

PUSHING BACK AGAINST THE “PUSH DOWN”: PRE-SERVICE TEACHERS
ENGAGING IN COMPLEX PEDAGOGIES AS PATHWAYS OF RESISTANCE
TO THE ACCOUNTABILITY MOVEMENT IN EARLY CARE AND EDUCATION
SETTINGS

A Dissertation
by
ANDREA WATSON ANDERSON

Submitted to the Graduate School
at Appalachian State University
in partial fulfillment for the requirements for the degree of
DOCTOR OF EDUCATION

May 2020
Educational Leadership Doctoral Program
Reich College of Education

PUSHING BACK AGAINST THE “PUSH DOWN”: PRE-SERVICE TEACHERS
ENGAGING IN COMPLEX PEDAGOGIES AS PATHWAYS OF RESISTANCE
TO THE ACCOUNTABILITY MOVEMENT IN EARLY CARE AND EDUCATION
SETTINGS

A Dissertation
by
ANDREA WATSON ANDERSON
May 2020

APPROVED BY:

Denise Brewer, Ph.D.
Chairperson, Dissertation Committee

Beth Buchholz, Ph.D.
Member, Dissertation Committee

Teressa Sumrall, Ph.D.
Member, Dissertation Committee

Vachel Miller, Ed.D.
Director, Educational Leadership Doctoral Program

Michael J. McKenzie, Ph.D.
Dean, Cratis D. Williams School of Graduate Studies

Copyright by Andrea W. Anderson 2020
All Rights Reserved

Abstract

PUSHING BACK AGAINST THE “PUSH DOWN”: PRE-SERVICE TEACHERS ENGAGING IN COMPLEX PEDAGOGIES AS PATHWAYS OF RESISTANCE TO THE ACCOUNTABILITY MOVEMENT IN EARLY CARE AND EDUCATION SETTINGS

Andrea Watson Anderson
B.S., Appalachian State University
Birth – Kindergarten Teacher Licensure, Western Carolina University
M.A., Appalachian State University
Ed.D., Appalachian State University

Dissertation Committee Chairperson: Denise Brewer, Ph.D.

This action research project and ethnography examined early care and education (ECAE) pre-service teachers as they engaged in complex constructivist pedagogies in the context of a junior level class at a rural university in the southern United States. This paper presents a constructivist conceptual framework and a literature review that argues that because of the accountability movement, in-service teachers are feeling pressure to abandon child-led, play-based learning experiences for didactic easily measured learning activities. This creates a problem for novice teachers. Do they stay true to what they have learned or do they change their practice to conform to the status quo? Pre-service teacher preparation programs are also feeling this pressure to adjust their teaching practice to conform to current practices.

This research presents findings that support the contention that a constructivist class can support pre-service teachers' understanding of the importance of relationships

and shows the depth of learning of children engaged in constructivist pedagogies. Findings support the belief that pre-service teachers can engage in activism to “push back” and disrupt the normalized practices in ECAE contexts. However, this research suggests that constructivism in itself is not enough to change the current narrative. It presents pathways for resistance that pre-service teacher preparation programs should consider in order to support students to be activists as they begin practicing in ECAE contexts.

Acknowledgments

A special thank you to my parents and brother whose devotion and support have been constant. You looked beyond the beginning to see what could be.

Thank you to Steve and Joy. You gave me a treasure.

Many, many thanks to my dissertation chair, Dr. Denise Brewer. There simply are not enough words to express my gratitude for your guidance and friendship. I am thankful for our conversations regarding philosophy, practice, and the injustices we hope to make right.

To my dissertation committee, Dr. Beth Buchholz and Dr. Teressa Sumrall. I know this took HOURS of your time. For me, the lived experience is so powerful and you supported my love of story by engaging in qualitative research with me.

Thank you to Cohort 23. Taking this educational journey with you has been a gift. I hope we look back one day and laugh, but if not, we were there together.

Thank you to Dr. Cindy McGaha for her friendship and support. I am so thankful you told me about an opportunity that would lead to the position that has fulfilled by career dreams.

Thank you to the teachers and college students at the Lucy Brock Child Development Lab. You were there when I could not put words together to form sentences and yet, you stayed and joined me in this work. I am eternally grateful.

Finally, thank you to the children and families who have joined me in learning over the years. I acknowledge you and recognize the immense faith you bestowed upon me. I will not waste it.

Dedication

To Patrick: Your faith and confidence in me is the substance of dreams. All my love.

To Jackson: You are my all and this is all for you. Be fearless.

To My God: You have extended your goodness and mercy to my family and me repeatedly during this project. Thank you.

Table of Contents

Abstract.....	iv
Acknowledgements	vi
Dedication.....	viii
Chapter One	1
Introduction.....	1
Statement of Problem	2
Research Context.....	4
Organization of the Dissertation.....	6
Research Questions.....	7
Overview of the Methodology.....	8
Constructivism in Early Care and Education Settings: A Conceptual Framework	8
Development Psychology.....	9
Behaviorism	9
Constructivism	10
Analysis of Constructivism for Teaching Practice	10
Piaget’s Stages of Cognitive Development	12
Vygotsky’s Sociocultural Theory	15

Rheta DeVries’s Constructivism in Practice	17
Developmentally Appropriate Practice (DAP): A Constructivist Framework for	
Teaching and Learning	18
Contexts and Experiences in the Framework of Relationships	19
Development is holistic and interconnected	23
Brain Development	24
Development is facilitated when children engage with the physical world	24
Environment as Teacher	25
Development is facilitated when children engage with the social world	26
Critique of Constructivism	26
Conclusion.....	28
Chapter Two.....	29
Review of the Literature	29
The “Pushed Down” Curriculum in Kindergarten and Pre-K	31
Kindergarten	32
Pre-K.....	35
Pre-service Teacher Education Programs	37
From Democracy to Neoliberalism	38

Reggio Emilia: Public Education to Eradicate Fascism	41
Loris Malaguzzi.	42
Constructivist Pedagogy in Practice	44
Pedagogical Documentation and Reflection	46
Project Work (Progettazione)	47
The Atelier & Hundred Languages of Children	48
Reggio Emilia and Positive Outcomes	49
Critique of Current Body of Literature	52
Conclusion	54
Chapter Three.....	55
Methods	55
Research Questions	55
Purpose and Design of the Study.....	56
Action Research	57
Ethnography.....	58
The Research Context	59
Participants	60
Researcher Positioning.....	61

Data Collection	62
Analysis	66
Reflexivity and the Researcher	68
Ethical Considerations	70
Conclusion	71
Chapter Four	72
Results	72
Jillian	73
Marie	74
Finding: Relationships	76
Dear Self- Image of Learner	76
Image of the Child	83
Jillian’s Image of the Child Assignment	83
Marie’s Image of the Child Assignment	84
Finding: Practices	85
Pedagogical Documentation	87
Jillian	88
Marie	93

Finding: Activism.....	99
Teaching Metaphor	99
Jillian’s Metaphor for Teaching	100
Marie’s Metaphor for Teaching	101
Photo Essay.....	104
Finding: Constructivism Is Not Enough	109
Conclusion.....	115
Chapter Five.....	116
Discussion.....	116
Jillian, Marie, and Me	117
Becoming constructivists	117
Jillian	117
Marie	118
Me	119
Becoming activists.....	120
Jillian	120
Marie	121
Me	121

Pathways for Resistance	123
Unsettle Views of Early Care and Education.....	123
Name Political Ideologies.....	124
Endorse Play- Based Curriculum Approaches	125
Push Back against Definitions of Quality	127
Understand Current Discourses.....	129
Image of the Child: Empty Vessel.....	129
Image of the Child: Deficient and in Need of Adult Intervention.	131
Counter Discourse: Children as Competent and Capable	132
Image of the Teacher: Teacher as Technician	132
Counter Discourse: Teacher as Learner and Researcher.....	134
Counter Discourse: From Instruction to Inquiry.....	135
Complexify Practice.....	137
Engage with Pedagogical Documentation.....	137
Engage with Critical Reflection.....	139
Engage with Ethics of Care	141
Moving Forward.....	143
Pedagogy as a Political Act.	143

Research Possibilities.....	144
Limitations to the Research.....	146
Conclusion.....	147
References.....	149
Appendix A: Consent Form.....	167
Appendix B: IRB Approval.....	169
Appendix C: Syllabus.....	172
Appendix D: Observation Form.....	177
Appendix E: Assignments by Student.....	178
Vita.....	195

Chapter One

Andin, age 4: "Sam, will you marry me?"
Sam, age 5: "No, I can't do that. I don't know myself yet."

Introduction

"Why are you allowing children to play with dolls?" "How are you teaching children to read by letting them paint at an easel?" "How are children learning math by playing house?" "Why do you have a block area in your classroom?" These are queries an early care and education teacher may hear when a principal, an upper grades colleague, or a parent enters their classroom. Early care and education (ECAE) teachers must answer a myriad of questions. As a teacher and mentor to beginning teachers, I have heard these questions and have seen the effect they have on a teacher's ability to stay faithful to pedagogy that supports meaningful learning. ECAE teachers have shared with me they feel dejected and "othered" because they taught in a constructivist manner. I have also observed ECAE teachers become complacent with current practice and choose not to "push back" against current normalized practice.

Teaching and learning in an ECAE program looks different from the way most people perceive teaching. Instead of being an expert who gives knowledge, early educators intentionally play with children, have conversations that engage children's thinking, and actively facilitate their learning. Constructivist pedagogy requires that teachers engage in the learning process with their students (Brooks & Brooks, 1999; Fosnot, 2013; Howe, Jacobs, Vukelich, & Recchia, 2012). Teachers must take a pedagogical stance; they remain grounded in a constructivist pedagogy while learning with children and families or become the

pedagogue that engages in didactic instruction to get children ready for the next academic expectation.

Statement of the Problem

In the current educational climate of high stakes testing, legislated outcomes, and Common Core standards, the ECAE field is reporting a “push down” of curriculum (Bassok, Latham, & Rorem, 2016; Stipek, 2006). The current system expects young children to learn concepts that are more academic across all developmental domains, but especially in literacy and math learning. Because of the current system, more early education teachers feel pressure to implement more didactic learning experiences (Bassok et al., 2016; Graue, Ryan, Nocera, Nothery, & Wilinski, 2017). Higher education institutions are also feeling the pressure to adjust how they are supporting and educating preservice teachers (Isikoglu, 2008). Higher education and advocacy organizations find themselves in a moral and ethical dilemma. College faculty are asking the question, “Do we help novice teachers understand constructivist pedagogy or do we get students ready for standardized testing?” (Brown, 2009; Buettner, Hur, Jeon, & Andrews, 2016). In the current educational climate, teachers are considered effective if children score adequately on a standardized measure (Darling-Hammond, Bae, Cook-Harvey, Lam, Mercer, Podolsky, & Stosich, 2016). Many teachers find themselves in teaching situations where they are pressured to adopt practices that are in conflict with constructivist teaching approaches (Vartuli, 2005; Vartuli & Rohs, 2009). Many school administrators believe in and promote more instructivist teaching practices that focus on academics (Bowman, Donovan, & Burns, 2001). The current educational system places strong emphasis on standardized testing that can easily be measured through quantitative

methods (Ingersoll, 2009). Most administrators would support direct instruction activities because there is quantitative data to support their efficacy (Bowman et al., 2001).

One of the biggest issues that young teachers face is the question of accountability (Crocco & Costigan, 2007). Meeting legislative outcomes, principal expectations, and pressure from their upper grade peers can negatively affect constructivist-teaching practices (Howe et al., 2012). Early childhood educators who are constructivists have to articulate their beliefs about the teaching and learning process and make learning explicit through advocacy (Howe et al., 2012; Isikoglu, 2008). If teachers choose not to do this, they may find themselves in situations where they lose their ability to engage in the best practice, they can easily be swayed to engage in more didactic teaching practices, and lose sight of the goal to learn with children and families (Vartuli, 2005). In practice, the push down has created ECAE classrooms that have abandoned play and exploration as the primary mode of learning. Children do not get the opportunity to explore and make sense of the world on their own terms and in developmentally appropriate ways. Young children are sitting at tables completing pencil and paper tasks to learn concepts that are more academic in nature. Children are assessed for skill attainment more frequently and with little thought of the consequences for their social and emotional wellbeing. Teachers and children are losing their agency. Curriculum is driven by testing and the need to meet standards. In chapter two I will discuss the literature regarding how interactions with children are being affected because of the push down of curriculum.

The problem I sought to research was based in my own experiences and conversations with pre-service and in-service teachers who feel pressure to adopt more direct instructional pedagogies. The remainder of this section will give an overview of the

ethnographic action research I completed in order to address the problem statement as well as the conceptual framework that has guided my practice and research.

Research Context

As a veteran teacher, I have lived the shift from play-based, child-led learning to teacher-directed learning experiences. As a beginning teacher in a Head Start program in 1994, I taught in a program that placed a great deal of emphasis on accountability. However, play-based learning was the mode by which I was expected to facilitate learning experiences. Lesson planning was based on children's investigation and assessment was based on developmentally appropriate activities. When I left the program in 1999, we were required to make more detailed lesson plans that connected learning experiences to mandated outcomes. Assessment became more prevalent and more formal, and less useful to teachers for planning.

In my next position as a child care specialist, I provided technical assistance to ECAE facilities in order to raise the quality of programming. At that time, there was a push to engage children in more scripted curricula in order to learn phonics and foundational literacy skills. Soon after, I became the Assistant Director of a pre-K in a rural school system with a robust program for children who had been placed "at-risk" for school failure. At the time, I became keenly aware of pressure from principals and kindergarten teachers to get children ready for the next academic expectation. Kindergarten teachers openly lamented the number of assessments they had to complete with children, especially in terms of language and literacy learning. They wanted our pre-K programs to assure that children knew the alphabet, beginning consonant sounds, how to write their name, and recognize a few sight words when they left the pre-K program. Most of these children had never been in an organized school

setting and very few knew how to use scissors. One day I found myself in a position in which I had to justify why our program provided opportunities for block play. A new principal questioned the validity of play-based learning. He felt the pre-K program should give more attention to engaging children in literacy experiences and the blocks should be moved out of the room for a bigger writing station. I had to defend our program's practice and engage in activism to help him understand the importance of constructivist pedagogies, specifically investigation and manipulation of materials. He had no conception that the block center provided children opportunities to engage in science, technology, engineering, art, and math (STEAM) learning. He saw block play as a waste of valuable time.

Moving into the directorship at a lab program in a College of Education provided me opportunities to “push back” against the prevailing notion that instructive academic learning content should replace play-based, child-led curriculum. The lab is inspired by the teaching practices of Reggio Emilia and engages in the process of pedagogical documentation. The lab school serves 98 children and their families as well as over 500 college students per year. The lab has a program located on campus and three programs in the local school system. The primary purpose of the lab school is to provide a high quality, early education setting that supports and promotes best practice that serves as a model for college students and the greater community. I could engage in activism with students to help them understand constructivist pedagogies, but I soon realized they were graduating and falling into the direct instruction trap. I began the doctoral program and gained a deeper understanding of constructivism and the paradigms that influence practice in educational settings. Upon learning about neoliberalism it became *real* to me and in the process of critical reflection, I could see its tendrils affecting the work I did with children, families, and teachers.

After my epiphany, I talked with my department chair about my concerns that our program was not addressing constructivist pedagogies explicitly or thoroughly. I also felt our students could not defend their practice or engage in activism. This project was born from that conversation. I was ready for my internship and asked to create a class for junior-level students that specifically addressed constructivist practice and how to engage children in complex pedagogies. I created and taught the class as a form of ethnographic action research. The following sections present an overview of my research project.

Organization of the Dissertation

This dissertation is a pedagogical documentation of my work with pre-service teachers. It highlights my own understanding about the “push down” being felt by ECAE settings as well as the discoveries created by participants in the research. This dissertation is organized in five chapters. The first chapter provides the problem statement, the research questions, an overview of the methodology, and a conceptual framework used to situate my stance. Chapter two is a literature review that analyzes the change in practice in ECAE contexts over the last twenty years. It defines the nature of standards based accountability and its impact on teaching. Chapter three gives details regarding the methods employed in the research as well as the nature of data collected. Data analysis is described and information is given about the research context. Chapter four provides the results and makes connections to the research questions. In chapter four, I use ethnography to tell the story of the participants in the class, particularly two students, Jillian and Marie. Chapter five provides pathways for resistance for pre-service ECAE teacher preparation programs to help their students “push back” against the current normalized ECAE practices and support them to engage in activism.

Research Questions

The purpose of this study is to examine ECAE pre-service teachers' perceptions and beliefs about their teaching practices and serve as a means to trouble the current narrative around ECAE programming.

The study examined the following questions:

1. How have pre-service teachers' own school experiences influenced their beliefs about teaching young children?
2. In what ways does a constructivist pedagogy class extend and complicate pre-service teachers' perceptions of learning and development in ECAE contexts?
3. How does pre-service teachers' engagement in course assignments and discussion facilitate a deeper, more complex understanding of constructivist teaching and learning in ECAE contexts?
4. What role can a college level course play in supporting pre-service teachers' engagement in activism in order to disrupt normalized practices in ECAE contexts?

In order to answer these research questions, I engaged in ethnographic action research as I created and taught a class about constructivist pedagogies to junior level child development and birth – kindergarten education students. The research project was based in my first attempt at teaching the class in the fall of 2018. Since then, the class has become a requirement for all majors in the department.

Overview of the Methodology

This research is qualitative and is an action research project and ethnography. Glense (2011) defines ethnography as research that describes a people or cultural group. The cultural group in the study was students who enrolled in the class. Action research is defined as methodology that seeks to take action in order to solve a problem and is popular in education settings (Creswell & Creswell, 2017; Glense, 2011; Stringer, 2008). I found this type of work to be particularly helpful as I sought to discover ways to engage pre-service teachers with constructivism and introduce them to activism. I posited the course could change students' thinking about the nature of teaching and learning. Thus, a constructivist conceptual framework was studied in the class and participants engaged in open-ended experiences that facilitated their thinking regarding young children and constructivist practice.

