before starting her own. At each bakery, the pâtissier, head baker, made their version of the traditional Southern chess pie. Upon opening her bakery, she too stayed within the known resources of experience and knowledge by *recreating* the chess pie. "[W]hen I first moved from New York and was starting [bake shop], I was very much rooted in the recreation, and the flavor development had to do with what was challenging me the most." *Recreating* from resources shaped her initial menus and pie bakes:

That really changed though, as I started to realize who my audience was. That started with my parents, because I was living with them at the time, but also thinking about the

food community in [the city] and what was going to make us feel and appear to be a friendly, welcoming business.

Interestingly, another resource, her community, triggered a shift from *recreating* to creativity. It moved beyond the adaptation for creativity and more toward finding her voice and style. Kate acknowledged a framework of creativity within baking will always have an element of *recreating*:

I think that's how recipes and styles change over time for different chefs, but also for any sort of craftsperson. You're always starting from a baseline of knowledge, that kind of everyone agrees upon to some extent. But then, through the conditions with which you're working in, the people that you're working with, the ingredients that you're using and your own style, you adapt and change and kind of expand upon those.

Multiple resources, social, cultural, and material, impact the move from *recreating* to creating practices. The “baseline of knowledge” she noted, placed *recreating* as a root that stems and shoots out to the branches of fruit, creativity, for harvesting. Resources triggered creative practices that moved her beyond *recreating* and into creating.

### **Francis creates a new slice**

In *recreating*, resources serve as a recipe to follow for practices. However, in creating, resources serve as a base of information that allows practices to build its own structures. Francis moved from directly *recreating* his father’s pizzas to creating his own style, the New York style pizza:

I wanted to change the style of my restaurant. I didn't want the carryout and delivery pizzeria business anymore. So, the pizza that we were producing on a faster pace, just get them in the box, and give them to the delivery boy and deliver them was not the pizza

that I wanted to put in a glass window when the customers come in. It had to be completely different. It had to be that New York theme, New York little pizza parlor that you go in New York, downtown Manhattan. That's where I tweaked everything. If I did it the other route, it wouldn't have worked. So that's where all the tweaking came in, so I went from one extreme of carryout and delivery to sit-down New York parlor.

He took his base idea of change and implemented that into practice toward constructing a signature style, in both restaurant and menu.

He learned from his father for 11 years and then continued his dad's pizzeria style for another 15 years. "Now me buying his pizzeria, everything was in motion. Everything was still there. I did very little small tweaks, but the 15 years I did there, I realized, 'This is basically what my dad was doing.'" Francis' base-knowledge formed from what his father taught him. He *recreated* his father's pizzeria from the recipes to the menu to how the business operated. Eventually, he moved to create his own pizzeria as he began to have a family. After learning from YouTube videos for pizza recipes, and Gordon Ramsay to simplify the menu, he created a five item menu, and five table New York style pizzeria.

The creative practices focused on trial and error of dough recipes, sauce recipes, pizza screen or board, and cook times:

And then the sauce, everything with the pizza I've completely changed to me. Anyone in the restaurant business will tell you they tweak every day. So you may have a recipe but you still tweak every day. The sauce was me, trial and error doing things.

He broke away from *recreating* and adapted what he learned from his father to create. Francis trialed various flavors and ingredients.

The different resources coupled with the resource of his father's practices propelled his creativity into practice. Although some may argue that Francis continued to *recreate* in practice the found resources, and he may be *recreating*. Kate seemingly confirmed that when she spoke about the baseline of knowledge shaping the basic structure. That is to say, in her context, apple pie is apple pie. The differentiation and creativity comes forth in flavors and perhaps even visual presentation. Francis' style and ideas moved the flavors from *recreating* resources to creating from resources in practice.

A similar movement from *recreating* to creating in practice happens in teaching. Even though adaptation highlights the actor's creative contribution to the *recreated* resource, the practice remains rooted to shaping the resource. Creativity in practice pivots away from the resource. Sometimes it may be a large jump away from the resource, and other times it may be a small step from the resource. Francis took small steps away from the resources that informed his creativity in practice. The base of his father's teachings to the found media resources shaped the way he trialed, and perhaps experimented away from *recreating* into creating. Meanwhile, Gertrude highlighted how passive and active resources informed her creativity in practice.

### **Gertrude embodied microaggressions fuel creativity**

She culled from many passive and active resources to inform her creativity with teaching and her planning practices. Live experiences, as passive resources, shaped from indirect links to creativity in practice. As one of the few - if not the only - student of color in the classroom, the experiences shaped her classroom practices toward a social justice space and curriculum.

Gertrude recalled several instances that reflected a paradox of feeling support and encouragement to isolated and essentialized. Her parents supported her creativity through giving her space and positive feedback. Her mother often found texts that featured a black or person of



color protagonist. That support contrasted with an early memory of school book fairs. “And then you think of the books that would be at Scholastic Book Fair, every kid's favorite day of school. I don't remember seeing stories that had just different people, just different stories.” The book fair selections did not afford representation. The early memory made an impression about diversity in literature and representation through characters.

Fortunately, her middle school teachers reflected positive encouragement and recognized her creativity in practice of writing stories:

My [7th grade] teacher was like, ‘Kels, that was really good.’ And I was like, ‘Thanks.’

And then, I think just with that encouragement, I was like, I'm going to keep writing. And then in eighth grade, my English teacher is like my best friend, I adore her. And I was like, ‘Mrs. Trombley, I wrote 52 pages of a vampire novel, will read it?’ And she was like, ‘Absolutely.’ And she went through and gave feedback, and was like, ‘You're doing really good, Kels, keep going.’

The support from teachers continued her junior year in high school:

We had to do a character analysis. And [the teacher] was like, ‘You know you could write it like a psych paper.’ And I was like, ‘Mm, can I write a story?’ And he was like, ‘Oh, okay.’ And I wrote it as if I was a psychiatrist examining these characters. And he was like, ‘That was so fun.’ And I was like, ‘Thank you.’ I got 50 points extra credit for that.

The teachers, combined with her parents, formed the foundation of support and encouragement for Gertrude's creativity.

The positive experiences shaped the passive resource that contrasted to her early childhood memory of book fairs and representation. The positive experiences with teachers and

school mixed with negative experiences. During her senior year of high school, a teacher essentialized her voice and being in class as they discussed a text:

I didn't even understand [*Beloved*] in AP lit in 12th grade. I was like, 'What the hell is this book?' Then the AP teacher was like, 'Kelsey, can you tell us what you, a black person, think of this book?' I'm like, 'Mr. Reid, I have no idea what this book is telling me.' Yeah, I would not teach *Beloved*.

And unfortunately in college, the microaggressions and essentializing continued:

I think back and I'm like, 'I had to read so much texts.' I had to do so many things that didn't connect with my life, but I tried to convince myself that it did. And I'm like, 'Maybe I did a big disservice to myself,' because coming to college was more of a culture shock for me where I was like, 'Okay, I'm one of the few people of color in my class and they've made it clear.' They're like, 'So tell us what your thoughts are on *The Color Purple* as a black woman.' I was like, 'Why are you calling me? I'm going to confess, this is not my job.' But then it suddenly became my job that I was supposed to be well read and relevant to all these issues.

The positive and negative experiences formed foundational resources that shaped Gertrude's creativity in practice. The experiences became a formidable resource that shaped her creativity with planning curricula and the way she integrates representation in the course texts.

### **Shaping an informed practice**

Gertrude's experiences as resources shaped her creativity in practice. She received strong support to build her creativity through her parents and teachers. She also received trauma with the lack of representation and racial microaggressions in school environments. The juxtaposition between the learning spaces showed the duality of resources, much like an inhibitor, that impact

creativity in practice. More to the point, the positive support allowed her a space to accept and shape creativity, while the negative experiences shaped a preventative and proactive set of practices in her teaching.

Her creativity in practice linked to planning the curricular unit texts and projects. She made a conscious decision to plan integrated and representational texts:

Let's watch *Homecoming King*. Because I wanted to have a text that could speak to my Muslim students, because I was like, okay, every curriculum is going to be like, 'okay, we have our black author, we have our white, we have our woman'. And I was like, 'Where are my brown people?'

She added, that her district did not add queer authors. So she actively looked to find supplemental and main unit texts that featured missing voices. Gertrude's resources provided a confidence to enact her creativity in practice and to ensure a representative curriculum. She embodied her life experiences within her practices of planning and teaching. In an interesting bit of unintentional irony, her district included *Beloved* in the sophomore curriculum. She pushed back on the text:

I'm 25 and I'm still like, 'What in the world is happening with this book?' So I couldn't ask my 15-year-olds to read *Beloved* and be like, 'So tell me what it feels like to be an outsider,' while also dealing with infanticide, trauma and slavery. That's too much, too much.

Instead, she called an audible, ignoring the district recommended text and had the students read Alexie's *Absolutely True Diary of a Part-Time Indian*.

The shift to integrate the curriculum texts illustrated Gertrude's creativity in practice. The creativity in practice highlighted improvisation, trial and error, and imagination. The move to

show Minhaj's comedy special occurred in-unit. She audibled, improvisation, the suggested texts to find representative texts that spoke to and with her students:

Okay, we're not doing *Beloved*, Frederick Douglas or *Incident in the Life of a Slave Girl*... for this unit theme to be, what does it mean to be an outsider, you need to hear from people, what are their stories? And so we watched Hasan Minhaj's *Homecoming King* so that they could hear him tell his story.

The shift in texts continued the unit theme and question. She trialed a new text, Alexie's *Absolutely True Diary*, in the pivot from the suggested texts and incorporated supplemental texts that allowed the students to form dialogues and connections.

By asking, *what are their stories*, she formulated a new critical frame for the theme of being an outsider. The reframing showed imagination and improvisation to plan new material for the existing unit, while she kept the skeletal structure of the district's unit. Her experiences as a resource, in addition to other resources such as the content material, college courses, texts, professional development, sociopolitical demonstrations and activists, informed and guided the trialing and planning. Gertrude's creativity in practice did not move into experimentation because it lacked the intentionality of design to work on one or two principle techniques such as a practice or particular variation. The creativity in practice stayed within the structure of a planned unit. The passive resources provided a base for her creativity in imagining, trialing, and improvising practices. Her practices revised the unit curriculum to feature a more culturally relevant and sustaining pedagogy. The other layers of active resources, such as professional development and 2020's sociopolitical climate, infused a more immediate focus for her creativity in practice. By immediate focus, it acted as a trigger to her creativity. While social justice pedagogies reflected her embodied experiences as resource, Gertrude enrolled in Abolitionist

Teaching professional development and remained engaged with the BLM activism and protests and current events.