Constructivism in Early Care and Education Settings: A Conceptual Framework

I analyzed the “push down” of curriculum practices through the lens of constructivism. I argue that a constructivist paradigm supports the best practice in ECAE settings while engaging children and teachers in meaningful and valuable learning experiences. This paper provides a literature synthesis of the nature of this issue in the *Literature Review*. Teaching practices in ECAE programs have changed over the past twenty years (Haslip & Gullo, 2017). Constructivist teaching practices are being replaced by more direct instruction activities that are easily assessed by quantitative measures (Haslip & Gullo, 2017; Genishi & Dyson, 2014; Wohlwend, 2018). I argue that constructivist pedagogies can be a form of resistance in the climate of neoliberalism policies that directly affect teacher practice. This section gives an overview of constructivism and scholars whose work has influenced constructivist practice in ECAE settings. To understand constructivist practice, I

look to the historical contexts and conceptual frameworks that provide the foundation for constructivism.

Developmental Psychology. There are debates in the ECAE field as to which teaching methodology best supports learning: *Child- centered vs. teacher- led, unstructured vs. structured learning experiences*, and *play vs. direct instruction*. These debates stem from two different beliefs about how children learn best: behaviorism and constructivism (Brooks & Brooks, 1999; DeVries & Zan, 2012; Fosnot, 2013).

Behaviorism. Behaviorism is founded in the work of developmental psychologists, Skinner, Engelmann, and Thorndike (Crain, 2015; Fosnot, 2013). Behaviorism is a theory postulating that learning is behavioral responses to physical stimuli (Crain, 2015; Fosnot, 2013; Skinner, 1953). In this paradigm, psychologists are interested in reinforcement, skill practice, and external motivation as determinants of behavior (Crain, 2015; Fosnot, 2013; Skinner, 1953). There are current educational practices that are based in the behaviorist theory. Behaviorist teachers pre-plan the curriculum based upon predetermined knowledge usually in the form of state standards. While planning curriculum, teachers break the content into finite skills that range from simple to complex. Teachers develop a sequenced and structured curriculum while moving children through the content. In this paradigm, students have the responsibility to pay attention and absorb their teachers' explanations while engaging in learning experiences that are often practice sessions in which students are given positive feedback (Crain, 2015; Fosnot, 2013; Skinner, 1953). Learning is passive and happens through the processes of external motivation and reinforcement. Learners are tested to see how their command of the content has been affected by the reinforcement. The learner is expected to move through the content in a linear way and demonstrate quantitative gains

(Crain, 2015; Fosnot, 2013; Skinner, 1953). This paradigm does little to explain cognitive change in the learner, but is concerned with the ability to demonstrate appropriate behaviors (Fosnot, 2013). Much of the current educational climate is based in this learning theory, especially since student outcomes are based on standardized testing and the accountability movement (Crocco & Costigan, 2007; Darling-Hammond et al., 2016; Fosnot, 2013).

Constructivism. Constructivism is an epistemology that maintains people construct or create knowledge through interaction with the environment and what they know and/or believe (DeVries, & Zan, 2013; Fosnot, 2013; Kroll & Laboskey, 1996). Active engagement, problem solving, inquiry, and collaboration with teachers and peers characterize learning in constructivist programs. Teachers act as facilitators instead of pedagogues who impart their knowledge. Teachers in this paradigm encourage learners to challenge ideas, ask questions, formulate hypotheses, and view learning as an interactive and personal process. Teachers plan experiences around what learners are interested in while embedding academics in naturalistic and holistic experiences (DeVries & Zan, 2013; Fosnot, 2013; Kroll & Laboskey, 1996). Curriculum is individualized and assessment is authentic, meaning it is conducted in a student's natural environment and their natural experiences. Assessment is interested in qualitative measures of students learning (DeVries & Zan, 2013; Kroll & Laboskey, 1996). Families are partners with schools and teachers in the learning process.

Analysis of constructivism for teaching practice. Fosnot (2013) asserts the following principles of learning derived from constructivist theory:

- “Learning *is* development.” The learner is the primary mechanism in the learning process and requires creation and organization on the part of the learner. Learners

should be supported as they raise their own questions, generate hypotheses, and theories (Fosnot, 2005, p. 33).

- “Disequilibrium facilitates learning.” Errors and incorrect beliefs about processes should be embraced. Children’s ideas that produce contradictions should be discussed and explored to seek a better understanding of the world. Environments that support open-ended learning in realistic settings generate possibilities both correct and incorrect (Fosnot, 2005, p. 33).
- “Reflective abstraction is the driving force for learning.” Children seek to make sense of the world by creating representations of their thoughts and ideas. In order to make sense of the world, children need time to reflect upon their experiences in order to create multiple dimensional representations (Fosnot, 2005, p. 33).
- “Dialogue within a community engenders further thinking.” Classrooms that are informed by constructivism seek to create communities of practice in which all community members are responsible for being engaged in the learning, communicating and justifying their ideas to the community of practice. Ideas are accepted on a community level and only after group discussion (Fosnot, 2005, p. 33).

There are constructivist scholars who focus specifically on ECAE settings. Their theories have affected constructivist teaching in ECAE classrooms. Figure one gives an overview of the theorists and scholars whose work has informed constructivist practice in ECAE settings.

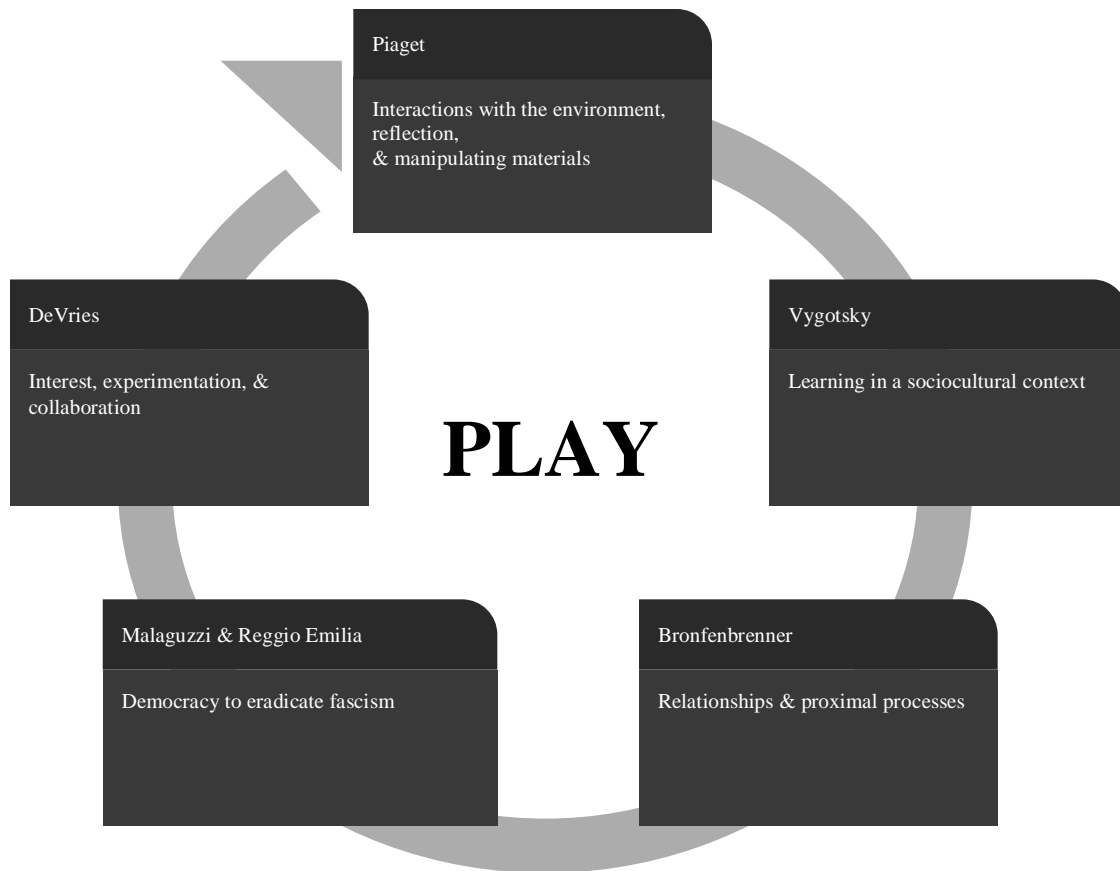


Figure 1. Conceptual Framework for constructivist practice in early care and education settings. This framework recognizes play as the primary mode of learning for young children.

Piaget's stages of cognitive development. Piaget theorized that children move through stages of cognitive development (Berk, 2008; Crain, 2015; Evans, 1973; Piaget, 1952; Pulaski, 1971; Singer & Revenson, 1997). However, his theory of cognitive development is a stage theory; he theorized there was little importance to the ages he associated with stages of his theory. Piaget recognized that typically developing children may go through the stages at different points in their development, but he did theorize that children moved through the stages in invariant sequences, meaning all children go through

the stages at some point in their development (Berk, 2008; Crain, 2015; Müller, Carpendale, & Smith, 2009; Piaget, 1952). Piaget (1952) believed that his stages represented increasingly comprehensive ways of thinking and understanding the world. Piaget believed that children constantly explore and manipulate the environment in order to make sense of it. In doing so, children construct new and elaborate structures that became the basis of their cognitive development (Berk, 2008; Crain, 2015).

Piaget's periods of cognitive development are listed in Table I (Berk, 2008; Crain, 2015; Evans, 1973; Piaget, 1952; Pulaski, 1971; Singer, & Revenson, 1997). In Piaget's theory, there are mechanisms for development (Berk, 2008; Crain, 2015; Evans, 1973; Piaget, 1952; Pulaski, 1971; Singer & Revenson, 1997). Piaget (1952) defines the mechanisms as assimilation, accommodation, and equilibration. Assimilation is defined as incorporating new knowledge into existing schemas. Accommodation is the process of changing cognitive structures to accommodate new evidence. Equilibration is when children are exploring a schema they cannot make assimilate or accommodate. Through disequilibrium, children actively work to make sense of their environment by mastering a new skill or idea. Once children master the new skill or idea they are brought back into balance. Disequilibrium is uncomfortable, yet produces more advanced thinking, meaning it is the primary driver of cognitive development (Piaget, 1952, Berk, 2008; Crain, 2015).

At the heart of Piaget's theory is his belief that a child's development is an active construction process, not a process that is governed by maturation or external teaching (Crain, 2015). Piaget theorized that children actively build their own understandings of the world through intrinsic motivation, exploration, and discovery (Crain, 2015). Children are active constructors of their own knowledge and learning comes from the child. For Piaget,

this is the most basic tenet of education and therefore needs to be at the heart of learning. Teachers are seen as facilitators of the learning process and support children's efforts to experiment and explore their world. Teachers ask open-ended questions that support children's thinking and facilitate experiences that engage children in activity with the environment, peers, and adults. Teachers actively facilitate experiences that produce disequilibrium so that children can work through their own development with adult support and mentoring, meaning that children and adults are co-constructors of knowledge (Berk, 2008; Crain, 2015; DeVries, 2002; DeVries, Zan, Hildebrandt, Edmiaston, & Sales, 2002; Piaget, 1952).

Table 1

Piaget's Periods of Cognitive Development

Period	Definition
I	Sensorimotor intelligence (birth - two years). In this stage, babies organize their physical actions through schemes. Schemas are actions such as sucking, grasping, and hitting. They do this as they attempt to deal with their immediate surroundings.
II	Preoperational thought (two - seven years). In this stage, children learn to think through the use of symbols and internal images; however, their thinking is often illogical and very different from adults.
III	Concrete operations (seven - eleven years). In this stage, children learn to think systematically but only when they can refer to

concrete objects and activities. Contrived tasks and unfamiliar people in a setting that is unnatural for children are not optimal for a true picture of a child's abilities and challenges.

IV **Formal operations (eleven -adulthood).** In this stage, children learn to think systematically in hypothetical and abstract contexts.

Vygotsky's sociocultural theory. Vygotsky's Sociocultural Theory provides a framework for children's learning through interacting with adults and peers in a social context. Vygotsky (1962) acknowledges the influence of maturation on children's development, but also theorized that learning is a function of collaborative and mediated activity. Children's development and learning originate from "social activity in which tools of the culture are appropriated, such as language and symbols" (Lindsay & Duvall, 2013, p.10). Vygotsky (1962) identified two interacting planes of development: interpsychological and intrapsychological. Interspsychological development occurs first when a child has an interaction with a person and intrapsychological development occurs when a child internalizes an event or idea that is first experienced during a social interaction (Lindsay & Duvall, 2013). Vygotsky (1962) emphasized that both planes of development are set in social contexts and cannot be separated from historical and cultural influences. Development happens when teachers engage children in the Zone of Proximal Development (ZPD). Children are just below mastery of a skill but can be successful with a teacher's support (Vygotsky, 1962). In the ZPD, teachers scaffold learning. Scaffolding is adjusting the support

offered to children to assist their current level of performance and move them to the next level (Crain, 2015).

Rogoff (1995) expanded on Vygotsky's theory by proposing the sociocultural context. This is the specific culture or setting in which a child participates in social experiences. The child's environment influences the ways, resources, and objectives of the participation (Lindsay & Duvall, 2013). Rogoff (2003) suggests the term guided participation. In guided participation, an expert and a novice share endeavors without the specificity of exact communication (Rogoff, 2003). In Sociocultural theory, teachers play a vital role in guiding children through the acquisition of new skills and concepts by engaging in the play with them (Crain, 2015; Lindsay & Duvall, 2013).

Social constructivism posits that knowledge and reality are contingent upon humans engaging with each other in context of language (Crotty, 2015). Social constructivists believe meaning is constructed, not discovered through social interaction and engagement within the environment. Meaning is constructed by people as they engage with others and with the world. They are interpreting and negotiating meaning (Crotty, 2015). Social constructivism postulates that there is not a set guide or concrete instructional strategy. The guiding principles of social constructivism is that learning is most beneficial when happening in a social context and that learning does not happen in a solitary way (Crain, 2015). It also proposes that cultural and historical contexts converge to mediate learning (DeVries & Zan, 2013; Fosnot, 2013; Kroll & Laboskey, 1996).

Shayer (2003) proposes that Piaget and Vygotsky needed one another's ideas to make a complete constructivist theory of education. When reading about constructivism in early education settings, both of their theories are present and provide the rationale for the types of

ECAE that are considered high quality programs (Blake & Pope, 2008; Copple & Bredekamp, 2009). Scholars, like Rheta DeVries, continue to build upon this work. DeVries is a constructivist scholar who has created a paradigm to guide early education teachers in their day-to-day teaching.

Rheta DeVries's constructivism in practice. Rheta DeVries is a constructivist scholar who has written extensively on ECAE classroom practice that supports Piaget's conception that children's learning is an internal process that is not governed by external teaching (DeVries & Han, 2012; DeVries et al., 2002). Her work has helped bring theory into practice. DeVries believes constructivist teachers who adhered to the principles detailed previously in Fosnot's research create spaces that foster children's search for knowledge. DeVries (2002) states social constructivist education supports children's natural dispositions of discovery and investigation through the medium of play. Play is the work of children and is a valuable and necessary mode of learning (DeVries & Han, 2012; DeVries et al., 2002). Teachers engage children in the study of phenomena in the world around them and foster cooperation between all members of the community through the work of play (DeVries, 2002). Teachers act as facilitators and build curriculum based on children's interests. The work children complete in the learning environment serves the primary means to assess children's understanding of content and the structure of knowledge (DeVries, 2002). This means children's understanding of content knowledge, such as properties of objects and the structure of knowledge (e.g., understanding the relationship between objects) can be assessed in the content of work or play they are engaged in (DeVries, 2002).

Another facet of DeVries' constructivist work that supports the constructivist contention that children cannot be governed by external teaching is the concept that children

cannot be in an authoritarian relationship with an adult. If children are in authoritarian relationships with adults they cannot be intellectually autonomous. DeVries believes that for children to develop to their intellectual potential, children and adults must have a cooperative relationship (DeVries & Han, 2012). In order to encourage the child's development, teachers facilitate experiences that support the child's self-regulation and the construction of rules and values that guide children's behaviors (DeVries & Han, 2012; DeVries et al., 2002). The most important principle of constructivist learning environments is to create a sociomoral environment in which respect is valued and nurtured (DeVries, 2002). Teachers refrain from unnecessary external control, punishment, or praise that is excessive. Teachers consult with children about what happens in the classroom, focusing on the learning community which is the beginning of children understanding democratic principles (DeVries, 2002; DeVries et al, 2002).

The next section will look to how theory and practice connect in the context of constructivist teaching.

Developmentally Appropriate Practice (DAP): A Constructivist Framework for Teaching and Learning

An appropriate and comprehensive understanding of child development guides program planning and practice implementation. There is a prevailing set of ideas that is universally accepted as being seen as best practice (Horn, Karlin, Ramey, Aldridge, & Snyder, 2005). These practices are detailed in the National Association for the Education of Young Children's (NAEYC) book, *Developmentally Appropriate Practices (DAP)* (Copple & Bredekamp, 2009). Developmentally appropriate practice is rooted in the belief that practice is informed by teachers' understanding of age-referenced norms for growth and

development, a child's individual growth, and cultural practices (Copple & Bredekamp, 2009; Graue et al., 2017). Teachers use their understanding of the child, their developmental, and cultural context to make appropriate curriculum decisions. These understandings of development are as follows:

- Development occurs across multiple contexts and within diverse experiences.
- Development is holistic and interconnected.
- Development is facilitated when children engage with the physical world.
- Development is facilitated when children engage with the social world.

Standards-based accountability measures are in direct conflict with the pedagogy outlined in DAP (Graue et al., 2017). An understanding of development influences teaching young children. Standards based measures take the teacher's ability to engage in developmental teaching because the focus moves away from the discovery of knowledge to the acquisition of skills (Graue et al., 2017).

Contexts and Experiences in the Framework of Relationships

In order for teachers to engage in constructivist pedagogy, they need to understand that development is impacted by a variety of contexts and experiences. Bronfenbrenner's (1979) Ecological Systems Theory postulates complex relationships facilitate development. A child's development is affected by multiple levels that surround children and families by their interactions within a child's environment. This theory suggests that children are at the center of the ecological model and people and systems are determinants of development. For a child, each interaction and action within the environmental system, either directly or indirectly, has some developmental consequence (Bronfenbrenner, 1979). The environment is defined as a complex system that goes well beyond a child's family and immediate

environment (Bronfenbrenner, 1979; Berk, 2008; Crain, 2015). Bronfenbrenner (1979) believed that behavior evolved as a person engaged with the environment. As Piaget and Vygotsky posit in social constructivist theory, learning is facilitated in the context of relationships. Relationships in Bronfenbrenner's theory are bidirectional and have a high level of positive exchanges between members. Reciprocity is a vital aspect in positive development because "joint activity produces the most powerful developmental effects" (Bronfenbrenner, 1979, p. 57). As systems work together to support children's development, the more likely a child will be impacted positively.

Relationships provide the foundation of quality early childhood education programs. Teachers must understand the importance of positive interactions while cultivating relationships within many levels of the child's ecological system (Copple & Bredekamp, 2009; Phillips & Shonkoff, 2000; Shonkoff, 2017). Early childhood care and education teachers have an opportunity to support affirmative relationships between school and home systems (Sandall, Hemmeter, Smith, & McLean, 2005). Educators can do this by taking an active interest in children and their families while genuinely caring about children's success. It has long been identified that positive relationships are a predictor of school success (McIntyre, Eckert, Fiese, DiGennaro, & Wildenger, 2007).

When teachers recognize themselves as the authority on ECAE, relationships between home and school can be compromised (Gonzalez-Mena, 2001; Wilgus, 2005). Bidirectional relationships can be endangered when teachers do not view families as partners in the education process. Relationships suffer when teachers instruct parents as to how to teach their own children. It is imperative that early education teachers actively work to understand and support families. Education programs actively facilitate children's learning and promote

relationships that foster reciprocity between school and home environments (Gonzalez-Mena, 2001). Teachers are the key component for the successful facilitation of relationships between school and home.

For children's optimal development, activities and interactions with the environment need to be affirming and intentionally more complex (Bronfenbrenner, 2005). These interactions take the form of connections with people and objects in the environment and unfold in reciprocal interactions (Bronfenbrenner, 2005). As children develop, connections and interactions and connections become more complex and progress over time (Bronfenbrenner, 2005). Bronfenbrenner (2005) also theorized that positive interactions must occur on a regular basis over an extended period in order for children to develop appropriately. He called a child's interactions with the immediate environment "proximal processes" (Bronfenbrenner, 2005). Proximal processes are the primary drive for development and cannot be structured or maintained without relationships (Bronfenbrenner, 2005). Children's interactions with objects, symbols, and other people within the environment are determinants of development. Children and their environments merge with cultural and historical contexts to work together to determine development (Bronfenbrenner, 2005).

In ECAE environments, relational contexts closest to the child determine development and need to be positive and caring. In high quality learning environments, proximal processes give protection and security while facilitating the learning process. Being taught and cared for by a loving and invested teacher produces proximal processes that facilitate a personal and caring relationship. These types of relationships should be commonplace in the early care and childhood program (Shonkoff, 2017). Phillips &

Shonkoff (2000) highlight the importance of supportive and caring relationships in educational settings. Children learn best when relationships provide opportunities for discovery of new ideas and concepts as opposed to didactic instruction that emphasizes rote learning. Children learn greater social capability and strengthen problem-solving skills in the context of supportive and sincere interactions (Phillips & Shonkoff, 2000; Raver & Knitzer, 2002; Shonkoff, 2017). Children's development is enhanced when teachers have knowledge of child development and understand how to be intentional in the implementation of developmentally appropriate learning experiences. This development is further enhanced when children have caring interactions in the context of a relationship (Phillips & Shonkoff, 2000).

Bronfenbrenner's Ecological Theory (2005) highlights the importance of relationships in his notion that "somebody has to be crazy about that kid" and be concerned with the learning and development (p. 262). When children and teachers are in a partnership and develop relationships of reciprocity then a paradigm is created that nurtures children as they develop and learn more about the world around them (Brendtro, 2006). Bronfenbrenner (2005) says, "the family is the most humane, the most powerful, and by far the most economical system for making and keeping human beings human," but schools are important extensions of home and family (p. 262). Bronfenbrenner's theory (2005) theorizes that supportive and nurturing relationships are necessary for a child's optimal development. Schools have a responsibility to engage learners in supportive relationships. In educational environments, teachers and students are in relationships that are comparable to families (McIntyre et al., 2007). In Ecological Systems Theory, all of the systems around the child coalesce to support children's development. Early childhood care and education teachers

need to understand how systems converge to support development and facilitate positive relationships between systems around children. Best practice requires teachers to create deliberate strategies about teaching constructs and environmental influences. Teachers need to understand this idea while being advocates for practices and policies that support children's development across environments (Crain, 2015; Copple & Bredekamp, 2009; Shonkoff, 2017).

Development is holistic and interconnected. In order for early childhood teachers to plan constructivist programs and experiences, they are required to view development through a lens that encompasses the whole child. It is paramount that teachers understand all domains of development are interconnected and one cannot be supported without affecting another area (Copple & Bredekamp, 2009). Berk (2008) states developmental domains are not distinct, but are combined in a holistic and integrated manner. These domains of development converge to support children's growth and development. Each learning domain influences and is influenced by the others (Berk, 2008).

ECAE teachers must be cognizant of the interrelatedness of development (Copple & Bredekamp, 2009). Teachers who understand development, understand that children are architects of their own knowledge and understanding of the world around them (Copple & Bredekamp, 2009). It is important for teachers to understand characteristics of each child's development while integrating knowledge across multiple content areas, such as math, science, and reading (Copple & Bredekamp, 2009). Teachers intentionally create learning strategies and implement environments that support development across domains in order for children to develop at the optimal level. Through children's active engagement in provocations that are either child-guided or adult-guided, teachers facilitate and support the

learning that children need to be successful (Copple & Bredekamp, 2009). Through these interactions, children are supported in their growth and development.

Brain Development. Cognitive science and neuroscience have been at the forefront of research in helping educators gain a better understanding of how the brain works. Through the creation of synapses, a child's brain is wired for learning. According to Bransford, Brown, and Cocking (2000) as well as Phillips and Shonkoff (2000), learning changes the physical structure of the brain. During a child's first three years, it is estimated that over one thousand trillion synapses are created, accounting for over eighty-five percent of the brain's lifetime development (Bransford et al., 2000; Shonkoff, 2017). Every positive interaction within the environment supports the development of the brain (Bransford et al., 2000; Phillips & Shonkoff, 2000; Shonkoff, 2017). Children are born with the hardware, but need interactions for the cells to "forge the neurological networks that will become the foundation for thinking and reasoning, language, physical movement, and social and emotional behaviors" (Schiller, 2010, p.26). The majority of brain development happens during a child's first five years. ECAE programs are critical determinants of brain development (Bransford et al., 2000; Phillips & Shonkoff, 2000; Shonkoff, 2017).

Development is facilitated when children engage with the physical world. ECAE teachers learn how to create curricula in order to support children's development. Through exploration and manipulation of the environment in the context of play, children develop ideas and theories about how the world works. In an ECAE program there is a great deal of thought given to the physical environment and the children's ability to play and interact with materials (Copple & Bredekamp, 2009; Lindsay & Duvall, 2013). Constructivists see children serving as protagonists of their own learning (DeVries et al., 2002; Edwards, 2003).

Children's interests and engagement with the environment facilitates development. Learning environments that are influenced by a constructivist framework are child-centered (Chung & Walsh, 2000). Chung and Walsh (2000) state that child-centered environments support the innate developmental drive of children to actively explore and construct their own understandings of the world.

Environment as Teacher. For early education settings to support children's learning, teachers need to understand how to create and maintain environments that facilitate children's development. Early childhood teachers must be thoughtful in how they craft the learning space. Teachers need to understand the importance of teaching to enhance development and learning, creating a caring community of learners, and planning curriculum to achieve important goals (Copple & Bredekamp, 2009). Before children enter into a classroom, a thoughtful teacher needs to take great care in determining the physical layout of the space. Primarily, children need safe and healthy indoor and outdoor learning spaces (Epstein, 2014).

Effective teachers organize the physical space into interest areas or centers (Epstein, 2014). With learning centers in which children actively explore materials, they can explore different content areas such as math, language and literacy, science, and art while playing in learning centers. This requires teachers to understand the importance of providing children with a variety of materials that support open-ended learning and exploration. These materials support curriculum development. This type of room arrangement also supports children as decision makers by allowing them to choose what, where, with whom, and how they want to engage in exploration with the learning materials (Epstein, 2014). There is little expectation

that children sit in chairs at tables and complete pen and paper work. In fact, this type of learning and teaching is viewed as inappropriate (Copple & Bredekamp, 2009).

Development is facilitated when children engage with the social world. Children interact not only with adults in social contexts; they also learn social customs by interacting with other peers. They learn how to conduct and regulate their behavior in a social context situated in relationships. Children learn to manage impulses, self-regulation, and learn reciprocity in the context of relationships (Galinsky, 2010; Rubin, Bukowski & Parker, 1998). Best practice suggests teachers facilitate peer learning by bringing in a more skilled peer to help mentor children who need more information or support to solve a problem (Copple & Bredekamp, 2009). Children's development of social skills is enhanced when children become friends with other children because the relationships are more complicated and longitudinal than interacting with unfamiliar peers (Rubin et al., 1998). Social and emotional learning is an important part of a constructivist classroom. Classroom community means that all participants have an active responsibility to care for each other and for the learning environment (Copple & Bredekamp, 2009).

This section highlighted authors whose work has influenced ECAE programs as well as provided a curriculum framework that supports constructivist teaching. I will now turn my attention to a critique of constructivism.

Critique of Constructivism

There are critiques to the constructivist paradigm and its implications for teaching practice. One critique is the emphasis on culture, language, and relationships. Particularly important to note is the idea that if a learning culture is flawed, such as being hegemonic, racist, or patriarchal, these traits are easily transmitted among members (Crotty, 2015; Kroll

& Laboskey, 1996). In this paradigm, the prevalent culture is the one whose meaning making is most important. Knowledge is built upon a prior understanding; but if those understandings are fundamentally flawed, there can be no real discovery of truth because the truth has been distorted (Crotty, 2015). Some believe that constructivist classrooms become proving grounds for groupthink. In this paradigm, collaboration is so important that students may choose to go along with the greater consensus instead of engaging in dissent (Kroll & Laboskey, 1996). They may feel like an outsider if they share a differing opinion, which puts them at risk in terms of membership in the learning community (Kroll & Laboskey, 1996).

Another critique is that constructivism is for the white upper class and is elitist (Crotty, 2015; Kroll & Laboskey, 1996). Poor children, children of color, and children with disabilities do not have the same opportunities for experiences as their privileged peers. Constructivism advocates that experiences with the environment in a social setting is the primary mechanism for learning. If children do not have an experience-rich environment or a caregiver to act as a social mediator to help them understand concepts and conventions, they are at a disadvantage (Howe et al., 2012). Finally, another critique of constructivism is that, because there are few quantitative measures in constructivist classrooms, there is little accountability for teaching practice. Teachers may use the constructivist mantra to skirt their ability to monitor and assess their students' progress (Russell, 2011). In response to this criticism, constructivist teachers would argue that this type of teaching requires teachers to be more in tune with children and requires a higher level of interpersonal accountability. Because this type of teaching requires the facilitation of relationships, teachers know their students holistically and know how to scaffold learning in all areas of development (Howe et al., 2012).

Conclusion

The chapter has presented constructivism as an epistemology to address the issue of a “pushed down” curriculum in ECAE programs. I have given an overview of the history and origin of the paradigm as well as defined key principles and assumptions of constructivism in early childhood. Specifically, chapter one has addressed the curriculum framework and Developmentally Appropriate Practice. This chapter has discussed the implications of constructivism on teaching practice and critiques of this theoretical framework. I have presented my research context, and questions. In the next chapter, I will synthesize the literature regarding a “pushed down” curriculum and provide suggestions for future inquiry.

Chapter Two

“To learn and relearn together with the children is our line of work. We proceed in such a way that the children are not shaped by experience but are the ones who give shape to it.”

-Loris Malaguzzi in *The Hundred Languages of Children:
The Reggio Emilia Experience in Transformation*

Review of the Literature

Early care and education (ECAE) has changed drastically over the last twenty years (Haslip & Gullo, 2017; Hoffman, Paciga, & Teale, 2014; Graue, Ryan, Nocera, Nothery, & Wilinski, 2017). While there have been positive indicators of change, such as increased access for low income and minority children and a targeted focus on teacher education and training, there have been negative effects from the over emphasis of high stakes accountability measures (Haslip & Gullo, 2017). Many teachers report being asked to engage children in more academic learning at earlier stages in children's development (Anderson, 2010; Hoffman et al., 2014; Graue, et al., 2017). This trend has been felt in the early grades (K-2) of elementary school since the inception of the *No Child Left Behind* legislation (Bassok, Latham, & Rorem, 2016; Stipek, 2006). This pressure has trickled down into kindergarten and pre-K, and has led to a torrent of inappropriate expectations for children that suffocate meaningful and intrinsic learning (Bassok, Latham, & Rorem, 2016; Stipek, 2006). In the current climate, there is a hyper-focus placed on helping young children demonstrate tangible and testable evidence of skill achievement, especially math and literacy learning (Anderson, 2010; Genishi & Dyson, 2014; Stipek, & Gullo, 2017; Wohlwend, 2018). With this focus, there has been a minimization of developmentally appropriate play and an increase of direct instruction that serves as the teaching method to prepare for the

onslaught of standardization (Christakis, 2016; Nicolopoulou, 2010). Miller and Almon (2009) say,

Policy makers are overlooking the ample evidence that young children learn best in settings rich with human relationships, imaginative play, and playful learning, where children participate in choosing their activities and teachers help them build on their experiences- not following the rigid curricula designed to increase scores (p.17).

This chapter will examine the current literature regarding pressures faced by the field of early education to abandon learning through play based inquiry and investigation. This paper will argue that teachers are being pressured to abandon developmentally appropriate and constructivist pedagogy in favor of didactic and behaviorist teaching. It will argue early education programs are being forced to move from democratic incubators to neoliberalism strongholds. While standards are not necessarily mechanisms that inhibit children's learning, they can help support children's growth and development, it is how the standards are employed. In the current climate, early childhood standards are being used as an accountability measure to assess skill level and academic content (Graue et al., 2017). The focus has shifted from constructing knowledge with children and families to preparing for standardized measures that quantify children and teachers' efficacy (Graue et al., 2017; Haslip & Gullo, 2017; Sims, 2017).

Traditionally, ECAE programs are based in the *Developmentally Appropriate Practice (DAP)* framework where constructivism is the prevalent pedagogy (Copple & Bredekamp; Christakis, 2016; Graue et al., 2017). This paper discussed this framework in the first chapter. In a developmentally appropriate context, children learn through exploration by the mechanism of play and is based in social constructivism through the facilitation of relationships. Historically in early education settings, a rich play based curriculum that

facilitates children's investigation of the world around them is the normative framework (Graue et al., 2017; Haslip & Gullo, 2017; Sims, 2017). In this paradigm, teachers act as facilitators and learn with children (Copple & Bredekamp, 2009; Graue et al., 2017).

Research regarding preservice early education teacher preparation programs and how they are being affected by this didactic paradigm will be discussed. Higher education programs are also feeling the "push down" of curriculum. There is a tension about how to teach college students (Knoll, 2005). Programs are torn between teaching best practice or teaching students how to cope with the realities of ECAE today. A review of the literature regarding the early childhood programs of Reggio Emilia, Italy will be provided. These programs are acknowledged as exemplars for the implementation of constructivist pedagogy through the process of pedagogical documentation, project work, and reflective practice (Heckman, Biroli, Bel Bocka, Heckman, Koh, Kuperman, Moktan, Pronzato, & Ziff, 2017).

This paper will argue that the accountability climate has changed teachers' day to day practice and how children are being affected by a more instructivist, didactic pedagogy.

The "Pushed Down" Curriculum in Kindergarten and Pre-K

Kindergarten and pre-K programs have been changed by the creation of legislative mandates that focus on academic accountability. Standards based accountability measures are pervasive in classrooms in US public schools through the implementation of the *Common Core Standards*. The *Common Core* is a means to implement a shared set of standards across all states and was developed because of the *No Child Left Behind (NCLB)* legislation of the Bush Administration (Christakis, 2016; Graue et al., 2017; Hoffman et al., 2014). While *NCLB* does not require end of grade testing until the third grade, there is research that suggests accountability measures have changed the pedagogy of early education programs

(Bassok, et al., 2016; Graue, 2009; Russell, 2011; Russell, 2007). This means children are engaging with more content that is academic at early ages to be more “prepared” for the testing that determines retention or promotion (Bassok & Reardon, 2013). Some families are choosing to delay entrance to kindergarten in order to give children more time to be prepared for the academic challenges of school (Bassok & Reardon, 2013). This section of the literature review will focus on how curriculum and instruction has changed the daily life of teachers and children in early education settings.

Kindergarten

Traditionally, kindergarten classrooms have been places where children had their first experience in the public school setting (Bassok, et al., 2016; Graue, 2009). It was common for kindergarten classrooms to be “child-centered,” meaning there were learning centers for children to engage in block play, easel painting, dramatic play, and puzzle play (Haslip & Gullo, 2017; Graue, et al, 2017). Learning was believed to happen through the context of play while children engaged in their natural sensibilities to explore and be curious about the world around them (Christakis, 2016; Haslip & Gullo, 2017). Children had autonomy to engage in the democratic process to make learning decisions for themselves. The goal of kindergarten was to focus on social awareness, regulation of emotions, and being in a group setting where another’s needs were as important as your own (Coppole & Bredekamp, 2009; Cuffaro, 1995; Dewey, 1905; Haslip & Gullo, 2017). This narrative is almost non-existent in most public school kindergarten classrooms (Bassok et al., 2016; Woodson, 2017).

Research has identified constraints for teachers in the implementation of constructivist, developmentally appropriate learning programs (Bassok et al., 2016; Brashie & Norris, 2008). Teachers report state curriculum and standards requirements are so rigid

that they feel little freedom to allow children to investigate and explore the environment for fear that children will not meet curriculum goals and promotion standards (Anderson, 2010; Brashier & Norris, 2008). A paradigm shift is evident in many early learning environments where school policy requires that teachers focus on test-driven curricula instead of the development of the whole child (Anderson, 2010; Brashier & Norris, 2008). Teachers reported that kindergarten children are thought to be too old to play. Play was seen to have no educational value and frivolous by the school community when working to meet curriculum goals. Teachers in this study reported that they felt pressure to “teach” concepts and foundational skills through pencil and paper tasks instead of play-based activities. Many educators may view play as a waste of time and see no educational benefit in embedding academic skills in play (Anderson, 2010; Bassok, et al., 2016; Brashier & Norris, 2008; Graue, 2009).