Gertrude's example of creativity in practice showed the impact of complex layers of resources. The layers formed from active and passive resources. Unbounded by time, resources connected and informed practices (Scollon, 2001). The complexity revealed how resources which include positive, and negative elements, informed creativity. I intentionally focused on her adolescent experiences to illustrate the effect of foundational experiences. However, I did not examine every mentioned resource of college course, text, professional development, etc. The overview of passive resources' effect on Gertrude's creativity illustrated the mix of resources to flavor creativity. Much like Francis's father as a cornerstone resource of experiential memories, Gertrude embodied the resource of experiences into practices. The complexity of layers reflected the heteroglossia of sociocultural resources for creativity (Bakhtin, 1981). The heteroglossia of resources highlighted the diverse voices that gave language and body to creativity in practice. Heteroglossia also speaks to the discourse of locale as resource.

### **Embodiment of the local place as resource in practice**

Situated practices speak less of teaching practices within classroom walls and culinary practices within restaurant kitchens. Instead, place, as a resource, affects individuals by impacting their creativity in practice through discourse. For example, Kate spoke about enhancing the flavor of her version of the chess pie by localizing the flavor. She changed it from a vanilla custard to a maple flavor, connecting her Midwest bakery to the region. The use of place as resource reflects a community discourse (Gee, 1996; Heath, 1983; Lave & Wenger, 1991). Of the multivocal resources, the active resources of 2020's spring/summer of Black Lives Matter, BLM, marches and activism, coupled with the political unrest within the United States

impacted others besides Gertrude. The active resources centered the immediacy of current events as triggers and resources for creativity. BLM movement compelled some to act and support it through curricular changes.

### **Teachers' creativity in practice and the impact of place as resource**

Peter, from a southern city, experienced protests and marches in his city. He recognized the potential that his students may be impacted and interested in learning more. "There's this reckoning right now of what's been going on in the past. It seems like a perfect place to bring in this moment, perhaps, or a lyric or song lyric." Peter showed a desire to imagine and perhaps trial a space in the curriculum for his students to explore current issues. Besides a student centered practice, the location of his school enhanced the culturally relevant pedagogy due to the BLM immediacy for the students:

Could we talk about this present moment in [city] as the past and the present coming together in some way? Absolutely. Could we look at our neighborhoods, and talk about our place, and how our place informs our view of history and our view of the present? Possibly.

The open questions reflected Peter seeing the possibilities through planning. The questions represented his creativity through trialing of ideas.

The role of place as a resource impacted the teachers in different ways. Gertrude and Peter's use of locale as a resource reflected two distinct midwestern urban schools. Their respective schools' districts as place made visible the immediacy of the BLM movement and the sociopolitical events unfolding during the summer of 2020. This is not to say that Monica and Beatrice did not support nor opposed BLM, rather they teach in suburban school districts. Neither mentioned BLM nor any of the sociopolitical events during the interviews. Instead, they

spoke of how their schools and districts are and have handled COVID and the students. Their districts and schools as place filtered priority focus.

Monica's and Beatrice's place as resource impacted their creativity in practice. In Beatrice's failed lesson, she localized the playlist for her students. She regularly engaged her colleagues in conversation about practice. The place as resource showed a mix of the school culture and discourse about practices and creativity. Similarly with Monica, place flavored her professional learning community, PLC, featuring her department team. The heteroglossia of local discourse illustrated how place shaped a lens for creativity in practice (Bannister, 2015; Lave & Wenger, 1991; Wenger, 1998). Even within the culinary field, Clarke, whose restaurant is located within a southern city, talked about the impact of place as a resource upon his creativity.

### **Chefs' creativity in practice and the impact of place as resource**

The place as resource helped Clarke create localized food fused Mayan flavors. He belonged to the community business association of his restaurant's city. During the summer of 2020, he attended several business meetings with local BLM activists to hear their needs and express support:

there's something right now that is more important than just talk about other things than what's going on right now like the racial issues, fairness... I want to help, I want to make a difference, which we're already doing in the first place, which I need to turn our idea to buy more, like help out Afro-American people like business people or with farmers and stuff like that, to buy more stuff from them.

Clarke viewed his restaurant's practice as a way to help. During the meeting, he tried to get other businesses to make a concerted effort as he has done for 13 years. He bought produce and meats from area farmers, in particular from farmers of color. Clarke viewed the community as integral

to his success and that he should support the community. “I came in a country where I have nothing and I came to this country, this country give me a lot. So it's just time for me to give back to the community, you know?”

The place as resource combined with culture to shape his creativity through imagining ways to enhance flavor. To him, food tasted differently than it did at home in the Yucatan, no matter if he used the same ingredients and techniques. The food lacked flavor. Eventually, he bought locally farmed produce and meats. The farm to table produced the flavors he wanted and needed. “I realized, wow, people might disagree with me, but it makes a huge difference on the food flavor and texture, and obviously healthy.” The local resources and place as resource enabled him to create the necessary flavors and textures. Clarke engaged in imagination to create and enhance the flavors.

Creativity in practice used resources as a way to inform but not realize the creation. The use of resources in creativity reflected a set of ingredients without a recipe. While the ingredients may be used in similar ways as known recipes, creativity foregrounds the flavors and textures that separate one dish from another.

Francis and Kate created their own styles and flavors of foods that imagined a new way to present existing foods. Some may argue that Francis five ingredient pizza dough recipe hardly accounts as creative, and that he learned his New York style from existing video resources. On top of which, he may likely be recycling his father’s sauce recipe. Yes, I agree that those are valid points. At the same time, his father did not put his sauce to the New York style. Francis trialed a new sauce that enhanced a different flavor. He also used different water, and other ingredients than pizza chefs in New York, which means a slightly different flavor in the dough crust. Francis created a pizza in his own preferred style. He reflected the way creativity emerged



from *recreativity*. Similarly, Gertrude shaped her creativity in practice from embodied resources. She drew from life experiences that reflected positive and negative experiences of creativity, schooling, and microaggressions. The experiences layered into passive resources that informed her teaching creativity in practice.

The use of resources for creating illustrated that not all resources emanate from positive or neutral sources. Creativity in practice coalesced the discourses of resources. It became apparent in the way place as resource impacted creativity.

### **Creativity of place**

Places contain provincial discourses that reflect the locale and its histories. Place represents one of the sociocultural resources. Place impacted creativity in practice by elevating discourse or providing a focus to view resources. COVID resituated everyone's place of work and sense of place. In turn, that resituated context filtered into creativity in practice. The chefs, Francis and Clarke, trialed different business practices. Teachers trialed different virtual teaching practices. They all engaged creativity in practice through imagined, and experimented, ways of doing. For some, 2020's summer activism of the BLM movement focused their creativity in practice by imagining ways to incorporate that into their curriculums. For others, place as a resource shaped the discourse and priorities of creativity in practice to reflect the school and its district. Place impacted the chefs' emphasis on flavors and even the acquisition of resources.

The use of resources highlighted *recreativity* and creativity in practice. The practices reinforced Leone's (2018) framework of practices. Imagination, experimentation, improvisation, and trial and error made visible (*re*)creativity in practice. *Recreativity* and creativity use resources to inform practices. The intertexted layers of resources reflect *recreativity* in practice. Beatrice illustrated the messiness of *recreativity* through the challenges of adapting and catering

a resource to her context. Monica showed a successful *recreation* from a self-resource in how she adapted it for a different context. Francis and Gertrude revealed the deep layer of personal experiences as a resource that embodied creativity in practice. The embodied creativity in practice also reflected place as a resource. In all, resources served as a way to engage and shape discourses into creativity. Resources reflected discourse communities (Bannister, 2015; Gee, 1996; Heath, 1983; Lave & Wenger, 1991). The *recreated* intertextual layers revealed the engaged heteroglossic voices and discourses (Bakhtin, 1981; Bazerman, 2004b; Wynhoff Olsen et al., 2018). Meanwhile in creativity, the use of resources showed the heteroglossic tracings within the shared stories. Ultimately, creativity in practice use of resources demonstrated the possibilities.

In Chapter 7, I examine the findings of how creators mediate resources for creativity in practice. Each of the teachers' and chefs' shared stories of creativity in practice reflected small moments of their mediation of resources. For instance, Monica remembered the moment she decided to plan the Escape Room activity. At lunch, the literacy coach shared resources from a conference she attended. The coach mentioned the Escape Room. Monica said she pounced on the idea and asked the literacy coach, "you want to do this?" From that point, she included the other Honors 9 English teacher and Monica engaged her (*re*)creativity in practice. Her moment reflected the use of sociocultural resources. It illustrated the engagement of community discourse to shape and construct creativity in practice. Scollon's (2001) mediated discourse theory as a nexus of practice shaped a wider understanding of the use of resources and its intersection with the nexus of practices. It maps out, in Monica's example, how she used resources and the nexus of creativity in practice.

## CHAPTER 7: MEDIATED CREATIVITY IN PRACTICE

The previous chapters highlighted the findings of creativity defined and its elements, the relationship between resources and creators, and creativity in practice. I ended the Chapter 6 featuring the way creativity in practice embodied place as resource. The explored practices reflect how creators engage and at times embody a resource within their creativity. The spring and summer of 2020 served as an active resource that some creators engaged and layered into their practices. For this chapter, I deconstruct the creators' mediated creativities as a nexus of practice. Chapter 6 contents set the table for the examination of resources mediating creativity. I show the deconstructed dialogue that forms between resources and creativity in practice. In the end, a nexus of creativity in practice forms from the mediated relationship.

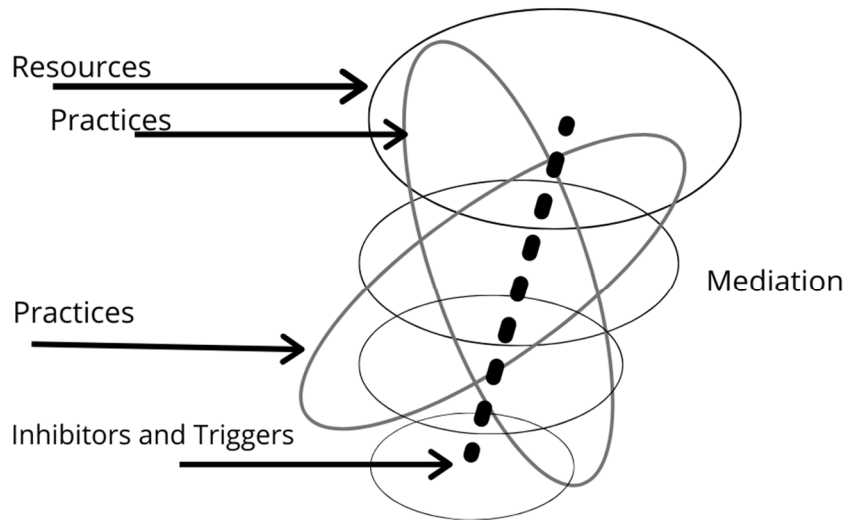
### **Mediated Creativity**

Mediated creativity builds from Scollon's (2001) mediated discourse theory, MDT, which helps recognize and make visible the way actors connect discourse and practice. For the purpose of this study, I am focusing on the way creators engage the discourse from resources to their creativity in practice. In addition, MDT shows resources intersecting within the nexus of practices through discourses (Scollon, 2001; Scollon and de Saint-Georges, 2012). The nexus of practice links discourses through sites of engagement and mediated means. The sites of engagement reveal the complex, social, and culture discourses that represent the creators' and their histories (Gee, 1996; Scollon, 2001). The mediated means illustrates the objects and shared languages of layered practices. The mediated discourse of resources links to the nexus of creativity practices to show unbounded social practices. I present the findings from a two of the participants to reveal the mediation that occurred between creator and resources; how the mediated creativity involved multiple resources, and captured a trajectory through the creator's

history of experiences and practices (**Figure 5**). The discourse of resources acted as triggers for creativity practices: imagination, experimentation, trial and error, and improvisation.

**Figure 5.**

***RESOURCES MEDIATING CREATIVITY IN PRACTICE***



Note: Figure 5 represents the complex view of the multiple layers of resources mediating practices. At times practices can intersect and creators engage multiple practices or hybrid forms at once. Throughout, inhibitors and triggers may occur during the creativity in practice. The figure combines the prior figures into one mapped image.

**Conflict as mediator**

Beatrice's live plan reflected *recreativity* in practice and the mediation of resources. Her creativity mediated multiple resources to construct her Google Classroom in preparation for virtual teaching in the Fall of 2020. The active and passive resources informed her creativity in practice. She largely used active resources found from her social media teacher groups,

professional developments, and a conference. However, before I explore her mediated creativity in practice, I need to share the story of one passive resource of a conflict experience with a student and their parents. The experience represented a part of her historical body about her creativity in practice. More importantly, the experience appeared to mediate throughout her *(re)*creativity in practice stories and shaped her live plan creativity. I noticed a possible trend in her shared stories about control and prevention.

Two prior examples reflected Beatrice's implicit tension with control. If you recall the failed *recreated* musical chairs activity, she spoke about one student acting out and negatively impacting the attitudes of the class. She then overcorrected with more directions and her own participation in the next course section. Beatrice also shared her need for the AP Literature scope and sequence, which featured the standards. The first year of teaching the course, she used the inherited curriculum and syllabus. She connected her lesson planning to Common Core standards since she lacked the official AP Literature ones.

She felt unprepared and vulnerable in her teaching. "I had never taught AP before and didn't know what the requirements were... The amount of work and the time required to achieve just a few of those things, to me was even daunting as a teacher." She had to learn the curriculum, content, and a new school community. Potentially compounding the fact that it was her first year at that high school. Even though most teachers at some point in their career inherit a new prep. The feeling and anxiety may have been too much for Beatrice's creativity in practice. The musical chairs activity happened post conflict experience and the AP scope and sequence anxiety happened throughout the conflict.

Upon working at the school, they began using Google Classroom. She too began to use it. The platform was also a new experience for her, but one she wanted to engage. "So I gave my

AP kids the option to post stuff in there as well as hand stuff in on paper.” The use of Classroom represented a repository for handouts, schedules, and *optional* submission of work. I italicized optional to emphasize Beatrice’s initial practice of Google Classroom for students to submit work. In the second half of the spring semester, a student and their parents shaped a formative experience for Beatrice. She explained that the student had many missing assignments by spring break:

And I tried to reach the parents to no avail, left voice messages, voice message full, sent emails, et cetera. And this child was failing my class. And so then conferences come around and I see that they signed up. And I'm like ‘oh good’ because I haven't been able to talk to them about their kid not doing anything. They continued to berate me. I then... The principal swept in and scooped them away from me so I could have my next thing. And it totally blindsided me.

In her set up of the context, the use of Google Classroom reflected a trialing of creativity in practice. It was her first time using the program. She was used to providing feedback on physical papers but gave students the option to submit their work either way. The students’ received agency. Then, the student earned a failing grade because they did not submit any work. The parents took their child’s story as truth and confronted Beatrice. The confrontation was so bad that the principal had to intervene.

Beatrice explained how parent conferences did not help, and made it worse on many levels:

The next day I had a parent teacher conference with the principal, with the parents, because the parents said based on their child's story that I was destroying everything the child turned in because I didn't like the child. And because I was taking stuff digitally in

Google Classroom as well as on paper, because I'd never gotten anything on paper I had no way to defend myself. So this is my first year and I'm terrified like oh, my God I'm going to get fired over the egregious lie from this little snot. But the principal, the parents had a history in the district, so the principal was wise to this.

Thankfully for her, the principal knew the parents' history of confrontations. Her direct admission of fear and even anger highlighted how the experience remained raw for her five years later. Her discourse describing the student, *delightful*, *darling*, *snot* reflected the emotional resonance of the experience:

She explained during that meeting, it became more contentious:

So then in that meeting, [the student and parent] pointed the finger at me and was just like, 'You just don't like me. You're trying to do this. Well I'm going to show you.' And some other choice words because I was a bitch and I was trying to... I don't remember what the line was, but I was trying to undo this child and it was all my vindictiveness, right.

After the meeting, the principal set a plan that the student would complete classwork through Google Classroom, while sitting in the administration office until the end of the semester. The principal removed the student because she threatened Beatrice. "It was really awful, really awful... So fortunately that individual and all nuclear relatives are gone and out of school." Her discourse reflected her identified status as the victim and the emphasis of "really awful" twice drove the point about her experience. The conflict represented a social resource. The vivid recall of the experience shared similarity to Gertrude's emotional experiences that shaped her passive resource. For both Gertrude and Beatrice, their experiences echoed as a resource impacting their

creativities in practice. The emotion of the experience formed a filter that mediates resources and practices.

### **Conflict as resource mediating creativity**

The reverberations of that conflict as resource guided Beatrice's future creativity in practices with Google Classroom. The experience illustrated the way a strong emotional experience acted as a resource that informs and filters. The use of the experience as passive resource made visible the way resources referenced during the live plan mediated her (*re*)creativity in practice for control. For example, she *recreated* a found resource (**Appendix C**) about Zoom meeting expectations. She selected the resource based on its design:

So when I looked at this example, I liked the layout and I liked the little background at the top, and I liked the emoji choices and the look of it all. And what most of it said I wanted to be sure to put that positive spin on it. So, be on time, the be prepared with all materials you need to be successful, I clarified that. Like check your tech and chargers too. Attire, wear school appropriate clothes as if you're in an in-person classroom, that's the same.

The imagery reflected her taste in design elements of color, font, bitmojis. She also explained that she changed some of the text to focus more on actionable choices rather than exerted power of negated action. Beatrice's claims of "I wanted to be sure" and "I clarified" reflected her implicit need to control through over explaining the policies.

At the time of the interview in the early summer of 2020, Beatrice's school district had not decided if they would begin the year virtually. The etiquette resource helped her make visible her expectations and routines of practice:



Knowing that I would want to cover all those expectations of every possibility of things that could occur, I wanted to have this covered, too. Because I talk about how we have class discussions and what it looks like when you're participating and that kind of thing.

On one hand, the reasoning focused on a logical element of practice for virtual teaching. It appeared to port her classroom norms for AP Literature into the virtual space. The practice reflected transparency. On the other hand, the clause of “every possibility of things that could occur” indicates the emotional layer from the prior experience continued to mediate her creativity in practice. It juxtaposed the pedagogical reasoning of setting up class discussions to her need for control and preventing a future bullying experience.

Moreover, Beatrice’s *recreated* Zoom document (**Appendix D**) contained creative and *recreative* practices that intertexted to directly lifted clauses. “I took a lot of the ideas that were there already and then I added other things that I thought would be relevant to my students.” The original document layout structured a title flag at the top and eight text boxes, four on the left and right side. The behavior categories included: [left] time, location, volume, cell phones, [right] attire, eating, sitting, name. Beatrice’s version *recreated* through *intertextual connections* and *resonance* of the structure and layout (Wynhoff Olsen et al., 2018, p. 62). She made intertextual connections using the same color design, border color, fonts, and similar bitmoji and clipart. Throughout the document, she replaced the other teacher bitmoji with ones of herself in similar positions. The added and revised text occurred to time, cell phones, eating, and sitting. The added text reflected Beatrice’s *recreativity* through adaptation.

Her text reflected a resonance of the original resource through the maintained purpose. She used humor for engagement and building rapport with her students. She added text to time, eating, and sitting. The revised text happened in the cell phone block. The original document

contained the text: “NO CELL PHONES/<sup>1</sup> Just like in class, you should/ not be talking on your cell/ phone while class/ is in session.” Beatrice created: “RESPECT/ Be intentional with your words and/ actions./ Be focused./ Pay attention./ Be an active participant./ (Clash of Clans can wait.)” in smaller font. The created text focused on building a positive climate. She moved away from the negated action toward a positive construction. While the original document discourse stated no phones, Beatrice’s discourse moved into implicit statements toward building a general learning environment:

I don't remember when I learned that concept, but it was presented in a professional development at some point. The idea that when you're giving expectations or rules, if it's written in that negative like no and don't, it's not taken well, it's not perceived well. And the directions there, especially if they're important, aren't received.

Her version resonated with the resource’s purpose. The expectation moved into a general point of behavior rather than a specific detail. Multiple resources mediated her (*re*)creativity in practice. She engaged the passive resource of the parent-student confrontation, the original resource, and in a moment of creating she referred to a professional development about language and discourse. The mediation revealed the layered engagement of her practice history and social habitus (Scollon, 2001).

Her *recreativity* intertextually connected the original document through directly using the same clauses. Within *recreating*, she created text and her own bitmojis even if they mimicked the original resource. Beatrice’s (*re*)creativity in practice positioned her as learner. Her created bitmojis and clipart reflected more of her use of humor to build community. For example, in the

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<sup>1</sup> / denotes a line break (Gee, 1996; 2014).