Bassok et al. (2016) completed a national longitudinal study investigating the difference in kindergarten practice from 1998 to 2010. This study is important to highlight in this literature review because longitudinal studies of this type are not prevalent in the literature. The authors studied five dimensions of kindergarten: teacher beliefs, curricular coverage, classroom setup, didactic instruction, and assessment (Bassok et al., 2016). In terms of teachers’ beliefs about learning to read in kindergarten, researchers found an increase of 31% to 80% of teachers agreed that kindergarten was where children learned to read over the course of their study (Bassok et al., 2016). Teachers in this study also indicated that academic skills were important for school readiness. Many teachers believe children should know colors, shapes, the alphabet, and how to hold a pencil, before they begin the kindergarten year (Bassok et al., 2016). Teachers in this study also indicated a thirty percent

increase in the belief that “children who begin formal reading and math instruction in preschool will do better in elementary school.” (Bassok et al., 2016, p.6). This is in direct contrast with *DAP*. In years past, most standards acknowledged that formal instruction did not happen until the end of the kindergarten year (Copple & Bredekamp, 2009).

For curricular coverage, math and literacy learning dominated the way children spent the days in the kindergarten classroom (Bassok et al., 2016). Exposure to dance, creative movement, theater experiences, and, surprisingly, science were not a part of the daily curriculum. Instead, these experiences were offered weekly or never (Bassok et al., 2016). In terms of didactic instruction, children were given less time to engage in child-selected activities. One hour per day was the norm in 2010 as opposed to three hours a day in 1998 (Bassok et al., 2016). Teachers in the study reported an increase in the use of worksheets, textbooks, and workbooks as the primary mode of instruction (Bassok et al., 2016). The study indicated a fifty percent increase in the use of didactic teaching methods for math and language learning that engaged children in rote memorization of skills that are measured through testable tasks (Bassok et al., 2016). Classroom setup changed as children were completing more seat work at tables instead of exploring and manipulating materials in the context of learning centers (Bassok et al., 2016).

In terms of assessment, there is a significant use of standardized testing in early elementary classrooms. Thirty percent of teachers in the 2010 cohort indicated using standardized tests monthly. This was 2.6 times higher than what teachers reported in 1998 (Bassok et al., 2016). Overwhelmingly, the study produced a twenty percent increase in teachers’ view of children in terms of academic performance. Teachers in the study “consider children’s performance relative to state or local standards very important or essential” (p.14)

to their everyday work in the classroom. The authors of this study concluded that a deeper understanding of the impetus for these changes is critical. In the current climate, kindergarten *is* the new first grade (Bassok et al., 2016; Christakis, 2016). Because of the “push down” of curriculum in kindergarten, there are implications for pre-K classrooms and teacher practice.

Pre- K

In the past twenty years, there has been a push to have four-year olds in the public school. Most states do not have universal pre-K, but states can receive federal monies to implement programs and most of the classrooms are placed in public school settings to serve children who are at risk for school failure. The prevailing notion was that providing low income and minority children with quality early education programming would make them more school ready (Bishop-Josef & Zigler, 201; Phillips, Mekos, Scarr, McCartney, Abbott-Shim, 2000). In response to *No Child Left Behind*, the Bush Administration created the *Good Start Grow Smart* initiative that required states to develop early learning standards for preschool programs serving children ages three to five. States that created learning standards were eligible to receive funds from the federal government for the creation of public school pre-K classrooms to serve children who were at risk (Christakis, 2016; Haslip & Gullo, 2017; Stipek, 2006). The Obama administration continued the commitment to funding early education programming through the *American Recovery and Reinvestment Act* and the *Every Student Succeeds Act* (Haslip & Gullo, 2017; Stipek, 2006).

Since the inception of this legislation there has been a pendulum swing in favor of abandoning play based learning and foregoing attention to social and emotional development (Bishop-Josef & Zigler, 201; Graue, et al., 2017). Time in pre-K classrooms is devoted to seat work where children engage in rote learning of concepts; however from a developmental

perspective children cannot sit for long periods of time nor do they have the fine motor control to complete copious amounts of worksheets (Copple & Bredekamp, 2009; Christakis, 2016). One pre-K teacher said, “We’re not ready to write ‘9’ yet. Let’s figure out what 9 is. It’s just not developmentally appropriate yet” (Graue et al., 2017). As Graue et al. (2017) so eloquently state, “The momentum that propels K-12 accountability is currently stronger than developmental logic” (p.120).

Lipsey, Farran, & Hofer, (2016) completed efficacy research on Tennessee’s voluntary pre-K program. They found that children who attended pre-K were more likely to score higher on an assessment measure that predicted “school readiness” than their non-preschool peers; However, by first grade their attitudes about school and learning were declining (Lipsey et al., 2016). By second grade, it was even more dismal. Children performed worse on assessment measures testing literacy and math skills, the areas to which they had been given more formal instruction than their peers who did not attend pre-K (Lipsey et al., 2016). The Tennessee study attributed this decline in scores and school attitudes to weak pedagogy. Most likely children experienced the same seat work assignments consistently throughout their schooling and it had affected their attitudes about school and learning (Lipsey, et al., 2016).

Graue et al. (2017) studied pre-K programs in Wisconsin and New Jersey to determine the effects of the accountability movement on early childhood programming. Teachers in the Graue study overwhelmingly felt the “push down” of academics to be pervasive in their school districts. While both states had made a commitment to offer a developmentally appropriate curriculum, there was pressure from school district offices to ramp up academic expectations. A superintendent said,

We can't afford for kindergarten to be colors and counting to ten and memorizing ABC's. It has to be reading readiness. It has to be math-concept ready-they need to be ready to go. The social piece of sitting and crying in the corner for the first week of school- we haven't got a week to lose!

One participant in the Graue study joked that soon there would be funding for pre-pre-K programs so children would be prepared for pre-K. Teachers in early education programs are constantly aware that they need to be concerned about the next grade, meaning today's pre-K is meant to prepare children for kindergarten, kindergarten for first grade and so on (Brown, 2009; Haslip & Gullo, 2017; Christakis, 2016).

Pre-service Teacher Education Programs

In a climate in which accountability is at the forefront of policy decisions and curriculum practice, it is implied that pre-service teacher education programs are preparing students to enter the classroom ready to teach and be assessed for their ability to help children meet the standards (Darling-Hammond & Baratz-Snowden, 2007). Teacher preparation programs play an essential role in helping college students discover their values, beliefs, and attitudes about teaching and learning (Darling-Hammond & Baratz-Snowden, 2007; Isikoglu, 2007). The question most early education preservice programs are asking themselves is how to do this (Isikoglu, 2007). Most people have an oversimplified view of teaching (Knoll, 2005). Many believe that teaching is giving children knowledge by transmitting information. Children are vessels that need to be filled and the only thing required of teachers is that they know the subject matter they are imparting to their students (Darling-Hammond & Baratz-Snowden, 2007).

For some, an understanding of child development or individual needs is not necessary to be a successful teacher. This is not the case in ECAE classrooms. ECAE

teachers need to understand that (a) development occurs across multiple contexts and within diverse experiences, (b) development is holistic and interconnected, (c) development is facilitated when children engage with the physical world, and (d) development is facilitated when children engage with the social world. Social constructivist frameworks acknowledge and embrace these ideas and are accepted and valued as developmentally appropriate in early education classrooms (Isikoglu, 2007).

From Democracy to Neoliberalism

Early education programs have been places where children learn to think critically about their actions and gain a sense of community (Cuffaro, 1995; Dewey, 1938; Howe et al., 2011). Democratic teaching has long been accepted as developmentally appropriate practice because teachers meet children's individual needs, learn with children, and are cognizant of the classroom community (Atkinson, 2017; Currafo, 1995; Katz et al., 2014). Curriculum is based on children's interests, their ideas, and their strengths. It may be tailored to meet individual children's needs while recognizing that children go through development in predictable patterns, but in their own time (Katz et al., 2014). Dewey (1916) believed schools had the responsibility to engage children in the democratic process. He also believed schools were proving grounds for civic engagement to understand democratic concepts, such as social justice and anti-discrimination (Currafo, 1995; Dewey, 1905). Dewey (1916) believed that the goal of the educative process was not merely to further the status quo, but a means to advocate for children as active participants in the democratic process. All children have equal opportunities to participate and be active determinants in the learning process (Baltodano, 2012; Sims, 2017). Teachers work to gain an understanding of children and their learning process (Brown, 2009). Through the ideal of democracy, there is a creation of

community while supporting and celebrating the differences that exists among people (Currafo, 1995).

Dewey (1916) says

A democracy is more than a form of government; it is primarily a mode of associated living, of conjoint communicated experiences. The extension in space of the number of individuals who participate in an interest so that each has to refer his own action to that of others, and to consider the actions of others to give point and direction to his own, is equivalent to breaking down those barriers of class, race, and national territory which kept men from perceiving the full import of their activity (p.93).

ECAE teachers have to be proponents of democratic teaching while being reflective and engage in critical thinking as they learn with children (Sims, 2017). Teachers can help build an appropriate democratic foundation with young children that will facilitate the creation of citizenship and support “the fundamental principles of justice and freedom that lie at the heart of a robust democracy” (Giroux, 2015. p.12). A robust democracy, has at its heart, the understanding that all people, even children have rights and those rights have to be considered in the educational programming (Sims, 2017).

In direct opposition to democracy is neoliberalism. Neoliberalism is defined as, “an anti-democratic force that gives the corporate elite of global capitalism power of nation states” (Abendroth & Portfilio, 2015, p.7). In a neoliberal environment, the goal of education is to create a product for potential employers (Abendroth & Portfilio, 2015; Baltodono, 2012; Davies & Bansel, 2007;Sims, 2017). This is solidly grounded in capitalism. For profits to be maximized, employers want employees who do what they are told, do it well, do it efficiently, and do not ask questions (Abendroth & Portfilio, 2015; Pucci, 2015; Sims, 2017). In neoliberalism, the purpose of education is to create students who are workforce ready and members who value the economy over democratic principles such as social justice and

equality (Abendroth & Portfilio, 2015; Baltodono, 2012; Pucci, 2015; Sims, 2017). An environment that places a high value on neoliberalism seeks to curb democratic ideas and critical thinking (Atkinson, 2017).

In the current climate of standardization and end of grade testing, children's rights to determine their own course study has been replaced by common standards. Teachers are pressured to move children through the same content at the same time, and in doing so are not able to take into account children's individualized learning needs (Brown, 2009). Morris (2016) states through the process of standardized testing education is creating a way to homogenize learning. Brown (2009) interviewed a teacher who said, "The state's tests impact the curriculum, the planning, everything, and I mean everything. They always talk about it. The students know it is coming up. Everything is about developing strategy for taking a test" (p.427)

A neoliberal agenda takes away teachers' ability to make decisions regarding curriculum and instruction for individualized learning and in doing so, de-professionalizes the field (Sims, Forrest, Semann, & Slattery, 2015). Teachers have only to follow a prescribed curriculum and move children through the course work. They are successful when their students score well on standardized assessment measures (Buettner et al., 2015; Brown, 2009; Sims et al., 2015). Teaching for tests and rote learning squashes critical and freethinking skills while supporting the notion that the goal of education is to become citizens who do not question authority or policy (Atkinson, 2017; Baltodano, 2012).

One way that early education higher education programs can push back against the "push down" of academics is to teach students how to engage in high quality constructivist practice. Teacher preparation programs must not be afraid to tackle the philosophical,

theoretical and sociopolitical contexts that situate themselves in the educative process (Atkinson, 2017). Higher Education programs need to support pre-service teachers as they become advocates and engage in activism to support democratic practice (Atkinson, 2017). In doing so, we are engaging in democratic practice by resisting neoliberalism policy (Sims, 2017). Instead of dealing with the current climate, Higher Education Institutions can actively resist it (Atkinson, 2017). Sims (2017) says, “coping is not sufficient: we have an obligation to engage more actively in resistance” (p.5).

In the current climate, a great deal of emphasis is placed on didactic instruction and the technical aspects of teaching. Teacher education programs can embed social constructivist pedagogies in course work. They can teach preservice teachers how to reflect upon their practice, ask difficult questions of themselves and children, and engage children in the creation of novel ideas (Buettner et al., 2016; Brown, 2009; Sims, 2017). They can teach students about constructivist models like New Zealand’s Te Whariki or Reggio Emilia as catalysts for change. Reggio Emilia ECAE programs are firmly grounded in democratic practice.

Reggio Emilia: Public Education to Eradicate Fascism. The ECAE programs of Reggio Emilia were created in an effort to bring social reform to a society in transition after war. The creation of early education programming in Reggio Emilia was in response to the fascist regime that had almost decimated the country (Buettner, et al., 2017; Lassari, 2012; Edwards, Gandini, & Foreman, 1998). This approach was born after WWII when Italy was rebuilding social and economic structures. The town of Reggio Emilia recognized the need for support systems for children and families in order to promote social change (Edwards, Gandini, & Foreman, 2011). At the very heart of Reggio Emilia’s inception was strife

between the prominent political parties of the time. Communists, socialists, and the fascist regime were all seeking to gain power while promoting social programs (Lindsay, 2015; Edwards, et al. 2011). Women's groups, educators, and workers advocated for policy reforms that supported access to ECAE (Lassari, 2012). These groups made a plea for democratic school systems (Lindsay, 2015; Edwards, et al. 2011). The goal of these oppressed community members was to support social reform through the creation of high quality early education programs (Lassari, 2012). Throughout its history and currently, the early education programs of Reggio Emilia have focused on equity and access, as well as the notion of democratic principles. Simply, children and families are helping build a democratic society through the educative process. They believe children have democratic rights as citizens and high quality programs will strengthen community partnerships and democratic participation (Lindsay, 2015). From infancy, children are seen as active members and participants in the democratic process (Hewett, 2001). The democratic process requires that children, families, schools, and communities be partners in the educative experience. There is a level of reciprocity between all systems to support children, but too the advocacy of the democratic principle (Gardner, 2012).

In the beginning, the programs were staffed by parents and volunteers. In 1963, Loris Malaguzzi created the first municipality funded and administered early education schools (Edwards et al., 1998; Hall, Cunneen, Horgan, Cunningham, Murphy, & Ridgway, 2014). In 1973, infant and toddler centers were added to the municipality. Malaguzzi directed these programs for many years and helped move Reggio Emilia early learning programs into the global spotlight (Edwards et al., 1998).

Loris Malaguzzi. Loris Malaguzzi is globally recognized as the most influential

administrator and advocate of the Reggio Emilia framework. Malaguzzi is seen as a revolutionary educator in Italy and has been hailed as one of the most influential early childhood educators in the world. He sought to make connections between theory and practice (Edwards, et al., 2011; Lindsay, 2015). Malaguzzi lived through WWII and saw the rebuilding of the social society in Italy. He was a primary school teacher who was trained in pedagogy before coming to work in the municipal preschools (Edwards et al., 1998). He developed the idea of the *Hundred Languages of Children*, which advocates that through their competence, and capability children can express themselves in many different ways (Edwards et al., 1998; Hall et al., 2014). This philosophy gives children a means to express their thoughts and ideas about how the world works. Malaguzzi was able to build Reggio Emilia preschools into a program that brought children, families, and the community together. In doing so, they created a medium for democratic education. Through this effort, these programs were able to meet the socially minded mission that they had been founded upon after WWII. In an interview with Lella Gandini Malaguzzi said,

The first philosophy learned from these extraordinary events, in the wake of such a war, was to give humans dignified, *civil* meaning to existence, to be able to make choices with clarity of mind and purpose and to yearn for the future of mankind. But the same events granted us something else right away to which we have tried to remain faithful. This something came out of requests made by mothers and fathers, whose lives and concerns were focused upon their children (Edwards et al., 1998, p.50).

Malaguzzi recognized the importance of community working together to support children and families in educational systems (Malaguzzi, 1993). From this idea came the idea that knowledge is a social construction that happens in the context of shared lives and experiences (Edwards et al., 1998). Reggio Emilia is firmly planted in constructivist pedagogy. In this teaching paradigm, educators view children as competent and capable as well as active

members of a democratic community (Edwards et al., 1998; Gandini, 2005). The ECAE programs of Reggio Emilia were created in response to fascism in order to promote democracy. Reggio Emilia implements an ECAE program that is firmly rooted in constructivism.

Constructivist Pedagogy in Practice. Most commonly recognized as best practice in early learning programs and hailed as exemplar in social constructivist pedagogy are the ECAE programs of Reggio Emilia (Buettner, et al., 2017; Gardner, 2012; Hewett, 2001). Reggio Emilia early education programs are informed by the idea that children construct their own understanding of the world around them, but do so in the context of relationships. Reggio Emilia inspired programs hold the belief that children are born as competent and capable learners and have an intrinsic motivation to discover ideas and knowledge. Play and children's exploration is the primary mechanism for learning. They also believe the role of teacher is to serve as a co-learner and co-constructor of knowledge (Edwards, 2012; Mardell & Carbonna, 2013). DeVries (2002) says constructivist early education supports children's natural dispositions of discovery and investigation through the medium of play (DeVries, 2002; DeVries & Zan, 2012). Play is the work of children (Copple & Bredekamp, 2009; DeVries, et al., 2002). Teachers engage children in the study of phenomena in the world around them and foster cooperation between all members of the community through the work of play (DeVries, 2002). Reggio Emilia practitioners act as facilitators and build curriculum on children's interests. The work children complete in the learning environment serves the primary means to assess children's understanding of content and the structure of knowledge (DeVries, 2002). This means children's understanding of content knowledge, such as properties of objects and the structure of knowledge, such as understanding the relationship

between objects can be assessed in the context of work or play they are engaged in (DeVries, 2002).

Another facet of social constructivist theory is the belief that children cannot be in an authoritarian relationship with an adult if they are to develop intellectually autonomously. Social constructivists hold the belief that for children to develop to their intellectual potential, children and adults must have a cooperative relationship (DeVries, 2002). In order to encourage the child's development, teachers facilitate experiences that support the child's self-regulation and the construction of rules and values that guide children's behaviors (DeVries, 2002; DeVries et al., 2002). The most important principle represented in constructivist learning environments "is to create sociomoral atmospheres in which mutual respect is continually practiced" (DeVries, 2002, p. 5). Teachers refrain from unnecessary external control, punishment, or praise that is excessive. Teachers consult with children about what happens in the classroom focusing on the classroom community, which is the beginning of children's understanding democratic principles (DeVries, 2002; Fosnot, 2013; DeVries et al., 2002).

The programs of Reggio Emilia, Italy serve as a model of constructivist education that is advocated for by constructivists. Reggio Emilia early education programs have embraced curriculum and research based on children's interests and ideas. They too, have seen children as equal partners in education. The reciprocal relationships between families, schools, and the community, children are supported in their intrinsic efforts to construct knowledge about the world around them. Relationships are at the heart of the Reggio Emilia curriculum framework (Rinaldi, 2006).

Pedagogical Documentation and Reflection. The conception of pedagogical documentation has been made more prevalent across the world by the research and documentation created by the early learning programs of Reggio Emilia (Edwards et al., 1998). In the Reggio Emilia curriculum framework, children are viewed as, “active and competent protagonists who seek completion through dialogue and interaction with others in a collective life of community, classroom, and culture, with teachers serving as guides” (Edwards et al., 1998, p.52). Pedagogical documentation serves as a record of the construction of knowledge as well as means to assess children’s comprehension of content knowledge and the structure of knowledge. Documentation is a tangible artifact of the construction of knowledge taking place in early learning environments that supports reflection on learning by children and teachers.

Children are encouraged to reflect upon their learning and represent their ideas in many different mediums, such as paint, clay, storytelling, or block building (Cavallini, Filippini, Vecchi, Trancossi, 2011; Cooper, 2012; Edwards et al., 1998). Through the process of pedagogical documentation, teachers capture children’s learning then revisit individually and then reflect upon the interactions in order to plan and build curriculum experiences. This process makes the learning of children visible and is captured in pedagogical documentation (Project Zero, 2003). This view of children is not a novel idea, and has a history in America in the progressive schools of the early twentieth century (Edwards et al., 1998). However, the schools of Reggio Emilia have made a focused effort to make children’s competence and capability prominent through child centered curriculum and teacher research. Reggio Emilia schools show children’s competence and capability by engaging in a method of teacher research that is pedagogical documentation. Project work is the child centered emergent

curriculum that drives the Reggio Emilia framework.

Project Work (Progettazione). The primary means of curriculum in Reggio Emilia is project work or *Progettazione* (Edwards et al., 2012). Knoll (1997) argues that project work is not a new idea and can be traced to European education programs in the 1500's, but Reggio Emilia had made this type of curriculum work in early education settings more prevalent. Reggio Emilia gives a method for early educators as they engage children in meaningful and in-depth curriculum work that is based upon children's need to actively develop their understanding of the world around them (Edwards et al., 1998; Katz, Chard, & Kogan 2014).

Katz et al. (2014) characterize the prominent feature of a project as “an investigation—a piece of research that involves children seeking information to questions they have formulated by themselves or in cooperation with their teacher and that arises as the investigation proceeds”(p.3). The primary mechanism for learning in project work is children's natural disposition to explore and learn about the world around them through active engagement with materials, ideas, and people in their environment. Through research processes and active learning procedures, children seek answers to questions they have formulated while working in cooperation with teachers and peers. A topic is investigated either in small or large groups or can be investigated by an individual child.

In this curriculum paradigm, it is necessary for teachers to understand and recognize the fact that children construct their own understandings and the role of the teacher is to help children research and facilitate learning (Katz et al., 2014). The idea that children construct their own understanding of the world is congruent with the constructivist belief that development is an active construction process, not a process that is governed by maturation

or external teaching. In the process of project work, teachers act as facilitators for children's learning (Chard, Kogan, Castillo, 2017; Edwards et al., 1998; Katz, 1996). Teachers are to help children deepen their understandings and help children clear up any misunderstandings they have about a subject (Katz et al., 2014). Teachers are viewed as learners and play an integral role in influencing children's curiosity about a project they are investigating (Chard, 1998a; Chard, 1998b; Katz et al., 2014).

Teachers are to act in a guide or consultant's role instead of a director of learning. Teachers should listen to children theories and ideas, observe children in their play and ask questions that incite thought, reflect with children, and provoke learning (Chard et al, 2017). Teachers should use open-ended questions that allow children to discover new theories or ideas and answers to questions for themselves (Chard, 1998). Teachers invite children to share what they already know and understand about a subject into a learning relationship in which they want children to have a deeper understanding of the subject (Katz et al., 2014). Chard et al, (2017) states that teachers can make suggestions for children's consideration in project work and work to redirect children who may seem to be losing interest in the project. The teacher's role is to inspire children to be engaged in learning and discovery in the context of the children's interests and ideas.

The Atelier & Hundred Languages of Children. The programs of Reggio Emilia teach the importance of giving children opportunities to express themselves through the idea of the *Hundred Languages of Children* (Edwards et al., 2011). Educators in Reggio Emilia believe that children have a right and the ability (even as infants) to express their ideas, thoughts, theories, and emotions (Gandini, 2005; 2012). Children do this through the application of their "language" to create representations about the way the world works.

Reggio advocates that children have opportunities to engage in learning that supports and defines their capability and competence.

With an *atelier* or art studio, children create and share their ideas and theories by the employment of representation with many types of mediums. Central to the Reggio educational practices is the art studio or the *atelier* (Vecchi, 2010). The teacher in the art space is called an *Atelierista*. The atelier is a community space and acts as a place where children can represent their ideas about the world. Children represent their theories and ideas through the manipulation of clay, drawing, wirework, block building, music creation, or storytelling. Reggio programs are designed to engage children's aesthetic and art sensibilities in order to learn about the world around them (Gandini, 2005). Through the creation of art and representation of their ideas they are engaging in the democratic process (Edwards et al., 1998; Gandini, 2005).

This section of the literature review has given an overview of the programs of Reggio Emilia and how constructivism is prevalent in their teaching practice. This paper will now turn its attention to contradictory research regarding constructivism and Reggio Emilia.

Reggio Emilia and Positive Outcomes

Reggio Emilia ECAE programs are recognized as the gold standard in terms of constructivist, play-based, and developmentally appropriate practice (Biroli et al., 2017; Christakis, 2016; Copple & Bredekamp, 2009; Heckman et al., 2017). The current body of research suggests there have been few qualitative studies to determine if Reggio Emilia's constructivist approach is effective for long-term child outcomes.

Heckman et al. (2017) completed research that compared Reggio Emilia ECAE programs with other regional programs in Italy. They measured child outcomes for cohorts of

children enrolled in ECAE programs in Northern Italy. Researchers surveyed people who attended ECAE programs in Reggio Emilia, Parma, and Padova. These programs ranged in influences from the Reggio or municipal approach, to religious sponsored, and state funded programs. In 2012, researchers collected data from five cohorts of people ages 6, 18, 30, 40, and 50 who attended these programs and others who did not attend an organized ECAE program in order to investigate outcomes such as IQ, employment viability, volunteer behaviors, participation in political activity, obesity, and marriage success (Heckman et al., 2017).

Heckman et al, (2017) found no statistically significant differences between ECAE approaches in terms of participant outcomes. The biggest predictor of positive outcomes was participation in an organized ECAE program, not specifically Reggio Emilia programs. There was no difference in outcomes between the participants in the research cities or the type of program they attended as a child except for political activity. Notably, participants who were in Reggio Emilia programs were more likely to vote and be politically active than their peers in Parma or Padova (Heckman et al., 2017). Researchers believed this was due in part to the focus on democracy and community engagement in Reggio Emilia programs. Participants who engaged in any ECAE program were more likely to demonstrate positive outcomes as opposed to their survey peers who did not attend an organized ECAE program (Heckman et al., 2017). Researchers in the study posited that some type of ECAE intervention was better than no intervention at all. This research has limitations due to its survey methodology as well as the focus on data collection in Northern Italy. More research should be conducted to ascertain if programs in Northern Italy are constructivist in nature. It would be important to determine specific curriculum differences between programs to see

they are more alike or different in terms of pedagogy.

Johnson (2000) asserts that Reggio Emilia has become an ECAE discourse that is firmly grounded in cargo cult theory. Many early educators look to Reggio Emilia as the panacea for the ills that plague ECAE. The teaching populace has identified and worshiped a discourse that is culturally normative and bound in a community context (Johnson, 2000). Reggio Emilia is seen as an exotic and novel way to fix the educational world's woes, when in fact, many of their practices have been a normative part of teacher education for years (Johnson, 2000). If that is the case and the practices that Reggio makes so visible are truly part of the teaching paradigm, then why has there been such a dramatic shift in the way classrooms look. The answer could be found in the neoliberalism practices that were discussed earlier in this paper. If the accountability focus remains the prevalent method for determining success, then a reformation must occur (Anderson, 2010; Bassok, et al., 2016; Brashier & Norris, 2008; Graue, 2009).

There is a body of research that supports constructivist pedagogies in the ECAE program as a form of reformation in school settings. Kaufman, Kaufman, and Nelson (2015) argue constructivist pedagogies, specifically those represented in the programs of Reggio Emilia, as a way to transform the current educational system in the US. They argue that constructivist programs provide foundational dispositions that children need to be critical thinkers as they move through their education. They cite specifically the ability to engage in in-depth learning over an extended period of time, an ability to gather research and synthesize information, the ability to think creatively, the ability to make decisions with a consideration of others, and the ability to be respectful of diversity (Kaufman et al., 2015). It is important to consider children's hearts in the educational process (Copple & Bredekamp,

2009; Kaufman et al., 2015; Kohn, 2009). When children engage in didactic learning experiences, the focus on relationships is diminished. All children have a right to an education in which they are valued as equal members of a community and supported to engage with the world (Ryan, 2006). Ryan (2006) contends that all children, but specially marginalized populations such as children who are poor, have a disability, and who are minorities have a constitutional right to ECAE programs that can promote social change. The goal of Reggio Emilia is to promote social change (Edwards et al., 2011).

Kohn (2009) supports the assertion that relationships with adults, peers, and the larger community provide the building blocks for brain development. Research on brain development and cognitive psychology support the notion that children are hardwired to seek out relationships that support the development of mental and cognitive processes (Perry & Szalavitz, 2010; Phillips & Shonkoff, 2000; Ramachandran, 2012). If schools were concerned about the facilitation of relationships, then there would be more of a focus on authentic assessment (McMullen, Elicker, Goetze, Goetze, Huang, Lee, Mathers, Wen & Yang, 2006). This type of assessment supports children's natural disposition to learn and make sense of the world around them. Relationships that support children's natural dispositions to learn about the world around them are sacrificed in high stakes testing, didactic, and neoliberalism environments (Anderson, 2010; Atkinson, 2017; Kaufmann et al., 2015).

Critique of Current Body of Literature

At present, there are few studies that provide longitudinal quantitative statistics regarding the impact of the accountability movement on ECAE classrooms. The studies mentioned in this literature review provide a clear quantitative measure of teacher attitudes

about teaching and what is deemed important by society and learning institutions. In the research there is little information regarding the impact Neoliberalism has on children's attitudes regarding school and learning. There is little research to help scholars understand how children's hearts and attitudes are affected by the current state of schooling.

There is little in the research that seeks to clear erroneous misunderstandings regarding the importance of play-based and child centered learning environments. This is a political topic and is seen by some developmental psychologists and educators as a means to promote a hands off approach to teaching. It would be important for the research to reaffirm the importance of play based, child directed ECAE programs. The field, in general, needs to remain steadfast in its advocacy for developmentally appropriate teaching and learning that are congruent with constructivist teaching pedagogies. As mentioned in the first chapter in this paper, a developmental perspective of ECAE understands the importance of constructivist pedagogies in children's meaningful and successful learning (Copple & Bredekamp; Gensishi & Dyson, 2014; Graue et al., 2017; Katz, 1996).

The current body of literature is not seeking to advocate for social change in terms of the agenda that neoliberalism seeks to further. Neoliberalism in ECAE settings is real and is the monster under the bed. ECAE teachers know it is there but cannot name it or understand the implications this ideology has on how the field views children in the educational process. It has direct implications for teachers' daily interactions with children and families (Anderson, 2010). While the "push down" is real, the literature does little to help teachers understand why this change has happened or how deep it is rooted in the current educational paradigm.

Conclusion

It is clear from the literature review there has been a “push down” of curriculum in ECAE settings. The literature review illuminates the day-to-day struggles teachers face in a setting in which there is a hyper-focus on standardized testing and accountability.

Neoliberalism has created a shift in the way society views schooling and how we view children’s success and teachers’ effectiveness. Advocating for constructivist pedagogies could be a form of resistance to the accountability movement. Teacher education programs can help pre-service teachers understand effective constructivist methodologies that make children’s learning meaningful, visible, and at its heart, democratic. Reggio Emilia ECAE programs are exemplars for democratic education that utilize constructivist pedagogies (Edwards et al., 2011; Kaufman et al., 2015). Reggio Emilia recognizes that the goal of education is to produce social change, engage in community, and be immersed in democracy (Edwards et al., 2011; Lazzari, 2012; Lindsay, 2016; Lindsay; 2015). If schooling were truly democratic, then it would focus on more than a quantitative measure. In a community of advocacy and activism, there can be change. This section ends with Dewey who advocated fiercely for democratic education (Lindsay, 2016). Dewey says (1927),

Whenever there is conjoint activity whose consequences are appreciated as good by all the singular persons who take part in it, and where the realization of the good is such as to effect an energetic desire and effort to sustain it in being just because it is a good shared by all, there is insofar a community. The clear consciousness of a communal life, in all its implications, constitutes the idea of a democracy (p.149).

Chapter Three

“I urge you to be teachers so that you can join with the children as they are co-collaborators in a plot to build a little place of ecstasy and poetry and gentle joy.”

Jonathan Kozol, *Ordinary Resurrections: Children in the years of Hope*

Methods

The purpose of this study is to examine ECAE pre-service teachers' perceptions and beliefs about their teaching practices and serve as a means to trouble the current narrative around ECAE programming. The problem I set out to investigate was how teacher preparation programs can prepare pre-service teachers to advocate for constructivist pedagogies and engage in activism to “push back” against the didactic teaching practices that are prevalent in ECAE contexts. In chapter two, I argue that ECAE settings have faced pressure from the accountability movement to change the nature of teaching and learning. Teachers face pressure to adopt more direct instruction experiences that can be easily assessed through quantitative measures. Child-led play-based learning is not seen as an effective pedagogy. This work began with the belief that pre-service teachers can engage in complex pedagogies that support children's acquisition of knowledge in developmentally appropriate ways. Pre-service teachers can make children's learning visible and show the depth of children's thinking while thinking about their pedagogy.

Research Questions

The study examined the following questions:

1. How have pre-service teachers' own school experiences influenced their beliefs about teaching young children?

2. In what ways does a constructivist pedagogy class extend and complicate pre-service teachers' perceptions of learning and development in ECAE contexts?
3. How does pre-service teachers' engagement in course assignments and discussion facilitate a deeper, more complex understanding of constructivist teaching and learning in ECAE contexts?
4. What role can a college level course play in supporting pre-service teachers' engagement in activism in order to disrupt normalized practices in ECAE contexts?

To gather findings for the above questions, I designed a junior level class focusing on constructivist pedagogies for students who are majoring in child development or birth through kindergarten education.

Purpose and Design of the Study

The study seeks to understand how a constructivist pedagogy class can change students' perceptions about teaching and learning while understanding how students' own school experience has influenced their beliefs about teaching and learning. This study has the potential to add to the existing body of literature about the implementation of constructivist pedagogy in teacher preparation programs. It may serve as a resource for teacher preparation programs that are feeling the "push down" of academic content at earlier ages as a tool for advocacy and resistance. This research has the ability to expand pre-service teachers' perceptions of the capability and capacity of young children's ability to engage in the democratic learning process. This study will serve as an act of resistance to the prevalent

notion that children need to learn content that is more academic at earlier ages to be successful in school.

This research is qualitative and inductive in its nature and will allow the researcher an opportunity to create meaning and understanding by exploring data (Creswell & Creswell, 2017). Qualitative research builds theories, concepts, or ideas as opposed to testing existing theories by positivist data (Glense, 2011). Qualitative research allows the exploration of complex problems while focusing on participant perspectives of a phenomenon situated within a system (Glense, 2011). This type of inquiry may bring light to new understandings of perceived theories or can create new theories to create new understandings of how the world works. This research combines action research and ethnography.

Action Research

Action research is defined as a methodology that seeks to take action in order to solve a problem and is popular in education settings (Creswell & Creswell, 2017; Glense, 2011; Stringer, 2008). Bogdan and Biklen (1997) say the purpose of action research is to engage in the systematic collection of data in order to bring about social change. This type of research has a long history and is associated with the scholarship of Kurt Lewin (Stringer, 2008). Action research is a cycle of inquiry, is dynamic, and is collaborative in order to solve a problem (Stringer, 2008). A cycle of inquiry requires practitioners to design research, collect data, analyze the data, communicate outcomes and finally take action (Stringer, 2008). The goal of action research is to provide a new understanding and knowledge to empower practitioners to solve problems and improve practice (Stringer, 2008).

I found this type of work to be particularly helpful as I sought strategies to push back against the push down. I was looking for a way to investigate how a pre-service teacher

education program could support students as they learn to engage in activism against normalized ECAE practices. I sought to discover ways to engage pre-service teachers with constructivism and see it in action. I posited the course could change students' thinking by engaging in the process of gathering information, then analyzing the information, and finally acting on the issue of the push down of curriculum in ECAE contexts.

There are limitations for action research. The researcher may have trouble making a distinction between the action employed and the research while ensuring that both are occurring appropriately (Bogdan & Biklen, 1997; Stringer, 2008). Because action research happens in a learning environment, there may be factors outside of the researcher's control that cause delays or interruptions (Bogdan & Biklen, 1997; Stringer, 2008). Bogdan and Biklen (1997) say that it can be difficult to repeat action research and some researchers suggest that action research lacks rigor.