“SIT STILL” box, she placed three bitmojis of herself dapping, dancing, and herself in a fetal position instead of the original document showing the teacher seated.

Although many of her bitmojis mimicked the original in *recreating* the same positioning, I argue that Beatrice still engaged her creativity in practice. She had to create her own bitmojis, and while many stayed true to the same position as the original, a few represented created positions. The *recreating* of the resource reflected her learning and planning of expectations and routines for a virtual space. She did not have a virtual classroom set of expectations when her school went online in Spring 2020. The lack of virtual expectations acted as an inhibitor. To overcome that inhibitor, she found resources that acted as models and teachers of content. The mediation of her (*re*)creativity in practice reflected her liking of the original resource and not having one of her own. She liked the design, structure, and layout to the point of complementation. Her (*re*)creativity in practice illustrated mediation to focus on elements of the resource. For Beatrice, the visual represented the initial interest followed by the focus on content.

### **Beatrice’s nexus of creativity**

Beatrice’s *recreating* of the resource illustrated a nexus of creativity in practice. She planned the start of the Fall 2020 school year, and proceeded with building a virtual space. In prior years, she attended a summer AP teachers conference. Due to the pandemic, it was cancelled. In its place, the teachers - all AP subjects - who prepared presentations moved forward with their presentations creating the Mosaic Slow Conference online. “And so it's going on for four weeks. This is now week three. And at 9:00 to 10:00 every night there is a Zoom with a presenter. And it's every night except Friday night and Saturday night in the week.”

The conference presentations she attended helped her learn digital tools and programs. She searched for resources to help her design and create a virtual classroom space. Through

using her social media teacher groups, she found Zoom etiquette documents. The resources acted as triggers for her creativity in practice. She selected the etiquette document based upon its visual design before proceeding to *recreate* content and adapt it. Beatrice *recreated* her version of the document to suit her class. She also engaged in creativity to shape elements of her document. The trial and error of creativity helped her design bitmojis and the written text. Her nexus of creativity in practice revealed the linked sociocultural practices involved in planning and the mediational means of her computer. In this instance, the mediational means included the digital resources of software and programs such as: bitmoji, the Mosaic Slow Conference, and social media groups. The mediational means allowed Beatrice to engage in her nexus of creativity in practice. Her computer became the site of engagement while she searched for resources, attended the conference, used programs, and created the virtual classroom. The pandemic and virtual learning mediated the need to create online expectations. However, in Beatrice's case, the expectations also linked to her student-parent conflict experience that mediated the discourse within the document toward control.

Beatrice's case highlighted the complex mediation of resources within a nexus of creativity in practice. Her parent-student experience imposed an implicit filter in which she viewed the Google Classroom Fall 2020 set up and use. However, that experience as resource only impacted select practices that connected to shaping control and transparency to prevent possible future conflicts. For instance, the experience mediated how she overcorrected and perhaps over-explained the musical chair directions the second time. The experience did not mediate her looking for the musical chairs activity nor in *recreating* it.

Beatrice may not even realize the echoed resonance of how that experience acted as a resource. However, the emotional experience revealed its continued impact in the descriptive

words of the student, the parents, and the conflict. She told that story in the second interview. I did not notice the theme of control until the second coding cycles. The hidden and implicit way that emotional experiences act as a resource reinforced the sociocultural and epistemological construction of creativity in practice.

The nexus of creativity in practices revealed Beatrice's history of linked practices of planning through sites of engagement. In her instance, the sites of engagement connected her to the social spaces of her computer and her classroom space, virtual or physical. As much as the failed musical chairs activity was a one off, the *(re)*creativity in practices occurred in the way she engaged resources. She *recreated* the musical chairs activity by intertexting the structure with slight adaptations to suit her class and community. Beatrice adapted the lesson by creating the music playlist to fit the text. On a similar but not directly linked level, the Zoom resource showed how she *recreated* it through intertextually connecting many elements with some creative adaptations (Wynhoff Olsen et al., 2018). Both social resources represented new teaching practices and positioned her as learner and creator. The social element of resources highlighted another element of Beatrice's mediated creativity as a source of learning.

Ultimately, Beatrice's story provided a view of the complex ways resources mediate creativity in practice. The resources highlighted the multiple social layers that impacted and filtered practices. The example provided is not to say that the conflict experience as resource mediated all of Beatrice's nexus of creativity in practice. Instead it highlighted the way a passive resource can indirectly - and perhaps unintentionally - mediate creativity. The conflict resource, situated from her history, mediated her creativity in practice while planning, while other resources mediated her creativity in practice while designing and composing. Beatrice's story

reflected more of the social than cultural practices. Chef Clarke's story highlighted cultural practices and discourses mediating more directly.

### **Documentary and culture as mediator**

Clarke's story revealed how resources mediate his nexus of creativity in practice. Although he does not have a resource that stemmed from conflict, instead, his passive resources connected to his home culture. Before he started his restaurant businesses, he grew up in the Yucatan Peninsula. His Mayan culture infused the menu flavors and textures:

I just basically doing traditional Mayan food or maybe a little crossover with Mexican, but a similarity. It's just each state of Mexico has different, unique cuisines, so mine is the Yucatan peninsula. I mean, the Yucatan state, so it's more like traditional from that area.

Clarke opened his second restaurant, a bigger version of his first one, in 2007. A few years after he opened, he saw the documentary *Food, Inc.* (Kenner, 2009). The documentary showed the food industry and how its changes impacted food and people. It shared the stories of large corporate farms and the smaller farm food production consequences on food quality, health, and costs. After he saw the movie, it awoke a new understanding of his relationship with food as a chef:

I remember I have vision and memories since I was a little kid. Like, when I used to eat this, it tasted different than here in the US. Why doesn't it taste that way? I would ask questions, why are we not going to the market like I used to when I was a kid? Memories that I have. Instead, I'm going to Kroger, I'm going to shopping centers and buy stuff, and I'm thinking, 'Hmm, you know what? I have this power. I can do this. I can change the way we buy foods or vegetables or meat and stuff for the restaurant. Why don't I just buy local? Will it taste the same as I remember when I was a kid?'

The film triggered critical engagement about his position as a chef to food. He remembered the tastes of his childhood. Questions formed about food and supply source: *why doesn't it taste that way? I'm going to Kroger*. He realized he had the power to change the source of his food. Clarke did not need to aid the coffers of large corporations and their farms. He operationalized his power in a structural way to financially support local farming communities (Fairclough, 1992, 2012). The critical creativity in practice inverted the power structure of the consumer controlled by financial resources from the producer.

The documentary mediated his creativity by acting as a trigger of critical thinking about flavors and textures of his foods, which moved into his practices. Although Clarke linked the documentary to the cultural resource of his youth during the interview, I cannot say it happened in real-time as he watched the documentary. Scollon and de Saint-Georges (2012) explained how texts mediate actions in real-time. However, I can speak to how the mediated resource provided ways to consider the value of quality versus price point for food.

Childhood and Mayan cultural memories formed tastes, textures, and shaped the discourses of food:

there was no restaurant there, but then there was just street food. That really considered restaurants because most people in the villages, they're Mayan Indians, they don't go to fancy restaurants. They can't afford it. They have six kids, eight kids, 10 kids, most of the people are like in their early eighties, you know, they have big families. So what I remember in my childhood, mostly street food and mostly it was overcooked food. They don't know the difference. They cook the chicken, they do it outside. They cook it all the way to the bone, dry meat. We bought the cheapest meat we can possibly buy and we cook it as it was a steak, medium rare here, but over there they just cook it full done.

His childhood flavors and textures helped him identify different techniques for preparing food. The techniques as a practice represented the layered discourses and practices he observed and learned over time:

So when I compare things like what kind of meat we buy back then and how we cook it here, I realized there's different ways to cook it in than just one way... It's not the cheapest way. It's like, the technique they use, and they put a lot of flavor. They put a lot of herbs, salt, pepper, but what is my question that I have sometimes is what kind of, is it the pepper was different comparing here? Because when I eat here the regular black pepper, it doesn't taste the same over there. That's the only difference that I noticed a lot of things. Certainly condiments are not the same. The tomatoes are not the same. That's what I've noticed a lot of the times between there and here. It's farm grown but it doesn't taste the same.

The realization helped him rethink the resources he purchased and the quality of ingredients. For Clarke, quality resources allowed his food to have the desired flavors and textures. He sought to (*re*)create those flavors for his restaurant and customers. The discourses provided a way to think through his culinary creativity practices about techniques and flavors.

### **Mediating critical creativity**

Resources mediated his creativity in practice in two ways. First, the documentary triggered him to rethink his culinary practice with food and flavors. In recalling his childhood memories of tastes, it linked to some of Clarke's history of resources that shaped his creativity in practice (Scollon, 2001). He contrasted that cultural memory of taste to the flavors he cooked in the U.S. The layered discourse of resources helped him reconsider food, namely the food quality. He then experimented in practice with buying food from a few local farmers. Food quality and



flavors focused his experimenting with a new food resource. “I start doing the same thing, cooking the same techniques as I was doing. Then I realized, wow, people might disagree with me, but it makes a huge difference on the food flavor and texture, and obviously healthy.” The realization moved him to pursue food resources from locally farmed sources.

He experimented with inviting farmers to set up a booth at his restaurant on every Monday night and using the farmer’s food in the nightly specials. The night was so popular, he had to consider:

‘Hey, we can do this every day.’ The question is, can we be sustainable? Can we afford to buy and to make a living? Can we still pay the employees? You have to look at that overall, when you're trying to run a business and trying to buy expensive... Not necessarily best product, but when I say expensive as far as freshness.

Eventually it moved from Monday nights to everyday beginning with meats, and then the produce. The resources mediated his nexus of creativity in practice of how he sourced foods as a resource. He moved from bulk buying from grocery stores to local farms. The resources mediated his critical engagement of his practices in structural ways (Fairclough, 1992, 2012). The consideration of sustainability and affordance reflected a tactical move away from a capitalist focus of profit.

In addition, the example illustrated a neat chain of mediations and practices. However, the movement from one practice to the next may not have been as neat in reality. In this instance of Clarke’s narrative, the messiness of mediation and creativity was not shared. His narrative showed the active engagement of his nexus of creativity to pursue change (Scollon and de Saint-Georges, 2012). The documentary profoundly mediated his culinary creativity to the point of change with how he sourced, priced, and valued quality over profit:

That [*Food, Inc.*] was, there was a turning point for me on that point. I knew I had to do something. I just couldn't figure out what. I don't know, have you ever wondered, you're alive, and you see things happen, but your gut's telling you there's something missing to do in my lifetime, but you just can't figure out what? Could be many things. Could be one thing. To me, maybe this is one of the things I have to do that I'm passionate about, and take advantage of that.

Clarke's example revealed how multiple resources mediated creativity in practice. The documentary shaped one social layer that triggered his creativity in practice to consider his own culinary responsibilities and production. Culture illustrated another layer that informed and filtered his creativity. Culture showed the social practices around food and flavors he learned and tasted in his youth. "[T]he challenge, that for us to bring that all the good stuff and bring the memories back, hey, this is good food, so this is what we're going to serve." Each of the resources reflected social discourses and practices around the means of food. The discourses of the two resources, documentary and culture, shaped a dialogue that Clarke's creativity in practice embodied. The mediation of resources helped him place that dialogue into actionable approaches to reimagining his foods' flavors and textures and where he bought the food.

### **Mediation Made Visible**

Beatrice and Clarke highlighted different ways resources mediated creativity in practice. Their shared stories highlighted the mediated discourses as a nexus of creativity in practice. The findings reinforce and make visible Scollon's (2001) MDT. And they showed more of the use of resources representing a temporal moment. The temporal moment describes an experience that occurred in the past. It may act as a passive resource, as it did for Beatrice, while Clarke showed it as an active resource. It could also be represented as a mediational means through an object or

symbol that carried history of practice and discourse (R. Scollon, 2001; S. Scollon & de Saint-Georges, 2012). For instance, Beatrice's use of Google Classroom may have been the symbol representing her conflict experience. Clarke referenced flavors of his youth.

Scollon (2001) and S. Scollon and de Saint-Georges (2012) noted the history of the person's social practice and discursive practices through their histories, sites of engagement. Beatrice showed how a recent experience, five years ago, impacted her and filtered her practices toward preventative and attempted control of future conflicts. Clarke's experience while over a decade ago, also showed a link between *Food, Inc.* and the experiences from his youth, another resource, of his historical body of discourses. In other words, resources can mediate as a dialogue with other resources to shape creativity in practice.

The significance of the findings adds to Scollon's MDT by making visible mediation and showing a way resources operate. Beatrice and Clarke reflected the embodied histories of their discourses and social practices. Beatrice also showed the temporal experiences as resource acting as an unconscious mediation of creativity in practice. Beatrice did not actively engage her historical experience as a resource. She did not directly state that her conflict experience mediated her creativity in planning. Instead she spoke about the conference and primarily the Zoom document as resources. The coding helped reveal the implicit connection to the conflict experience. The finding showed the complexity of mediation moving between direct links to resources and indirect, implicit, links. Scollon and de Saint-Georges (2012) noted the conscious and unconscious embodiment of personal histories. However, that occurred within enacted practices not as a mediator of the practice.

## Dialogue of resources

Beatrice and Clarke showed another significance of a nuance of mediation. The narratives showed how resources shaped a dialogue in meditation of creativity in practice. For example, Clarke's history of discourse and social practices entered into conversation with the documentary to reimagine and critically engage his creativity in practice. Beatrice's conflict resource implicitly dialogued with other resources such as: the AP conference, online repository of teacher materials, the Zoom document, and even her visual design preferences. In both examples, the resources shaped a layered dialogue that reflected Bakhtin's (1984) heteroglossia. However, they are not outliers in the way resources formed dialogues through mediation.

The live plans offered a real-time view of mediated resources. It made visible the same complexity that Beatrice and Clarke showed. The live plan offered a view of how resources dialogue through intertextual references of texts, questions, and histories. For instance, as Peter engaged his creativity in practice through planning, he provided a stream of conscious planning that showed how resources mediated and dialogued with other resources to shape ideas:

As I'm reading *The Kite Runner* what writing prompts could I use? I'm thinking about doing *Fahrenheit 451* this year to start out and then I just reread the "American Scholar", Emerson's "American Scholar" and I was like, 'Man that's like absolutely on.' In particular part of the "American Scholar" Emerson talks about books and the relationship that we should have with books and things like that. I'm thinking about let's see questions that I can ask kids around literature. What's a beautiful sentence? And when we read a passage what can we pull from it? What's the most beautiful sentence? What's the most boring? What sticks with you? Where are you in a text? Is there a magical object in this

story? So what is it? What would you do in this situation? What have you done in similar situations?

He began investigating writing prompts for *Kite Runner*. His thoughts moved to another text and then quickly to another text, Emerson's essay. Thinking of the essay constructed questions about literature. Peter's creativity of imagination showed the way texts mediate and link to other texts through an objective of planning writing prompts. The linked resources shaped a dialogue of literature discourse ideas and questions. The questions about literature and writing showed how resources mediate practice. Peter started with an idea. It flowed and linked to other texts, which prompted questions.

The practice of starting with an idea moved beyond Peter and Beatrice. Kate illustrated the way she planned a menu with a pre-existing starting idea. Except, Kate began with a more concrete vision for what she researched and wanted to construct. "I'm thinking a couple of months ahead. I know that, that's kind of the basic concept that already exists, that I'm going to start from." Kate engaged multiple resources from books, pictures, and online websites. "So now what I'm going to do is just look at some traditional recipes for sour cream apple pie." The resources shaped a dialogue about flavor, texture, and techniques from recipe to recipe. The mediation between the texts help her visualize possibilities with her creativity in practice:

So for this filling, it has egg and egg yolk, it also has milk. So it looks like it's a similar... Oh no, in this filling, they cook the apples. And then they mix it in with all that stuff, which I think is what prevents the apples from... Well, that helps the apples release their moisture before you go to put them in the filling, which could be really helpful. I'm going to see if this other recipe has them cooking the apples too, because this one looks really good to me. Okay. Now, in this one, they're not cooking the apples. Oh, but they put the

apples in the pie before... Okay. There's just so many techniques. Because I think what's happening in both of these recipes is something that's not a technique that we normally use, which is that they will put the apples in the crust and then bake it without streusel topping for a while. And then add the streusel topping, which to me sounds super annoying.

As she viewed resources against each other, the recipes mediated ideas about technique and food theory. She noticed the way apples were cooked and not cooked. In turn, that helped her understand more of the discourses about flavor and techniques for her particular apple pie. A part of viewing for technique linked to her team:

I'm also trying to think about how can I... This is isn't me just baking one pie. This is us baking 50 pies a day for Thanksgiving. So I have to come up with not just... It's a combination of what's the best going to create the best pie, but what's also going to be the most efficient pie.

In other words, the mediation of resources shaped her creativity in practice through existing business pragmatics of pie production. The resources mediated her trial and error and imagination of constructing the pie ingredients, techniques, and production efficiency. So Kate highlighted how external factors, business pragmatics, as resources mediate creativity in practice.

The cross section of fields showed how resources mediate the nexus of creativity in practice. In particular, that resources dialogue with other resources in both fields. The multivocal layers of resources shape a heteroglossic mediation of creativity (Bakhtin, 1984). The discursal layers reflected social and cultural resources that inform and filter creativity. Scollon noted:

What we see is a view which emerges only in and through actions, which is always a rather poor vision of the structural whole because it is always and only seen from the

point of view of the social actor, and which changes at least to some small extent through each new action” (2001, p. 167).

In showing the cross-field stories and examples, I hope it revealed the intersection of practices. In particular, the meditated discourse provided a wider view how creativity, practices, resources, and positioning of the creator shape the nexus of creativity. Individually, the elements of the nexus shape granular views into the discourses of creativity. As a whole, the elements form a fusion from sociocultural experiences, knowledges, theories, and practices to form the nexus of creativity. In the next chapter, I discuss the larger implications of how these fields simmer together to produce flavors, textures, and techniques of the nexus of creativity in practice.

## CHAPTER 8: DECONSTRUCTING THE MESSINESS OF CREATIVITY IN PRACTICE

The teachers' and chefs' stories of practices revealed an epistemology of creativity rather than an ontological construction. The findings addressed the research questions to: define creativity and its elements; examine the positioning between creator and resource; construct emergent practices; and illustrate the way resources mediate creativity. Ultimately, the findings revealed a nexus of creativity in practice. I showed the layered sociocultural complexities that added to existing research. Furthermore, I also used a critical and intertextual lens to understand how creators engaged resources. That relationship between creator and resource formed a power relationship. Sometimes the creator inverted the power from the resource, and other times the creator assumed the discourse of the resource. When the creator assumed more of the resource's discourse, it revealed the intertextual layers and the practice of *recreativity*. Needless-to-say, *(re)creativity* in practice proved to be complex and messy. Next, I will examine the nexus of creativity and all of its messiness. In doing so, I hope to deconstruct creativity in practice and find grace in the visible messiness.

I found creators in both fields tended to engage in similar practices of creativity. The significance of viewing two fields highlighted *(re)creativity* in practice and how the engagement of resources transcended field and discipline. The cross-profession comparison worked in my favor to build out a nexus of creativity rather than communities of practice (Grossman et al., 2009; R. Scollon, 2001). Originally, I hypothesized that the two fields may form a dialogue and thus shape a community of practice around creativity. While the teachers and chefs shared views of creativity, generalized forms of practice, and use of resources, the two professions did not necessarily form a dialogue. Instead, they shaped a more uniform view of the nexus of creativity in practice. That is, Scollon (2001) reasoned the social practice of handling as unbounded to any one social group and discourse. He explained that *nexus* represented the wider, linked,



comprehensive set, while *practice* represented the specific and narrowed historic action. Therefore, the nexus reflected how creativity is unbounded to any one discipline and that the generalized practices move across fields. Practices represented the field specific ways that teachers and chefs engaged in experimenting, trialing, imagination, and improvisation. The nexus of creativity in practice showed how resources represented a heteroglossia of sociocultural voices that dialogued to mediate creativity in practice (Bakhtin, 1981).

### **The Nexus of Creativity in Practice**

I studied the nexus of creativity in practice featuring imagination, trial and error, experimentation, and improvisation (Leone, 2018). Abbott (2014) shared his concerns about one field's discourse crossing over into another field. I acknowledge that Leone's (2018) categories of practice originated within culinary research; however, simply put, the education literature did not unpack or explore a taxonomy of creativity in practice. Sawyer's (2000, 2004, 2011) and Beghetto and Kaufman's (2011) studies of disciplined improvisation reinforced Leone's improvisation practice. Yet, the disciplinary improvisation differentiated and separated the fields due to focus on improvisation within disciplines, and it missed other practices. Perry-Smith and Mannucci (2015) explored idea conception through completion; however, they did not construct a taxonomy of practices. They showed the parts to whole view of creativity. Within my study, the creators showed variations within their own fields of how they executed those practices, and yet Leone's general practices moved across fields. My research has important implications for the broader domain of creativity in practice. In particular, I think it important to move beyond the gifted and talented view of creativity to reveal its sociocultural construction. The ontological view of individuals as solely responsible, reflecting inner brilliance works well in movies about fallible geniuses. However, in real life, that view overlooks the nuances of practices that reflect a

messiness of creativity. By viewing the messiness, I can provide a way to deconstruct creativity in practice and make its discourses visible.