Ethnography

Glense (2011) defines ethnography as research that describes a people or cultural group. Wiersma and Jurs (2008) further define ethnography as, "an in-depth, analytical description of a specific cultural situation" (p.17). The goal of ethnography in education is to provide formal scientific descriptions of phenomena, systems, and processes within an explicit context (Wiersma & Jurs, 2008). Ethnography heavily relies on observation, thick description, and qualitative interpretations and judgements of the phenomena that are being investigated (Wiersma & Jurs, 2008). Ethnography is process focused and takes place in a natural setting in order to obtain a holistic understanding of what is being studied. Wiersma and Jurs (2008) say that often ethnography does not have specific hypotheses or a strong

theoretical base before the research is completed. Hypotheses and theories are generated as the research is completed (Wiersma & Jurs, 2008).

The cultural group of pre-service teachers studied in this research were Jillian and Marie. I will give a detailed description of these participants in chapter four. I employed this type of research to gain an understanding of pre-service teachers' understanding of the current educational climate, how they believed the process of learning and teaching occurs as well their understanding of constructivist theory. In addition, I used the context of a college course to gain an understanding of the phenomena of how pre-service teacher education programs are engaging students with activism.

The Research Context

This ethnographic action research was conducted by accessing child development students enrolled in a constructivist pedagogy class in a public university in a rural community. This is an appropriate source of data as participants in this study were enrolled in classes in an ECAE practitioner preparation program. It is appropriate for this population to think about and identify their beliefs about and perceptions of teaching and learning. Various data sources were collected in the setting of a course that met one day a week, either in the lab or in classes for fifteen weeks during a fall semester. I recruited nine pre-service child development students in the context of a class called *Reflective Practices: Observation and Constructivist Pedagogy in Early Care and Education Settings*. I designed the class after faculty in the College of Education realized that students in the Child Development Program needed a more in-depth understanding of the importance of observation, reflection, and constructivist pedagogies. The course description is:

This study will engage students in understanding of the tenets of Constructivist pedagogy. Students will examine exemplars of Constructivist practice. Material

covered will address the importance of observation and reflective practice in the creation of vibrant early care and education settings that focus on inquiry and the facilitation of relationships. Students will observe children and create pedagogical documentation that facilitates the Constructivist practice of learning with children and families (ASU, 2018).

Participants

The researcher provided copies of IRB approval as well as informed consent at the beginning of data collection in the context of a class meeting. A member of the researcher's dissertation committee shared the informed consent with students and gave participants opportunities to ask questions or express concerns regarding the nature of the study and the research questions without the researcher/class professor being in the room. Participation was voluntary and student's grades were not affected positively or negatively by the student's decision to be a part of the study. Ten students were enrolled in the course. Eight students were child development (CD) majors and two were birth-kindergarten (BK) teacher majors. One did not participate because she is an employee of the lab school and I provide direct oversight for her job performance. She is a BK major. It would be a conflict of interest for her to participate. While nine students were used for data collection and analysis, I focused on two specific students, Jillian and Marie, in the results in chapter four to engage in ethnography. Jillian is a BK major and Marie is a CD major. My interactions with Marie and been numerous, but not for prolonged periods. I had never met Jillian before the class. These two participants were highlighted because of the diversity they brought to the study as well as their work in the context of a constructivist pedagogy class. The goal of this research was to gain an understanding of a lived experience. I chose Jillian and Marie based on my previous experience with them, their engagement in activities, level of participation in class discussions, and perceived interest in the material.

Students accessed the campus based lab school in order to complete the photo essay, observation of learning moments, and a pedagogical documentation. The table below gives characteristics of the research participants.

Table 2

Participant Characteristics

<u>Pseudonym</u>	<u>Race</u>	<u>Major</u>	<u>Practicum Completed</u>	<u>Future Goal</u>
Jennifer	White	CD	Yes	Occupational Therapist
Jessica	White	CD	Yes	Early Interventionist
Cassandra	White	CD	Yes	Classroom Teacher
Marie	Asian	CD	Yes	Classroom Teacher
Julia	White	CD	Yes	Early Interventionist
Alicia	White	BK	No	Classroom Teacher
Kerstin	White	CD	Yes	Graduate School
Molly	White	CD	Yes	Undecided
Jillian	White	BK	No	Kindergarten Teacher

Researcher Positioning

As discussed earlier, I am the lab school director for the College of Education and am responsible for helping give oversight in student supervision as well as assuring the lab school is meeting the instructional needs of students in the program. Not only did I have oversight for the students in the lab, but I also was responsible for the course content and teaching practices. It could be perceived by participants that in my role I held two positions

of authority over them. I was responsible for grading assignments and assessing their level of understanding. I made it clear that participants could choose to participate or not. I also make it clear that I was seeking answers to my own questions and as a group, we were learning together. As discussed in chapter one, I am a veteran teacher and have lived the “push down” in my work with children and families. This fact has affected my desire to engage students in activism and trouble the current narrative around normalized ECAE programming. Over the course of the class, I did share my teaching experiences in order to make connections to the readings and assignments, but did so with careful thought and consideration.

Data Collection

Many data sources across a variety of formats were collected so that triangulation could occur. Triangulating data from many different sources allows for the creation of coherent themes or theories that may be present in the data and adds validity to the study (Creswell & Creswell, 2017). Over the course of the fall 2018 semester, participants completed assignments that served as artifacts for this research. I intentionally created assignments to build upon on another and that were based in the constructivist framework presented in chapter one. The constructivist framework guides program planning in ECAE settings. I used this framework as the foundation of the course and data collection. See figure two for a synthesis of assignments with the constructivist framework presented in chapter one.

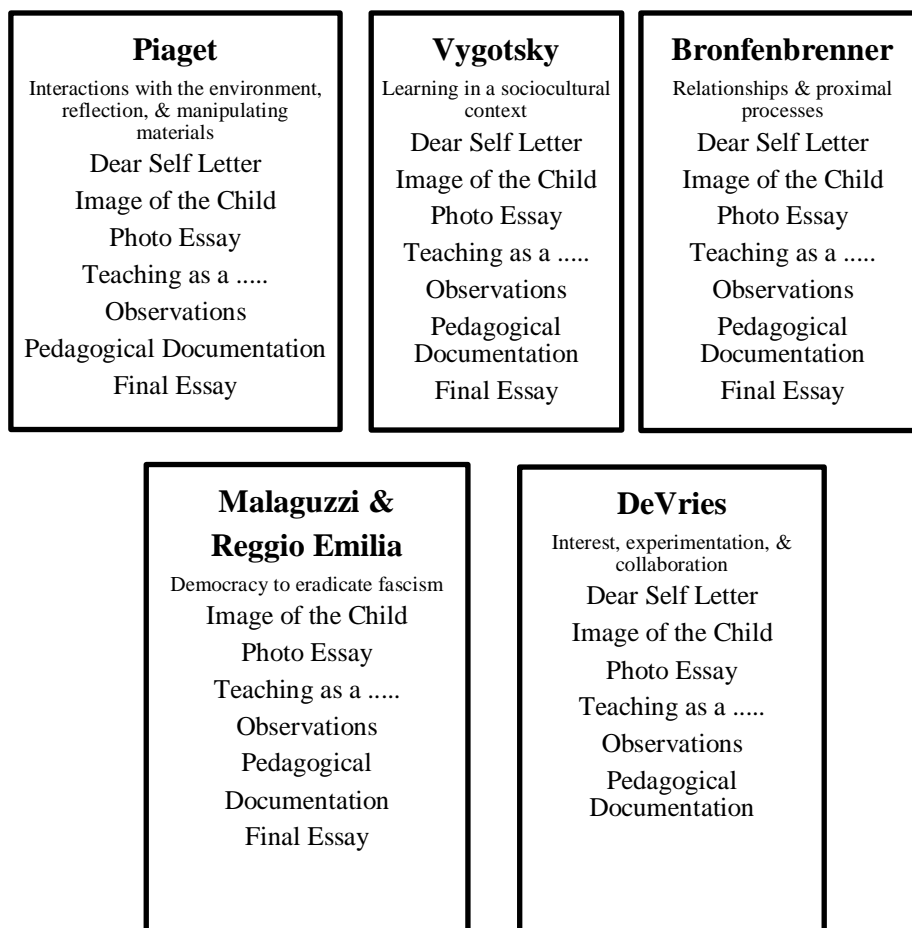


Figure 2. Synthesis of course assignments and constructivist framework.

An overview of the assignments that served as data are as follows:

- *A dear self-letter* – In week 2 of the course, students wrote a letter to themselves detailing their school experiences at the early childhood level, when they were students in elementary school, middle school, and in high school. They wrote positive and negative memories from their school experience. They traded their letters with another student in the class and the students created a written response to each other. This assignment was created to provoke participants' feelings about their school experiences. I was hopeful the letters they wrote would help them identify memories they deemed important. I wondered if they would think about teaching in the way

- they had experienced during their school years. I posited that participants would be able to make connections between their experiences to the work of Piaget, Vygotsky, Bronfenbrenner, and DeVries.
- *Image of the child-* In week 3, students created an essay that describes their view of a child they know personally. Students shared their descriptions with the class and received feedback from their peers. I created this experience to engage participants in a thoughtful look regarding their view of children and childhood. This assignment was based on Malaguzzi, Reggio Emilia, Bronfenbrenner, DeVries, and Piaget's work.
 - *A photo essay* –Over the first 6 weeks of the course, students took pictures of the children engaging in learning while participating in the lab school. They took at least twenty photos. Before students went into the lab school, they signed confidentiality agreements and had access to an example photo essay. After students reviewed and edited their work, they printed their essays and posted them in the classroom where they presented a photo exhibit. Students observed the photos then discussed their observations regarding the photo essays. They analyzed photos as they determined how the photos present an image of childhood and learning. This assignment was a means for participants to see the constructivist framework in real life and experience it first-hand. This assignment was based on the work of Piaget, Vygotsky, Bronfenbrenner, Malaguzzi, Reggio Emilia, and DeVries.
 - *Teaching as a.....* In week 8 of the class, students created an image of teaching by creating a metaphor that described their view of teaching. In addition to the written description, they created a drawing with colored pencils to enhance their metaphor.

- Students shared descriptions with the class and received feedback from their peers. This datum was created to provoke participants' thoughts about the teaching and learning process. This assignment has connections to the work of Piaget, Vygotsky, Bronfenbrenner, Malaguzzi, Reggio Emilia, and DeVries.
- *Observation of learning moments-* At two points in the semester, week 11 and week 14, students turned in an in-depth observation of a learning moment with children in the lab school. Students created field notes with pictures and made inferences about what they thought was occurring in the learning moment and why it was happening. They made connections from their observations to *North Carolina Foundations for Early Learning and Development*, which is a document that identifies North Carolina's early learning and development for children from birth to 60+ months old. This assignment was a means for participants to see a constructivist framework in real life and experience it first-hand. This assignment was based on the work of Piaget, Vygotsky, Bronfenbrenner, Malaguzzi, Reggio Emilia, and DeVries.
 - *Pedagogical Documentation-* For the final project due in week 15, students observed two learning moments as highlighted above. After receiving feedback from me they chose one moment and created a finished pedagogical documentation. They shared their documentation with the class in the form of a presentation. The class discussed themes that were observed in the documentation. This assignment was a means for participants to create a learning story based in the constructivist framework and make connections to children in a real setting. This assignment was based on the work of Piaget, Vygotsky, Bronfenbrenner, Malaguzzi, Reggio Emilia, and DeVries.

- *In this class, I have learned: A final essay* - At the last class meeting I asked participants to write about what they perceived they learned in the class. This assignment was designed specifically for the purpose of reflection. This came from the work of Piaget, Vygotsky, Bronfenbrenner, Malaguzzi, and Reggio Emilia.

As the course progressed, the assignments became more complex and were built upon one another. Reflection and content learned in the context of the course helped scaffold the learning as the students created assignments that were more complex.

I created written memos after classes to capture data in terms of students' practices and responses to class meetings and the assignments above. Over the course of the research project, I completed fourteen written memos. Memos are artifacts that support the researcher's ability to reflect upon the process and determine codes or themes (Creswell & Creswell, 2017). Class dialogues were recorded. After the class, I assigned each recording one to five themes based on the discussion in the context of the memo I created. Recordings that were used as data points were transcribed.

Analysis

Data analysis was completed over the development of the research project including during the class and after the course was completed. I was consistently and constantly analyzing data throughout data collection. During that time, data analysis was an informal process used not only for this research project, but also for an instructional strategy. Each week I would analyze data in order to assess classroom assignments, activities, and plan accordingly based on informal assessment. Data analysis was very dynamic and it overlapped in many ways. Data could be themed and categorized in different ways. For example, participants completed the *Dear Self* assignment. In this writing, many students talked about

the relationships and recalled either negative or positive interactions with a teacher. Some of them discussed their engagement or disengagement in the learning process via the instructional strategy employed. Some discussed their efficacy in positive and negative terms based on the environment and conditions created by teachers. See figure three.

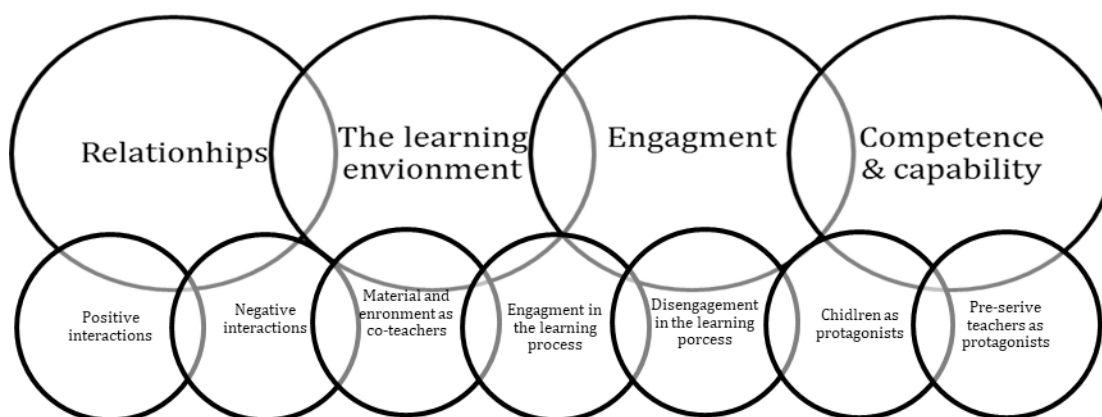


Figure 3. Data analysis by themes and categories. Many artifacts were classified into multiple themes and categories as themes and categories overlapped.

Glense (2011) details the process of creating analytic files to collect data by themes and then identifying categories across themes. I employed this method for data analysis. I created files where I placed artifacts around themes. I sorted my memos and chosen class transcripts in the appropriate theme file. Several artifacts were placed in multiple files because they could be categorized under different themes. See figure two.

Themed files included:

- Relationships

- The learning environment
- Engagement
- Competence and capability

When the data was sorted into themes, I then went into the folder and created categories around the themed data. At that point, I was able to connect categories across themes. Those categories included:

- Positive interactions
- Negative interactions
- Environment and materials as co-teachers
- Engagement in the learning process
- Disengagement in the learning process
- Children as protagonists
- Pre-service teachers as protagonists

By using categories, I was able to separate the data further to transform the raw data in the findings of the ethnographic action research presented in chapter four. I made a conscious effort to be objective in theming and categorizing the data but tried to remain faithful to the story presented to the participants. I tried to understand the participants' perspective as novice teachers who were making sense of a difficult learning paradigm with all its messiness and disequilibrium. I worked hard to honor the personal and cherished stories they shared.

Reflexivity and the Researcher

Throughout the research, I took steps to recognize and acknowledge how experiences and biases may shape the collection and the interpretation of the data. I have been an early care and education practitioner for over twenty years across settings such as Head Start,

public school pre-K, Child Care Resource and Referral, and in higher education. Because I have spent a prolonged amount of time in ECAE settings, it is important to have periods of reflection after class meetings and while collecting data to assure a complete and holistic representation of the data. Creating memos helped the process of reflection. I engaged in member checking. Member checking brings participants into the analysis process by engaging them in ongoing dialogue to assure that the researcher's interpretations are presenting a true picture of the data (Creswell & Creswell, 2017). In the class assignments, I asked participants to share themes they discovered in the data. I also gave multiple opportunities for participants to share their perspectives and created open space for students to share alternate ideas.

In approaching this study, it was crucial for me as the researcher to think about my philosophical assumptions and beliefs about the nature of learning in ECAE contexts. As a constructivist educator, I have a bias toward this type of learning paradigm. The goal of the class is to introduce students to constructivist teaching paradigms. As I have advanced in my career and education, I have progressed from an advocate to activist. I thought carefully about how to frame the class and research experiences without allowing my biases to inform the students' responses to the research prompts. Admittedly, the goal was to introduce them to teaching and learning through a constructivist lens, the Reggio Emilia approach, and to unsettle their views of early care and education. This type of work has the potential to disrupt participants' views of normalized ECAE practices.

I recognized this could create disequilibrium for some participants. I wanted to create safe/brave spaces where participants could push back against what they were learning and/or ask questions to clarify their understanding of the course material. They too, could question

my beliefs and understanding of constructivism. In as much, my role was that of a participant observer. Glesne (2011) defines this role as a researcher who is on the outskirts observing the research but has interaction with the study participants. My role was to facilitate the class and present the activities that provided the data set. I was available to answer questions and clarify understandings of the assignments while gathering data for memos. As such, my presence in the space where data was collected and my role as professor allowed me to be deeply emerged in the research process while students explored their understanding of constructivist principles.

Ethical Considerations

There are ethical considerations I reflected upon during the research. I did take steps to interact ethically with the research process. I recognized the power differential between student participants and me as the researcher and professor who assigned grades at the end of the course. I was thoughtful about this and gave students the freedom to have a different opinion and “push back” against what they were learning in the class. I was concerned about subjectivity and the possibility that my beliefs and attitudes were intertwined too much in the research. Walter (2009) says that in action research there are occasions where researchers can be over involved in the process and researcher biases can affect findings. I recognized this during all phases of the research project and worked to recognize and counteract my biases. I recognized that I was at the center of this research and understood there was no way to be completely neutral as researcher, professor, lab school director, and learner.