### **Messiness of (*re*)creativity**

The nexus of creativity in practice revealed itself to be messy. Messiness referred to the non-linear start to finish creativity in practice and mediation of resources. It does not claim a negative nor positive element of practice. And it moved across fields, as teachers and chefs spoke directly and indirectly about how it occurred in their practices. Messiness showed itself to be an accepted element of creativity of moving between inhibitors, triggers, and mediated resources into practice. Clarke talked about the messiness of creating a menu special only for it to not work out well. “I mean, not always work out the way I think. Sometimes: oops. You know what, this doesn't go after actually finish the product and raise a service. There's a point where we need to do like a last-minute call and tell the service, Hey, you know what? This is not working out. Let's just switch it to something else. So I have to come up with something new.” Clarke experienced nights where his planned specials did not work for various reasons. Instead of accepting the loss, he addressed the inhibitor to create a new menu special in moment. Clarke, like the other chefs, did not see inhibitors as limitations per se. Instead, they readily accepted the messiness of creating. He improvised and imagined a new special using the key ingredient resources to avoid food waste. The messiness showed the recursiveness of learning creativity. The recursiveness showed the continuous loop of improvement that occurs in creativity.

Meanwhile, in the classroom, Monica illustrated another element of messiness, building from abstract ideas to more concrete ones. Monica talked about her creativity in planning when she created the Escape Room. “My brain when I first started planning, it was a crazy mess because it was all so scattered and so abstract. I knew what I wanted to accomplish, and then I

had all these pieces that I had to bring together to create it. I really just had to work on each of those pieces one by one.” Even as an experienced teacher, she recognized that creativity formed a puzzle of ideas without a picture. The ideas lacked coherence and seemed vague to her as she planned. Even though she knew the end goal, planning took time to shape details and learn from her resources.

Monica’s creativity in practice also reflected the non-linear messiness. “I would create one thing, one piece of this whole Escape Room, and then I would create the next thing, and then I’d have to figure out how those fit together. There were many revisions throughout the process to make sure that everything worked together... there were revisions that were happening because we realized that things would work better in a certain way. It was an enormous process.” In other words, like Clarke, revision illustrated the recursive way creativity in practice builds a project.

Frequently during the interviews, I was amazed at the finished and enacted plan from the teachers and the dishes that chefs spoke of and showed. They shared thoughtful and awesome work that undoubtedly took time and effort. That time and effort through the recursive loop of improvement and the ambiguous starting points illustrated a part of messiness. It often remained the unspoken and implied element of creativity research. Without talking about the messiness of creativity in practice, it shortchanges creativity in practice and provides false narratives of it being easy. The narratives often reflect in the stories of creative geniuses rather than the sociocultural layers that inform and impact creativity. As consumers and creators, we enjoy the plated meal and tantalizing deliciousness, and forgo the mess in the kitchen that goes into making it. Students, myself included, enjoy the finished labors of a crafted lesson plan or activity

that shapes learning and reflection. However, students do not see the toiled labor of the teacher learning, relearning, and planning out the lesson.

Messiness shows a nuanced layer of creativity in practice. Existing research used words like *complex* to describe the non-linear process of creativity (Leone, 2018); or to show the way learning acts as transformative to negotiate meaning (Prior, 1995). Prior also showed other factors that shape complexity within learning as goals, stances of the learner, responses, analysis of the texts, contexts, and learner histories. Sawyer (2004) explained that improvised teaching required “constant decision making” (p. 17) and needing to know pedagogy, content, and performance skills. He explained complexity resulted from needed knowledges and skills to improvise. Sawyer (2016) also acknowledged the challenge of experimentation resulting in dead ends. Meanwhile Perry-Smith and Mannucci (2015) explored the process of creativity that showed the *elaboration* of ideas. They showed a recursive loop of uncertainty due to the risks taken to create. In all, the research indirectly explored the messiness of creativity in practice. Perhaps the term of messiness represents a term of art, and it is one that I use to encompass complexity, the factors of complexity, and the recursive loop of discomfort. In viewing the messiness, it helps make visible the deconstructed mediated resources and practices. Thus creativity is revealed to be messy in practice.

### **Messiness and learning creativity in practice**

Beatrice’s *recreated* musical chairs activity continued to stay with my thoughts. In earlier chapters, I used case reasoning to build out possibilities for the failed *recreated* lesson. I also reasoned that because of her positioning to the resource as learner, she may not have given enough time to learn the material. However, I now realize perhaps, as learner, she embodied the messiness of creativity through the engagement of new resources, concepts, skills, material, and

the other contextual layers such as new school and new curriculum. Beatrice showed that experience provided pedagogical resources of knowing how to engage students and enact practices in the classroom. At that particular moment, 14 years of teaching experience may not have provided the necessary resources to mediate creativity in practice of a new activity plus the additional contexts such as new school, curricula, etc. Perhaps, if Beatrice *recreated* an activity she taught before, and adapted for that course, the text, and the students, the lesson may have achieved its objective. In contrast, Monica did not have to learn the resources of her live plan for the first day of virtual classes. Her live plan created a virtual adaption of her day one community builder. So for Monica, the *recreativity* in practice did not position her as learner to the same degree. It was as learner to a micro-focus of online software, which she already knew most of the programs.

Beatrice's example reminded me of Smagorinsky et al.'s (2010) article about academic bullshitting. Smagorinsky et al. framed it as learning the discourse of a particular community in order to mask a lack of knowledge and enough to pass through unnoticed. They found academic bullshit often lead to learning through mediating the available tools to produce the assigned task. Smagorinsky et al.'s concept links to Beatrice's (*re*)creativity in practice through her position as learner to the resources. While potentially pejorative to say (*re*)creating in practice equates to academic bullshitting, the concept does help explain the position as learner to resources. They explain learning while engaging in academic bullshit as a "willingness to use speech and writing to try new ideas that may or may not pan out... Bullshit thus involves a degree of risk..." (2010, p. 402). In other words, it is an acknowledgement of the messiness and risks that come with trying something new. The messiness of creativity in practice challenges not just classroom teachers like Beatrice and Peter, but also teacher educators.

## **Classroom teachers and deconstructing mess**

Making visible the element of messiness within the nexus of creativity in practice provides teachers the ability to recognize their inhibitors, triggers, and resources. The recognition helps them forward their (*re*)creativity in practice through their experiential resources, which formed the passive and sometimes active layers. In some cases, teachers may have to recognize personal historical experiences as an inhibitor or trigger (Scollon, 2001). For example, Gertrude shared formative experiences of microaggressions as a student. The resources acted as a trigger and helped her frame and enhance her curricula and teaching practices to create a student-centered abolitionist practice. She combined her experience resources with current socio-political events and Love's (2019) Abolitionist Teaching framework to create reimagined adaptations to the curricula that forwarded activism, student allyship, and resistance to dominant discourses.

By making the discourse of messiness visible, it may help creators deconstruct their triggers that forward creativity. Conversely, it may provide insight into the inhibitors that delay or stop creativity. Without recognizing experiences as resources, they may linger, and potentially teachers miss an opportunity to learn and grow in practice (Rogoff, 1994; Macbeth, 2010). This is not to say that Beatrice missed an opportunity; however, she has not confronted that tension yet. She has not retried the musical chairs activity. And since the student confrontation experience, she has perhaps unconsciously steeped her practice in mitigating outcomes. Does that mean all teachers who avoid reflecting upon experiences inhibit their creativity? No. In fact, Beatrice continued to (*re*)create lessons and activities. However, she may be limiting her creativity in practice potential by not realizing the effect of those resources as inhibitors.

My intent is to draw attention to the way the experience as a resource mediated her creativity, just as Gertrude's experiences mediated her creativity. The non-linear way that

resources mediate creativity and how some resources carry different personal weight highlights the messiness. More importantly, it makes the discourses visible and relatable for teachers. It demystifies the creative genius and bares creativity discourses and practices. It reveals the sociocultural layers that inform and construct engaged resources. Yet it is fair to ask, what of teachers who may not have had experiences such as Beatrice or Gertrude as a resource?

Peter still created without referencing a personal conflict. He may or may not have a conflict that mediated his creativity. He did not share nor imply that he did. He drew from small family moments as means to trigger his creativity in practice. And yet his community, urban school district, became a resource of place. During the summer 2020, his community experienced protests for the police murders of Breonna Taylor and George Floyd. As a resource of place, it mediated his critical creativity allowing him to reframe and adapt his curriculum toward a more culturally relevant practice. Peter, Gertrude, Lisa, and Clarke engaged their communities as resources that mediated their creativity. Their stories represented a broader view of resources that allows teachers to confront tensions and discomforting ideas of socio-political issues (Rogers, 2018).

Using other resources, such as place, or texts still show the messiness of creativity in practice. In Peter's live plan, he began by considering his students, "I know as I'm planning I'm thinking about that. I'm thinking about how are my students going to enter the day? How are they going to enter this?" As he planned the curriculum within the uncertainty of COVID, the learners and their lives became priority one. It could be argued that the student centered pedagogy also reflected use of critical discourse to reevaluate the power structure of curriculum. He chose to place the students' lives first rather than the texts. He then moved into other questions about building a community. As he moved into the curricula questions, he reread notes, texts,

“everything”, which for him is “real generative and messy”. He mentioned that he goes through notes from years ago, that are dog-eared in notebooks and texts. “It’s amazing how much you forget and then once you ... Then I’m just thinking about approaches. So, if I’ve taped any lectures and things like that, that I’ve been permitted to from Bread Loaf classes.” At this point, he had not explored the semester texts yet. The organization and preparation to plan reflects the messy and multiple sociocultural layers of resources that mediate (*re*)creativity in practice (Figure 4).

Much like the use of experiences as resource, I am not saying that all teachers must engage community as a resource. Instead, the examples highlighted how place acted as a tactical resource, and provided a critical discourse path to view, learn, and enact creativity in practice (Rogoff et al., 2016; Fairclough, 1992, 2012). Place and community as resources provide a lens for creativity in practice, which may allow the creator to engage in critical discourses. It can also shape ways to approach imposed and prescriptive resources such as standards in ways that invert the power of the resource. Moving into the critical engagement of resources and embodying it into practice can be messy. The messiness occurs in the need to learn resources, and the willingness to engage and embody as creativity in practice. I think it remains important to explore the messiness of critical creativity for teachers. I remain wondering how do teachers learn to engage place, or any other resource, tactically? To what extent is the community they teach with and in acting as a resource or inhibitor? I noticed that Peter and Gertrude are two teachers in urban school districts, while Monica and Beatrice are in suburban districts. So, in what ways does place as resource mediate critical creativity?

Rogers (2018) explained that critical literacy takes practice. I recognize that not every teacher may be comfortable with engaging critical discourse and pedagogies, which represents



another element of the messiness of creativity in practice. Creativity in practice enables a dialogue to form with resources in two ways: 1) engage as a (*re*)creator by questioning the imposed resources of curricula and standards. 2) engage the material in culturally relevant and sustaining practices. I saw teachers and chefs critically engage and question resources. Peter and his PLC used a text to decipher and revisit the standards, while he also made the standards transparent for his students. He inverted the imposed structure and power of standards by making the hidden objectives visible. In contrast, Beatrice sought out the AP Literature scope and sequence to help her structure the course. Many teachers fall between those two practices. What, if any, elements of creativity in practice separates Peter's inverting standards from Beatrice's need for standards and curriculum scope?

Perhaps, Peter's and Gertrude's use of critical creativity separates them from Beatrice's *recreativity* practices. Their critical practices combined with their creativity in practice enhanced their learner centered and social justice practices. The elevation of voices highlighted their recognition of the dignity of student voices and linked their pedagogy to culturally relevant and sustainable practices. Although their creativity may seem only relevant to teachers in urban schools, I argue that it reflects creativity in practice for any teacher regardless of school community. In fact, I think creativity in practice can form a fusion with critical practices and tactical resources to give teachers the freedom to shape practices that move toward culturally relevant and sustainable pedagogies. I am not advocating that all teachers must link to Love's (2019) Abolitionist Teaching framework, yet her framework elevates *radical* thinking about schooling and school structures. I believe the complex layers of tactical resources links to that radical thinking to put creativity in practice to imagine and experiment not just in thought but in action of new teaching curricula and practices. Gertrude and Peter highlight the explicit and

implicit practices that elevate critical creativity in practice. Ultimately, creativity in practice fused with a social justice teaching framework speaks to timeless teaching practices centered on the dignity and humanity of students. The creativity in practice speaks to the stakeholders of teachers, school communities, and students to reimagine the way teachers plan and put into practice their curricula and practices.

### **Other Education Stakeholders**

Beyond teacher practitioners, there are others stakeholders in school communities who may benefit from engaging creativity in practice. For instance, school administrators could enhance the way they think through teacher observations in less evaluative ways of the Danielson framework into more of a dialogic and growth mindset. Creativity in practice can help them reimagine not just what practices they observe but also how they encourage their teachers' development. Similarly, a stronger understanding of creativity in practice can aid instructional coaches as they foster the development of teacher practices and foster teacher creativity and mediate resources for creativity. Adding in another layer that also coincides with administrators and coaches are district curriculum directors who have an opportunity to review and construct curriculums that encourage critical and social justice practices through thoughtful essential questions and content materials. Even extending beyond the initial school community stakeholders, other indirect stakeholders such as state and federal department of educations and grant foundations can operationalize creativity in practice by putting funding into studies that examine to what extent teacher creativity in practice fosters student success in meeting and surpassing grade level expectations and even studying student creativity in practice and its impact on their success rate with grade level expectations, graduation rates, and years to

completion for college bound students. In short, creativity in practice impacts many education stakeholders and moves into all subjects and practices inside and outside of the classroom.

### **Teacher educators as a tactical resource**

As a field instructor, I noticed one of the big challenges that teacher interns face is the lesson plan and constructing a unit plan. The teacher interns I work and learn with often talk about their desire to *create* their *own* lessons. They say while it is nice to use their mentor teacher's lesson plans, they feel they must construct their own. They are excited about their ideas and desire to stake ownership of their focus class. Some, even the eager ones, have anxiety of creating an original lesson. For some, there remains an anxiousness to feeling they must incorporate all theories and concepts from their teacher education courses into each and every lesson. To some extent, they worry that their mentor teacher will reject their ideas and they will fail. Others find the shared space and role of intern to inhibit their lesson planning and the interns largely stay within the confines of their mentor teacher's prescribed plans or outline. The teacher educator cannot fix nor allay any of the interns' anxieties. However, the teacher educator can make visible the nexus of creativity in practice.

Teacher educators' practice of engaging meta awareness and reflection provides an opportunity for preservice and teacher interns to make visible theory, practice, and learning. For the teacher educator, the study provides discourse that can deconstruct creativity. The significance pivots the appreciation or engagement of the enacted lesson or activity toward viewing the practices that construct the final product. It allows the teacher educator to reveal the messiness of creativity, by showing that teachers do not just show up and magically improvise. Instead, experienced teachers, who may not lesson plan per se, still plan and still engage

resources while engaging in improvisational practices (Leone, 2018; Sawyer, 2000, 2004, 2011; Beghetto and Kaufman, 2011).

I am reminded of an anecdote that Peter shared with me about his children's swim lesson. He observed and noted what the swim instructor did to teach. The instructor "starts out by getting the kids to float and just realizing that you can float. You float. We float. We already do this." The metaphor of being in the water and showing that they float, potentially reflects the meta approach to teaching creativity in practice. Peter added, "So, I wrote this... 'No forcing, only doing. Practice, encourage gentleness, play, laughter, repetition.' These are the keys to a good swim lesson." Teacher educators should be in the water with the preservice and teacher interns and deconstruct their own messy creativity in practice. Doing so, allows the preservice and teacher interns to see how sociocultural resources build creativity and mediate practices. Perhaps, more importantly, to show that creativity in practice is a form of *play* and it takes repetition to develop. From that point, teacher educators can link how to critically engage resources toward culturally relevant practices or even how to critically invert standards toward revising curricula and still meeting the objectives. Critical engagement of resources links to the intertextual layers of *recreativity* in practice.

I think it important to show preservice and teacher interns that *recreativity* is more than copying. *Recreativity* remains a high frequency practice across fields. The teachers and chefs showed that ideas generated from existing resources such as lessons, recipes, techniques, etc. Just as it is important to deconstruct the messiness of creativity in practice, it is equally essential to show them the messiness of *recreating*. Beyond Beatrice's failed *recreation*, the intertextual layers provide a way to learn from resources. Lars Ulrich of Metallica provides another way of viewing *recreativity*. He said, "I'm very comfortable with the fact that all great artists derived

from something else. You take the things that turn you on and mold it with the other things that turn you on, and hopefully you spit out something that's your own thing and that sometimes works for other people" (Scott & Ulrich, 2021). Be it academic bullshitting or deriving from, the point reinforces the sociocultural layers and that adapting from resources requires learning.

Ultimately, creativity in practice depends on teacher and teacher educators doing two things: 1) exploring and deconstructing their own creativity in practice. It could be through any activity related to them as learner or teacher. I encourage all to see their symbolic "Last edit..." history or "track changes" of any activity. See their own messiness and acknowledge their inhibitors, triggers, and resources. Then 2) reposition from learner to collaborator. By repositioning the role, it allows the teacher and teacher educator to speak of their own nexus of creativity in practice and to make visible the discourses and messiness. The demystification of creativity may be the strongest collaboration toward creating.

### **Next steps: (re)constructing creativity in practice**

Originally my study focused on student writers and their creative practices. Then on March 11, 2020, Michigan State University President Samuel Stanley sent an email: "Effective today at noon, MSU is suspending face-to-face instruction in lectures, seminars and classroom settings and moving coursework to virtual instruction. This suspension of in-person classes will last until Monday, April 20 and we will reevaluate this decision on an ongoing basis, sharing additional updates or modifications as more information becomes available" (S. Stanley Jr., MD, personal communication, March 11, 2020). The suspension of in person classes continued for a full year into the Spring 2021 semester. COVID and the ensuing quarantine inhibited my project. As a result, a study of learner creativity in practice appears to be the next logical step. My original intent focused on student writing and literacy practices. I envision possible studies could

view the way resources mediate student creativity in practice while writing or even for building reading comprehension. What resources do learners engage? In what ways do engaged resources mediate creativity in practice, be it writing or reading? The nexus of student creativity in practice has the potential to explore various facets of their literacies and enhance literacy and education research. In particular, the findings could provide insight into what elements of a teacher's practice students engage as a resource. So, it has the potential to build teacher practices as well. Like the teachers and chefs in this study, there is potential to view how learners' nexus of creativity in practice links to their critical discourses. Because the study showed creativity in practice as uniform across fields, there is potential for building a cross curricular view of creativity in practice of learners. Ultimately, the next creator will shape their own path, adding a sociocultural layer that continues to evolve multivocal research.

### **Conclusion**

I return to the question I asked myself months ago during a field observation: what does creativity mean? The teachers and chefs responses built an ontological and cognitive perspective that reinforces most existing research. The findings, on the other hand, showed a more sociocultural and epistemological construction of creativity in practice linked to resources. The resources moved between texts, mentors, experiences, classes, and family. Resources shaped heteroglossic layers that mediated the nexus of creativity in practice by positioning (*re*)creators as learners, collaborators, and tacticians. These findings speak against the cognitive and ontological studies and showed a more complex sociocultural form and construction of creativity. My discussion highlighted the potential of the findings as a way to deconstruct (*re*)creativity in practice. In doing so, I hoped to make visible the messiness of creativity discourses and practices.

The cross-field study enabled me to build a wider view of creativity in practice. It enabled a scope of how creativity in practice works across fields and note any outliers of practices. The findings showed those practices to be universal using Leone's (2018) categories. The categories represented a generalized set of practices that each creator and field then embodied in their own approaches. The larger significance of the universal categories possibly indicate that the findings may be more generalizable. Certainly, the possibility showed that if the practices are universal across two fields, then they may be applicable to other fields as well. Although the initial idea of creativity in practice may seem of concern to a niche audience of teachers, and teacher educators, the research of creativity connects to anyone or field interested in the construction of ideas into a product. By product, I do not mean a monetized good; instead, I mean a realized and concrete (digital or physical) object.