Somekh (2009) says that there is also a vulnerability to feel pressure from the parent organization in which the research is being conducted. I thought about this carefully as I am an instructor in the department where the course was created and where the research was

completed. I did not want the departmental beliefs and intentions to supersede the purpose of the research and made sure to share very little with colleagues about the project during the creation and implementation of the project.

Conclusion

This section has outlined the quantitative methodology of this study. This study is important because as early education teacher preparation programs strive to educate teachers it is imperative to assess how students understand, perceive, and interpret their educational experiences. It is important to ascertain how the current educational climate influences teacher beliefs and behaviors. This research could fill a gap in the literature regarding novice teachers' beliefs and their ability to practice what they believe. It also serves as a means to trouble the current high stakes testing and accountability narrative that directly influences children in ECAE settings. The next chapter presents the findings of the research project.

Chapter Four

“I urge you to be teachers so that you can join with children as they are co-collaborators in a plot to build a little place of ecstasy and poetry and gentle joy.”

-Jonathan Kozol, *Ordinary Resurrections: Children in the Years of Hope*

Results

“What do children need to know?” and “How will we teach it?” These questions have guided curriculum from the beginning of the educational process. Who determines what needs to be learned and how to teach it is the focus of standards and curricula around the world. The goal of this research is to gain an understanding of pre-service teachers’ perceptions of how and what they teach young children. In doing so, this study seeks to examine ECAE pre-service teachers’ perceptions and beliefs about their teaching practices and serve as a means to trouble the current narrative around ECAE programming.

Here are the questions I sought to answer in this study:

1. How have pre-service teachers’ personal school experiences influenced their beliefs about teaching young children?
2. In what ways does a constructivist pedagogy class extend and complicate pre-service teachers’ perceptions of learning and development in ECAE contexts?
3. How does pre-service teachers’ engagement in course assignments and discussion facilitate a deeper, more complex understanding of constructivist teaching and learning in ECAE contexts?

4. What role can a college level course play in supporting pre-service teachers' engagement in activism in order to disrupt normalized practices in ECAE contexts?

Participants and I co-constructed the data in this chapter from the context of class assignments. In addition to seeking answers to the questions above, I wanted to collaborate with participants and engage them in critical reflection while inspiring activism in their own contexts. I present the research findings from this research as categorized by the course assignments. I give a detailed overview of the assignments created for the course as well as a constructivist framework synthesis for assignments in chapter three.

This research focused on two students and their work in the context of a constructivist pedagogy class. The goal of this research was to gain an understanding of a lived experience. Thus, I engaged in ethnography, focusing on two students whose given pseudonyms are Jillian and Marie. I have created a pedagogical documentation based on Jillian and Marie's response to assignments. I chose these two students based on my previous experience with them, their engagement in activities, level of participation in class discussions, and perceived interest in the material. Transcripts from class discussions will be included in the results and will include other participants who were in the class. The next section gives a description of research participants.

Jillian

My first meeting with Jillian is one that will continue to have significance throughout my college teaching experience. About an hour before class, Jillian bounded into my office and introduced herself. She literally had changed her major hours before and registered for the class I would teach. Previously an Elementary Education major, Jillian began working at

an early care and education program in the area the summer before the fall semester and had discovered her passion for engaging with young children. The director of the program had told her about the Birth- Kindergarten teacher education major at the University and had specifically put her in touch with the Department Chair and me as the instructor for the class.

As soon as I met her, Jillian demonstrated an excitement for the change in her circumstances, but was clear in her mission to teach kindergarten. My office is located in the ECAE lab school and she asked me for a tour of the space. She had never been in the building before because her major did not require students to complete co-curricular experiences at the lab school. I took her for a tour and then we walked to class together. On our walk over, I thought Jillian would be a good addition to the class as someone with a perspective of education that facilitated by course work in another major. I also believed right away that Jillian was firm in her desire to be a kindergarten teacher.

Marie

Marie had been in a class I taught the summer before the fall semester and had been in the lab school many times for co-curricular experiences for classes. She was a Child Development major, so I knew her as a student who utilized the lab school. Before her time in my summer class, we had never had a conversation. She rarely spoke to me when she came into the lab school. I came to know her better in our summer class and found her to be insightful in her understanding of development, a better than average writer, and she was a conscientious student. Her work was on time and she completed assignments in a thorough manner.

When I walked into the class, I went to her and greeted her. I shared my excitement that she was in the class and I was looking forward to getting to know her better. She smiled

kindly and acknowledged me, but did not make conversation. I immediately thought it would be important for me to build a relationship with Marie, so I could try to help her open up in the class. I had heard from other faculty members that she was shy and did not speak a great deal in discussions. Immediately, I thought about myself as an undergraduate student and young teacher. I, too, was shy and felt I had that in common with Marie. As an undergraduate, I had not found my voice and wondered the same of Marie. I thought about my own lived experiences and reflected that for me, teaching and advocacy did not become real until I had a classroom of my own. Only now in my work, do I see the importance of activism. I wanted to make a space that Marie could feel open to share and have a beginning understanding of constructivist principles and advocacy.

Over the course of the semester, I collected data in the form of class assignments as well as class discussions and conversations with both Jillian and Marie. The goal of these assignments was to engage students in thinking in a way that was congruent with constructivist practice while introducing them to complex pedagogies. I wanted to facilitate learning moments that encouraged participants to bring themselves and their beliefs, biases, and experiences to the class while engaging them in critical reflection. The goal of the experiences was for the class to be truly constructivist by not only engaging students, but engaging myself as a learner and recognizing all parties as equal members in the teaching and learning process. The next section of this chapter focuses on data analysis of Jillian and Marie's responses to assignments as well as class discussions with all the participants in the class.

Finding: Pre-service teachers articulated that relationships were important in their school experiences and believe relationships are at the center of the teaching and learning process. (RQ1)

The first data point I asked participants to complete was to write a letter to themselves as learners. This was a free writing experience that we did in the last hour of class and then discussed with a partner before giving them an opportunity to share with the class. Sharing was voluntary and their partner student wrote a response to them. If they were so inclined, I planned to have a group discussion about what they shared.

Dear Self – Image of Learner

I wanted to prompt them to think about their school experience and urge them to think about how their personal experiences influenced their view of teaching and learning. I was particularly interested in hearing about students' perspectives because I hypothesized that their experiences would be drastically different from mine as I am almost twenty-five years older than the students in this study. I wondered what experiences and relationships were at the forefront of their memories. These participants were traditional college age and had completed traditional schooling. What struck me most is they had been schooled in a way that could have been affected by the legislation of *No Child Left Behind* and the accountability movement. They are the generation of standardized testing. I wondered if their school experiences would be grounded in relationships or the work of school itself. I wondered if this would affect their view of teaching and learning. This prompt was given to participants:

Write a letter to yourself discussing your learning experiences throughout your school years. Choose at least three moments to reflect upon at different times in your development. An early education experience, an elementary experience, and a high school experience. Think deeply about why those moments are in your memory.

What about the teacher or activity present the experiences as memorable? How did you learn or maybe you did not learn? Do you remember these moments because they were joyful or stressful?

As you think about these moments, think about your future self and your work with children and families. Have they informed your view of teaching and learning?

Here is Jillian's letter and a classmate's written response:

Dear Self,

I know you remember clinging to the fence during outdoor play so you could talk to your cousin through the fence. I know you tried to hide from the teachers, who would tell you to go and play then proceed to stand in the adult circle in which you were not welcome. I know your heart needed to be valued and have a deep conversation rather than run and play, and that is okay. You are healed and seen today (Parents divorced at age 3).

I know you remember your teacher who let you stand at her feet while she talked to another teacher and played with your hair. She always let you go to the cozy corner and read whenever you felt you needed to. She valued your presence and still does to this day. May the same love, patience, and joy you felt to be with this teacher, also reside in your kiddos.

I know you remember feeling overlooked and unimportant, but your teacher saw your capabilities as a leader in the kitchen. She fostered a community that wasn't only academic, but also inspired you in your love for motherhood and family. May you remember how capable she made you feel and give your students the same opportunity. I love you.

Response:

Thanks for letting me read your letter! I understand what having divorced parents can do to a child that young. I found it to be both cute and funny, the story of you clinging to the fence during playtime. I know you will have great experiences with your children and that they will feel that they can have these deep conversations with you. I also hope that you will be able to foster these communities both in and out of school for and with your children.

Here is Marie's letter and a classmate's response:

Dear Self,

I remember in kindergarten, my teacher would ask us to sit on the carpet as she turned the lights down and introduced us to a book about a hermit crab. I loved her

enthusiasm while reading and the actual hermit crab that she brought into the classroom. I looked forward to reading time and how she would engage with the text.

I remember my 2nd grade teacher would reward us with candy or with a squirt of juice he kept by his desk. I remembered receiving a handful of candy, because I was the only child who didn't talk and listened.

For high school, I remembered the dreadful index cards I had to write to remember for final exams. My teacher would reserve days for us to write definitions all day. I never enjoyed it!

I believe that learning does come through a child's interest and environment. It can be difficult to teach meaningful things when there are end of grade exams. Every child learns differently and at a different rate. It is important as a future caretaker or educator to dig deeper into the child you work with to meet their needs to help them reach their full potential.

Response:

What an amazing memory of story time as a young child. You painted a picture of such an inviting environment and engaging teacher. What an interesting reward system for 2nd grade, but how nice to feel appreciated. And oh the flash cards, I remember them well too. What good memorization skills we practice, but so little applied knowledge and such a waste of paper!

You are so right how the environment changes are learning and the way we feel about it. It was obvious to me how pleasant that first experience you shared was, but how much you disliked days devoted to flashcards. So true that all children learn differently and so great you see the importance of meeting all children's needs.

In Jillian's letter to herself, she represents the importance of relationships while being seen and valued in a learning environment. For Jillian, it seemed to be important to have a close relationship with teachers. She actively sought out relationships with the adults. She discusses how her kindergarten teachers shooed her away while she clung to a fence. She knew someone on the other side of the fence and wanted to talk with them. Jillian needed the comfort of someone who cared for her. She wanted to feel welcome in the space and engage in a conversation with those around her. Play was not her primary objective, although a

teacher recognized her competence and capability in dramatic play. She was interested in being in a relationship with those around her.

It is interesting how Jillian says to herself, “You are healed and seen today.” Being an active and seen member of the learning community is important to Jillian. She shared personal information about her parents’ divorce, which gave insight into why relationships and community are important to her. Jillian sought comfort from an adult and remembered vividly when she received the attention she desired from a teacher. Jillian chose specifically to share an early education memory only. This experience is so vivid in her mind that she wanted to reflect upon it and how she could use this experience to mold her practice as an ECAE teacher.

Marie’s letter to herself shares her experiences throughout her schooling experience. She recounts memories of being in a warm and welcoming environment in kindergarten. She explains how her teacher created a classroom community that fostered enthusiasm and a love of learning. She recounts how she looked forward to story time, feeling a sense of awe about how the teacher connected the reading to a real life experience of engaging with a hermit crab. Her second grade experience was based on a reward system, which she successfully navigated because she was quiet, and followed the rules. Marie’s high school memory was based solidly in didactic teaching and learning experiences. She shared that her teacher set aside days of learning definitions by having her students write definitions on index cards for rote memorization. She expressed very clearly that she did not like that type of learning experience.

After participants had a chance to read their classmate’s response to their *Dear Self* letter, I gave students an opportunity to decide if they would like to read their letters to the

class. I felt it was important to give all participants an opportunity to share their memories as a way to validate their feelings and opening a dialogue at how our experiences affect the value we place on teaching and learning. I explained they could share and we would give feedback to their writing, but with the understanding that the classroom was a safe space and everyone's feelings, beliefs, and memories would be respected. Jillian was the first to read her letter. She read her letter and then her classmates had a chance to give her a response.

One participant acknowledged how horrible it must have felt to be moved away from the adults when it seemed Jillian so clearly needed an interaction with someone she felt comfortable with. Seeking her cousin out by being near the fence was a way for Jillian to soothe herself. Jillian responded, "Yeah, I remember it so well. I didn't feel valued or important at all. That really hurt me. I wanted to be seen and talk to someone who knew me. I didn't think it was cute or funny not to belong. I don't *ever* want to be that kind of teacher." (Class transcript, 8/28/18). While during the class, I agreed with her assertion and had a beginning understanding of what Jillian was feeling. I did not fully understand that Jillian's vehement response was in response to her classmate's written response to her letter until I had an opportunity to review all the *Dear Self* experiences. In her way, Jillian called her classmate out for calling her traumatic experience "cute and funny." She was making it clear that her feelings were real and the experience had made an impact on her. While there was most likely no malice from her classmate's written response, I used this idea of childhood experiences being cute and funny as a discussion topic in a later class and as a talking point for the *Photo Essay* assignment. I will discuss this more in another section of this chapter.

Other participants shared their letters and much to my surprise, Marie read her letter aloud. I had not expected Marie to share because she had not said much in class at that point.

Her classmates responded to her memory of her teacher making reading fun and exciting. Many had similar experiences in their early school years, especially in terms of language and reading experiences. One student shared how story time was her most favorite experience and how it felt “home like” to be read to (Class transcript, 8/28/18). Participants were also able to share similar experiences about high school. The consensus was that rote memorization activities have little to no significance in applying knowledge. Again, I had not had a chance to read her classmate’s written response, so I did not know at the time how Marie’s characterization of using index cards for memorization was validated as a waste of the learner’s time and resources. Overwhelmingly, her classmates agreed with her assertion that these types of experiences were not enjoyable. One of Marie’s classmates praised her last paragraph where Marie discusses the importance of planning around children’s interests, getting to know children, and the importance of the environment. “I really appreciate you discussing how children learn differently and how teachers must get to know them in order to make learning meaningful. Relationships are so important. We talked a lot about that in Child Guidance class,” (Class transcript, 8/28/18). At this point, I felt it was important to discuss the idea of relationships as being central to teaching and learning.

I prompted the students to think back to their development classes and think specifically about Bronfenbrenner’s Ecological Systems Theory. This theory provides a framework to understand the importance of relationships in a child’s development (Bronfenbrenner, 2005). One of the students asked, “Is he the relationship guy?” I affirmed their memory and shared Bronfenbrenner’s contention that, for children to have a healthy ecology, an adult has to be deeply involved in their lives and care about their development

(Bronfenbrenner, 2005). He believed that children need one adult who is crazy about him or her to develop to their full potential (Bronfenbrenner, 2005).

Most of the participants in the class had been in the lab school completing observations before we met. I prompted them to think about how they see the teachers at the lab school engaging with children.

I asked, “Can you see how our teachers are crazy about the kids in their classrooms?” One of the participants responded, “I do, especially with the very little kids. It seems like they really do love and care about them.” I questioned, “But how do you see it?” She responded, “Well, they have positive relationships and the kids seem happy to be there.” I responded, “Yes, that’s true, but how does that manifest itself in the classroom?” Another student responded, “It’s everywhere. You can see it in the way the materials are put out for the children. You can see it in the types of materials they have. It’s so obvious the classrooms are for the children, not adults. You can see how they respect children and value their competence. It seems like relationships are at the heart of everything they do. They know the children and can create curriculum that is especially for them” (Class transcript, 8/28/18).

I affirmed the student’s beliefs and shared with them that for the lab school, relationships are indeed at the heart of every decision we make and shared how being inspired by Reggio Emilia prompts us to constantly think about children, families, and students in the context of relationships. In addition to the conversations we had in the context of the class, I created a memo after this class. I wrote,

I can see that the students understand the importance of relationships. They were able to make the connection between their relationship experiences (positive or negative) with a teacher in their learning environment and their memories. As we move forward in the class, I want to affirm their belief that relationships are the core of teaching experiences. It will be important to help them understand how through reflection and observation we can create a litmus test for the relationships we have. I thought it was

brave of Jennifer to share her story about the time she felt shamed by a teacher. She really believes that the teacher did not believe her and for her that was her reality. Obviously, that memory has stuck with her as did many of the positive memories the students shared (Memo, 8/23/18).

Image of the Child

The next assignment was a free writing assignment that created an *Image of the Child*. Participants completed this assignment in the context of the last twenty minutes of a class. Because we had a great deal of material to cover for the class session, I did not have time to ask students to share aloud or write a written response. Here is the prompt that was given to students:

For this assignment, you will create an essay that describes a child you know. In this essay, you will create an image of that child so that the reader has an in-depth understanding of the child you are describing. Think about the child in a multi-dimensional way. You will use this essay to present not only the child you are describing but an image of childhood. You may choose to describe the child's physical presence, their temperament or disposition, the child's connection with others, and the child's mode of learning. Use this exercise as a way to show the child living and learning in the world.

Jillian's Image of the Child Assignment.

Hey Friend...

I see your cute dimples and glowing smile.

I see your curly blonde hair and beautiful skin tone.

I see your smile creases under your eyes that smile back at me...

I see your arms stretched out in front of you every time we greet each other and

I love your high 5 wave when you are meeting someone new

I admire your resilience in a time filled with so much change.

I admire your willingness to learn new words and practice gentle hands.

I admire how you are excited for school and look forward to seeing your friends.

I admire the way you let me hold you before nap, thank you for trusting me to care for you.

I love the energy you bring to our learning space.

I notice how you are exploring ways to make new friends with kiddos your age.

I notice how you like to engage in your environment with your hands.

I notice how much you love your mommy... and I've enjoyed becoming her friend.

I notice how happy you are to see me... believe me I'm happy too.

I love to watch you zoom around the room with the shopping cart.

You see the sunshine in all those around you .

You admire the patience and love of others.

You notice when someone is genuine, and boy, I love you...

Although I don't see you everyday... I look forward to growing with you the next time I am at school with you. You are the highlight of my mornings. I'll see you Saturday at the Farmers Market.

Marie's Image of the Child Assignment.

Colored and scarred with memory of your loving mother who left you in my arms. Being tough and resistant was all you knew to cover what was underneath. Slowly as I gave you blocks and gave you the chance to express yourself, your bright smile that lit up that frown you always had on your face brought the happiest moments that I strived to do. You began to smile more, laugh more, and joke around with me. Such a delightful, smart, and caring boy who strives to be better and smarter. A young boy who felt he wasn't smart enough and who would never feel loved again. A young boy who was almost my height with a charismatic persona, only to reveal how kind and strong you are to pursue your dreams. To a young boy who had many doubts and pain, I believed you and believed you could do anything to change your world. Don't forget to keep that bright smile on your face and the burning desire to keep trying. Many people may not know you go through, but believe in yourself. To the young child who will make a difference in life, never stop trying.