Ultimately, with a focus on education, the findings speak to how teachers engage their creativity in practice and how they can enhance their creativity through understanding inhibitors, triggers, and resources. Meanwhile, teacher educators can offer preservice and teacher interns ways to critically dialogue with resources to mediate their creativity in practice. In other words, teacher educators have an opportunity to serve as a mediating resource for preservice teachers and teacher interns. By deconstructing creativity in practice, I think it allows teachers and teacher educators, anyone, the opportunity to rediscover play.

### **Meta-discovery of my own creativity**

Throughout my weekly meetings with my dissertation chair, I often quipped that I am living my dissertation. While my study focused on several creators in two fields, it also felt like a discovery of my own creativity in practice. Let me explain. In an unintentional meta approach<sup>2</sup> to

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<sup>2</sup> This feels like the moment that cognitive researchers laugh at the irony.

writing my dissertation, I tracked several dates that marked moments of inhibitors: March 11, 2020, seemingly all of May, June 1, September 18, the months of November and December, January 6, 2021, and 20. The anxiousness ratcheted to levels that disrupted, perhaps even crippled, my thinking and writing on those days. The dates do not even include micro moments that inhibitors took hold and paused my creativity in practice. Yet throughout all of it, I continued thinking, reading, and writing. And I baked.

I lived the meme of baking the COVID-19 pounds. I baked <sup>3</sup>breads, pizza dough, 5 birthday cakes, cupcakes, brownies, cookies, cinnamon rolls, buttermilk turkey, pot de creme, and made frosting. My family members and friends who enjoyed the baked goods were not privy to the messiness of baking - in the dishes and recursive learning. I made bricks of bread (**Appendix E**). However, I continued learning from YouTube videos - add and mix the yeast before the salt - and the comment sections of practices before an edible loaf happened. As I scrolled through and compared recipes, techniques, and the comments of other home bakers, I understood the sociocultural layers of resources that mediated my creativity in practice. I lived my dissertation through baking; however, I failed to recognize it at the time.

All while I baked, I still had a dissertation to create. Like I did with baking, I explored resources and scoured my Google Drive for notes, memos, and highlighted articles. Some resources formed triggers of creativity from: notes, articles, books, talks with my advisor, talks with friends, emails to my dissertation committee members. They all forwarded ideas that gave way to trial and error, and imaginative creativity practices. During an inhibited moment of writing the Discussion chapter, I read a book review.

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<sup>3</sup> I included the links to what I baked, to illustrate the engaged practice. And should anyone be so inclined, they can view the recipes, comments, and compare to their own curated recipe list.



Shapiro (2021) reviewed Sam Sifton's *The New York Times Cooking-No Recipe Recipes*. The book provides the general gist of the recipe: ingredients, oven temp, preparations of pans, pots, food, and minimal guidance. In effect, it is the antithesis to *Tasty* videos demonstrating how, exact measurements, times, and to-do recipes. The use of those direct sequenced recipes tell home cooks, like me, what to do and how to do it. It provides a guided one-way plan that gets food on the table. The book, however, reflects upon the non-recipe as an opportunity to improvise. In other words, it builds creativity in practice - all four of them. Shapiro (2021) quoted Sifton, "Cooking's not difficult. It's just a practice". The implication pushes back at the standardized and prescriptive recipes. Shapiro spoke back asking, "[w]hat's so uncool about measuring?" At the same time, there are many cooks who need the details of time and measurements. I am one of them.

Sifton's book acted as a trigger that engaged my creativity. It gave me pause to consider the way resources mediated my nexus of creativity in practice. I think back to hearing Kate and Francis say they do not measure. The admission demystified a myth of baking that I held onto of precision and food chemistry. Truth be told, I still meticulously measure ingredients out of habit and fear<sup>4</sup>. The combination stayed with me through writing the dissertation: habits of writing practices and fear of failure. At the same time, I am reminded of a recipe for "ooey-gooney brownies". The recipe writer included a vague line about bake until *gooey in the middle* - still am wondering about that. I need a timestamp. Then, another connection happens that links to my dissertation writing. I wanted the measurements and time details for writing the chapters. I wanted a picture of what the bake would look like - even better yet, a *Tasty* video showing me

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<sup>4</sup> Inhibitor combo.

what to do. I wanted a clean dissertation. Instead, it was messy. It was a non-recipe of creativity in practice. Perhaps as I deconstructed creativity in practice, I was deconstructing myself<sup>5</sup>.

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<sup>5</sup> The unintended irony is not lost on me.

## **APPENDICES**

## APPENDIX A

### Analysis used for Research Questions

Table 9. ANALYSIS USED FOR RESEARCH QUESTIONS.

Research Question	Analysis method
R1: How do the participants define creativity?	Coding using Leone (2018) taxonomy of creativity for participants' practices (Saldana, 2013).
R2: In what way does reflect the positioning between actor and resource?	<p>Discourse Analysis (Gee 1996, 2011; Gee and Handford, 2012). Provides a ways to view their language and practices to make visible the linked and unlinked connections. View resources using Manz and Suarez (2018) and Stroupe (2016).</p> <p>CDA. Open to the possibility of the way participants position themselves with/against/to/etc. the resource (de Certeau &amp; Rendall, 1984; Fairclough, 1992; Freire, 1996; Prior, 1995; Stroupe, 2016) Can make visible the impact of resources such as the dominant discourses of institutions, curricula (prescriptive, transmission, banking) on participants' creativities.</p> <p>Intertextual analysis (Bazerman, 2004; Fairclough, 1992; Wynhoff Olsen et al., 2018; Prior, 1995; Smagorinsky, 1998).</p>

Table 9 (cont'd)

<p>R3: What creative practices emerge when individuals choose to use, or not use, resources?</p>	<p>Mediated discourse analysis (R. Scollon, 2001; S. W. Scollon &amp; de Saint-Georges, 2012; Wertsch, 2016) offers a way to view the actions in relation to language and histories. It helps to make visible the explicit and implicit links of action and discourse. Leads to frame the nexus of practice through the interview data or talk aloud. Connecting the resource(s) as a mediational object and how the actor appropriates it in creative ways using Leone (2018).</p>
<p>R4: How do resources mediate creativity or <i>recreativity</i>?</p>	<p>Mediated discourse analysis (R. Scollon, 2001; S. W. Scollon &amp; de Saint-Georges, 2012; Wertsch, 2016) offers a way to view the actions in relation to language and histories. It helps to make visible the explicit and implicit links of action and discourse. Leads to frame the nexus of practice through the interview data or talk aloud. Connecting the resource(s) as a mediational object and how the actor appropriates it in creative ways.</p> <p>Intertextual analysis. Code the shared resources and/or artifacts (Saldaña, 2013).</p>

## **APPENDIX B**

### **Interview Protocol**

#### **I. Interview overview**

- A. Begin with structured questions to start with a theme or focus point (Glesne, 2006)
  - 1. How do you define creativity?
  - 2. What are resources?
  - 3. Allowing natural dialogue to form and participant's voice and story to lead. (Stroupe, 2016)
- B. Multiple interviews through VOIP service or phone
  - 1. Record each.
  - 2. May have informal interviewing through email or text messaging as follow up.
  - 3. 2 interviews at 20-25 minutes
  - 4. 1 live plan: lesson or activity plan, menu/meal plan.
    - a) To have them talk through their decisions and practice with the use of resources (Prior, 1995; Roozen, 2009; Stroupe, 2016)
      - (1) Teacher: lesson plan or activity building
      - (2) Chef: menu plan, meal prep
  - 5. Artifact share of creative moment or possibly even constrained by/bounded to a set of parameters (Pahl & Rowsell, 2010; Smagorinsky et al., 2010)
    - a) Talk about artifacts
      - (1) Note what resources are associated or if the artifact itself is a resource
        - (a) Type of resource
        - (b) Purpose
        - (c) Element of creativity

#### **II. Protocols**

##### **A. Pre-Interview**

- 1. Check if they have access to Zoom or Google Hangout or Skype.
  - a) Be sure I can record the conversation using whatever program used.
  - b) Test run to be sure connection/program runs.
  - c) Send reminder email/text day before with time to confirm.
    - (1) Share the general set up of interview process
    - (2) Ask if it is okay to email or text a few questions post interviews.

B. Interview protocol - 1 and 2

1. Use same starting question(s) with each participant during Round 1.
  - a) For round 2
    - (1) Read notes, memo, transcript\* (if available) and address any follow up questions to start.
  - b) To probe further or build elaboration if participant freezes use phrases such as:
    - (1) Tell me more about...
    - (2) That's interesting you say that, could you say more?
    - (3) I'll start with a phrase and then you finish (like word association)
2. As interviews finish, thank them.
  - a) Set up live plan date and time.
    - (1) Briefly explain what it is.
      - (a) Example: like a cooking how-to video, meta-commentary while planning, doing.
    - (2) Have all materials and resources normally used available.
  - b) Send a thank you email for their time
3. Quick reflection memo (10-15 mins.)
  - a) Type up handwritten notes

C. Resource share

1. Using the resource question or experience question that connects to a particular resource(s)
2. Ask if they can share it (Google share, take a picture, scan it).
3. View the resource(s) and/or artifacts
  - a) Write questions that come mind to ask in next interview.

D. Live plan

1. After Interview 2
  - a) Send an email outlining the talk aloud: what is it, what they need, and notify how much time - 20-25 mins.
    - (1) The live plan is a practice where the participant will vocalize their thoughts as they conduct an action such as planning, meal prep, menu plan, lesson plan, etc.
    - (2) They will need resources or artifacts that they use for such activities.
      - (a) If none available, then in quick q/a after or email ask about the verbal connection (intertextual references) that they talked about. What was it in reference to?
      - (b) Ask about artifacts and why use.

(3) They will need whatever other items they normally would use for the practice.

2. Day before

- a) Confirmation email/text with time.
- b) Reminder of the materials and protocol.
- c) Resend Zoom link.

3. Live plan

- a) Recording program ready
- b) New doc file with date, initials, and pseudonym
- c) What practice will they do today?
- d) When they're ready, begin.
  - (1) Take notes
- e) Ask them to share or take a picture of what they made.
- f) Q/A (5 mins., time permitting)
- g) Quick reflection memo (10-15 minute write)
  - (1) Type handwritten notes.



## APPENDIX C

### Resource, Zoom Etiquette original

Figure 6.

RESOURCE, ZOOM ETIQUETTE ORIGINAL



## APPENDIX D

### Beatrice Recreated Zoom Etiquette

Figure 7.

#### BEATRICE RECREATED ZOOM ETIQUETTE



## APPENDIX E

### Messiness of Creativity, Bread Fail

**Figure 8.**

MESSINESS OF CREATIVITY, BREAD FAIL



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