Both Jillian and Marie recognize children as individuals with their own personalities while also recognizing children's competences and capabilities. In their belief systems, children are not one dimensional, but have many facets to their character. It is clear from their image of children that they have an understanding of teachers engaging in relationships with children and understand the importance of positive interactions. They also understand how children engage with materials to make friends and make sense of the world around them. Both contend that children have the ability to figure out adults' true intentions through their interactions with other adults. It is interesting how Jillian uses the "I see," "I notice," and "I love" statements. In conjunction with her letter to herself, Jillian places great

importance in helping children understand that she sees them and recognizes their strengths. For Jillian, a relationship requires her to know children intimately while recognizing the immense faith that children have placed in her to care for their needs.

Marie presents the image of a child that has been in an adverse childhood experience. She recognizes that children come to learning spaces with challenges and experiences. They bring themselves and their past interactions into the learning environment. She sees her role as supportive and as a caregiver in order to engage children in relationships. She, too, understands the important element of trust that children have to place in an adult. Both students understand the responsibility that teachers have to facilitate and cultivate positive relationships.

This section has presented the evidence to support the finding that pre-service teachers can articulate their belief that relationships are at the center of the teaching and learning process. The next section presents a finding for research question number two.

Finding: Pre-service teachers can engage in complex pedagogical and constructivist practices that facilitate a deeper understanding of teaching and learning. (RQ2)

The capstone assignment for the class was for the participants to create a pedagogical documentation that documented a learning moment of a child in the lab school. Participants could be an active part of the moment or observe the moment. This assignment was rooted deeply in constructivist practice in that participants had to observe and make connections between the engagement and the tenets of children's construction of knowledge. Before participants created their final documentation project, they completed eight observation/participation hours in the lab. They observed and interacted with children and while completing two observation forms. A copy of the observation form I created for

participants is in Appendix D. Participants could ask for support from their mentor teacher in the classroom where they completed their observation/participation hours. Some participants did need assistance to find moments they thought were meaningful and deep enough to document in order to create the final project. The observation form was broken into three segments, anecdotal observations, participant interpretations, and connections to the *North Carolina Foundations for Early Learning and Development (NC FELD)*. Participants completed forms during lab hours. After getting feedback about their learning moments on the observation form, they were able to choose one moment to create a pedagogical documentation for their final project. Participants were prompted to write a narrative that included the observation, their interpretations of the children's play and engagement, and how the experience met the *NC FELD* early learning standards in a cohesive and evocative way.

The goal of the project was for students to make children's learning visible, while reflecting critically on their interactions with children as well as materials in the environment that provoked children's deep thinking. These documentations presented a means to create a discourse of study and critical reflection for members of the learning community. Families, other participants, and teachers could read their final projects after I conferenced with participants about their work. Students then presented their pedagogical documentations to the class with the express intent of making the learning (both theirs and the children's) visible.

As defined by DeVries et al. (2002) the tenets of constructivist teaching as:

- Engaging children's interests

- Inspiring children to actively experiment even if children make errors and struggle to find answers
- Fostering cooperation between all members of the learning community.
Fostering child and adult relationships and relationships among the children.
All are equally important.

The requirements for the final assignment were:

You will choose one of the observations you have completed in this class and create a pedagogical documentation. Incorporate the feedback I have given you on your assignments into your final projects. You can also look to the exemplars I have shared with you. This is due on 12/5 by 11:55 pm. Please create a link that allows editing and post on the forum. You will complete this assignment in Google slides. You will present your documentation on 12/10. Your pedagogical documentation should:

- *Make the children's learning visible.*
- *Make your learning visible.*
- *Be a beautiful and meaningful narrative.*
- *Be at least 3-5 Google Slides. If you need more slides, feel free.*
- *Have a title- be creative.... It can be catchy.*
- *Be free of grammatical and spelling errors.*
- *Include wonderings and goals from NC FELD.*
 - *Wonderings should include your reflections about what the children are thinking AND how you could improve your practice.*

Pedagogical Documentation

Presented below are Jillian and Marie's final pedagogical documentation projects.

See figures four and five for detailed information regarding their work.

Jillian.



Silent Science

S.I.L.E.N.T. SCIENCE

It was a sunny afternoon at the Lucy Brock preschool playground and they began to take interest and a new and exciting element on the playground. Can you guess what it was? No, it wasn't cotton balls, dress up, or reused dirty rain... it was CLEAR, CLEAN, & COLD water delivered via pitcher to the playground. What started as a tea party between the girls expanded to a unique play experience with many students and a SILENT science experiment for Arlo.

S- SKILL

Arlo noticed EmmaLeah, Evelyn, Everleigh, and Leah pouring clean water into cups. He was playing in a bowl of sand and *paused*. He filled up a cup of water and brought it over to his bowl of sand...

I wonder if he was thinking what he can do with the clean water and sand or if he just wanted to play with the clean water like his classmates. Did he have a plan before starting the experiment? Has he ever done this before?

NC Foundation for Early Learning and Development: Curiosity, Information-Seeking, and Eagerness: APL- 1 : Children show curiosity and express interest in the world around them.



I-INTEREST

Arlo treated the water and sand, as if it was a treasure, with great gentleness and curiosity as he experimented by mixing the two materials. After filling the cup, he stepped with eagerness to his bowl of sand, being careful not to spill any water. He squatted down to the ground and used his left hand to make a hole in the bowl of sand.

I wonder if he wanted to treasure the water, and use it in the best way possible? Was he thinking conservatively? I wonder if he meant to pour it all into the bowl so he could have lots of water to mix and experiment with? Was he asking himself if it could all fit in the hole?

NC Foundation for Early Learning and Development: Curiosity, Information-Seeking, and Eagerness: APL- 2 : Children actively seek to understand the world around them.



L-LEARN

I wonder if he was planning on dumping it all back into the bowl when he was carefully putting it into the cup? What could I have asked him to inquire about his plan without stunting the curiosity?

Well, the water fit in the bowl... all of it. Arlo patted the top of the water gently and created a little splash with his flat hand. He seemed to be displeased that all the water was gone and it was evident this was just the beginning of experiment. So he used his hand to grab part of the sand and water and put it in the cup. Arlo didn't grab it with monster-like claws, it was with the same mindset that this water was a treasure. He picked up a little bit at a time, using his 4 fingers and thumb like a clasp. Watching as the sludge-like mixture fell into the cup. Once the cup was filled, he dumped the mixture back into the bowl, yet now the water was not sitting on top of the sand, it was mixed.



NC Foundation for Early Learning and Development: Construction of Knowledge :Thinking and Reasoning: CD-1 Children use their senses to construct knowledge about the world around them.

E-EXPERIMENT

NC Foundation for Early Learning and Development: Construction of Knowledge: Thinking and Reasoning : CD-2 Children recall information and use it for new situations and problems.



Arlo then got another cup of clean water, *I wonder what will happen if I add another cup of water to my mixture? This time I am not going to create a hole in the top.* He slowly, and carefully poured the water onto the sand watching it shape and form around the textures in the sand. As the water made it to the other side of the bowl from where he poured it in, he scooped a handful of sand up and placed it down in between the canal of water going from the pond to the hole he created. *I can stop the water from overflowing by creating a dam, like a pond.* Arlo was able to recall information to solve the current problem in his experiment. He looked intently after creating the dam and continued to experiment.

I wonder if he has been to a dam in a pond before to make him recall the purpose of a dam? If I asked him why he put the lump of sand there, would his answer be to block the water?



N-Neat

Motivated, Arlo grabbed handfuls of the sand and water mixture and put it in the cup. He filled up the cup to the top neatly and cleanly. *I wonder if I empty out the whole bowl and pour it back into the bowl if my mixture will be strong or will it be soupy?* Once he filled up the cup, he pressed lightly with his fingers...

I wonder why he was putting it in the cup by the handful now instead of slowly? Was he in a hurry to overflow the cup? Was he happy with the texture he had created? If given more water in this moment what would he have done? I wonder why he was not saying anything during this experimentation? What had he touched previously that created this desired texture, if anything?



T-TREASURE



Arlo got down on the same level as the cup looking across the surface. He continued to put the sand and water mixture in the cup as it overflowed onto the sides, like slime. He looked pleasantly down at the cup, seeming to be happy with the texture he created... He left the experiment and later I asked, "Arlo, What was your plan with the water?" To make it sticky!"

I wonder if he will continue to experiment with sand and water on the playground. If not sand and water, other experiments with textures...Children are natural scientists. Watching something so ordinary to us, water, become so powerful in the moment was inspiring as an adult, to see joy in the ordinary. It amazes me how his awe and wonder for the mixture was so intentional that he did not speak throughout this 10 minute experimentation. His focus was able to block out all of his surroundings. I am thankful that Arlo taught me to see joy in ordinary things, may we be inspired to create more moments filled with S.I.L.E.N.T. in our lives. (Skills, Interests, Learning, Experimentation, Neatness, and Treasures).

Figure 4. Jillian's pedagogical documentation of Arlo's exploration of scientific properties connected to sand and water play.

Jillian presents an image of Arlo as an active agent in his own learning and makes his interest in the moment very clear. She creates a powerful narrative for Arlo's interest, experimentation, and collaboration in the learning environment. Her images solidify her narrative as they help the reader understand that Arlo has a profound thought processes.

Jillian shows Arlo as powerful, careful, curious, skilled, interested, and learning as he engages with the world around him.

Jillian comprehends Arlo experimenting with sand and water and sees the power this exploration has to make his learning visible. This moment holds great interest for Arlo; he maintains sustained attention for some time as he explores the material and engages with the materials in multifaceted ways. Her ability to articulate Arlo's learning process demonstrates complex thinking on Jillian's part. She puts herself in Arlo's time and works to understand his thought process by creating wonderings and questions about his exploration.

In the moment and represented in the pedagogical documentation, Jillian never seeks to "give" Arlo the answers to his exploration, but instead facilitates a deeper exploration, which in turn makes way for Arlo's deeper thinking. She is engaging in constructivist practice by supporting and facilitating Arlo's exploration of the materials. She demonstrates herself and Arlo as equal and active participants in the learning. She presents Arlo as a learner who engages in the scientific method and is intrinsically motivated to learn more about his theories and the materials through investigation. Jillian thinks about Arlo's prior experiences to build upon the moment to make connections in his thinking.

She demonstrates her cooperation with Arlo by being in the moment with him and Arlo collaborates with her by responding to her questions. Arlo allows her to witness the moment and in doing so creates a space for observation and reflection. Again, she does not intrude on his learning or create a paradigm that makes her the expert and Arlo the beneficiary of her knowledge. She asks Arlo open-ended questions that serve to provoke his thinking and her own. Jillian is open to Arlo's method of investigation and sees the power that experimentation and interests play in children's construction of knowledge.

Jillian thinks about her engagement with Arlo as a facilitator, teacher, and thinker. She makes clear connections to the *NC FELD* without engaging Arlo in didactic experiences. She reflects critically on her interactions with Arlo and sees the joy in the learning experience. She is open to Arlo's natural tendency to manipulate the world to make sense of it. Many teachers could see this exploration as trivial and peripheral to learning and academic work. She demonstrates her ability to look beyond play as a vague experience, but demonstrates the richness, wonder, and joy she sees in Arlo's work.

Jillian was the first to present her documentation to the class. She shared, "I really enjoyed doing this and I can't wait for you all to see" (Class transcript, 12/10/18). She explained that the moment presented in the section above occurred while children were on the playground one afternoon in late November. The weather had been overcast and rainy, but the addition of clean water in pitchers presented children an opportunity to engage in science learning. She spotted the learning moment and was able to document Arlo's investigation and her interpretation of his thought process. She presented her findings to the class and asked the class for feedback. One participant shared, "I like the way you show this investigation as being a science experience. I can see how much you enjoyed being in this moment with Arlo" (Class transcript, 12/10/18).

Marie.

The next section presents Marie's pedagogical documentation as shown in figure five.

Delilah and the Fish Puzzle



One morning during free play, a colorful fish puzzle laid on a table near the block center. The puzzle had light and dark colors of fishes. All the fishes on the puzzle were different shapes and sizes. Delilah approached the fish puzzle and picked up a magnet that was attached to a string with a truck at the end. She started to lift each colorful fish off the puzzle with a delightful smile each time.

HPD-5f: Use simple tools (spoon for feeding, hammer with pegs, crayon for scribbling.)

ESD-2: Children express positive feelings about themselves and confidence in what they do.

Every time Delilah lifted each fish off the puzzle, she would throw them on the ground next to her. Then I asked her if she could put all the fish back on the puzzle while I pointed to the empty spots on the board. Delilah took a step back and bent down and said, "yeah." She picked up a fish and the magnet from the ground. She placed them on top of the puzzle and brought three more fish to the table. *What made Delilah commit to a challenging task that may bring some frustration in the process?*



APL-Children are willing to try new and challenging activities.

Delilah picked up a blue fish on the table and smiled at it. She tried to place the blue fish on the board in three different spots. I directed her where on the board it said that the blue fish would go in. She looked around the puzzle and put her hands on the table. I picked up the blue fish and placed it near the empty spot that it would go in. I asked her to try and twist the fish into the empty spot. She began to twist and turn the blue fish and smiled with excitement as got the fish to go in the puzzle. *How could my language with Delilah help her through this process?*



LDC-2: Children participate in conversations with peers and adults in one-on-one, small and larger group conversations.
Goal HPD-5: Children develop small muscle control and hand-eye coordination to manipulate objects and work with tools.

Delilah bent down and grabbed two more fish off the floor. She put them on the table as she looked around the puzzle. I told her where the red fish was on the puzzle as she followed through by placing it in the correct spot by twisting and using both hands to push it down. However, Delilah said something I couldn't understand while I encouraged her that the fish will fit in the empty spot. She tried to put the red fish back into the correct spot by lifting and turning the fish once again. She lifts the red fish off the puzzle and bit it. Then, I put the red fish in the puzzle to demonstrate that it would go in the empty spot she's been trying to do so persistently. *How was Delilah's confidence affected as she tried a second time to put the red fish in the puzzle? What prompts or motions could I have used to support her play?*



HPD-5: Children develop small muscle control and hand-eye coordination to manipulate objects and work with tools.
LDC-1e: Respond to others by using words or signs.

Soon after, Delilah grabbed a yellow fish off the ground. She put the yellow fish on a random spot on the puzzle. I told her that the yellow fish was on the other side of the puzzle. She moved the fish to the other side of the puzzle and got it in the first try. She smiled as she got the fish to go in and began to say a short phrase as she laid her hands on her chest. *What made this interact a lot easier than the last one?*



ESD-2: Children express positive feelings about themselves and confidence in what they can do.

Delilah saw another fish in front of her and reached over to grab it. She said, "green," as she picked it up and started moving it around the puzzle. She twisted and turned the fish as I directed her where it belonged on the puzzle. *Did Delilah really need my assistance since she got the yellow fish in herself? Why did I have to assist her this time? Were there too many empty spots on the puzzle that she needed assistance?*



LDC-1e: Respond to others by using words or signs.
HPD-5e: Use hands and eyes together (put together and take apart toys, feed themselves finger foods, fill containers). HPD-5e

I picked up a light green fish and told Delilah it went in a certain spot where it said light green. Delilah said something I couldn't understand and I told her it would fit. I picked up the fish and put it near the empty spot on the puzzle. Delilah said, "Let me try," as she grabbed the green fish and moved it in different areas on the puzzle.



APL-5: Children are willing to try new and challenging activities.

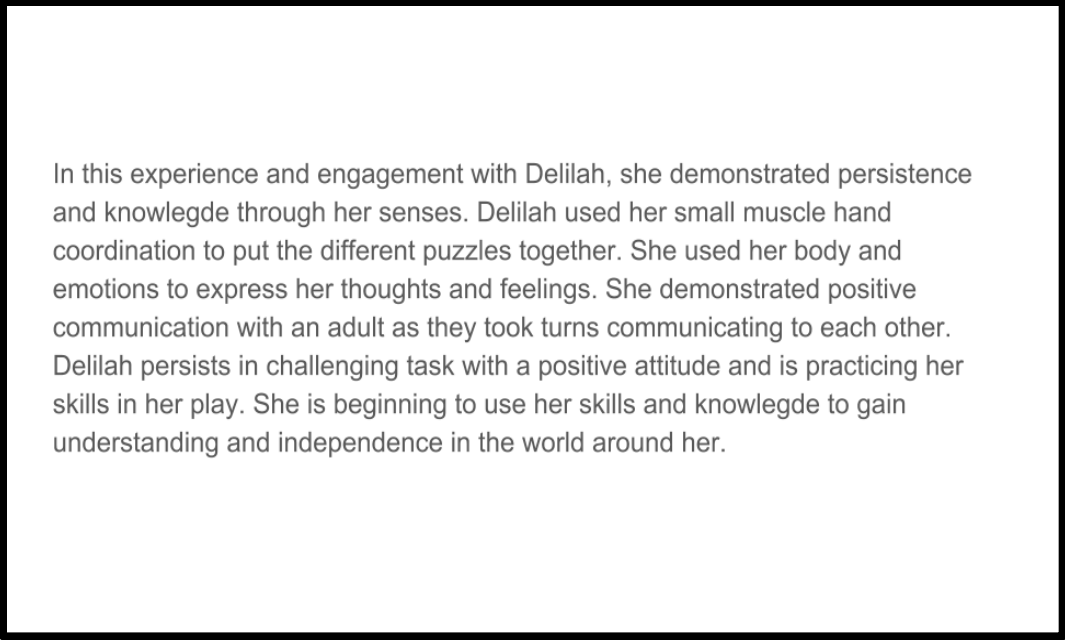
LDC-2: Children participate in conversations with peers and adults in one-on-one, small, and larger group interactions.

Now Delilah only had three more puzzle pieces to go until she was completely finished. She found one fish on the ground next to her feet and brought it back to the table. She found two empty spots on the puzzle that she wanted to try to fit it in. Then I asked her if she needed some help and she said, "yes." I directed her that she would need to turn it around and push it down. She responded saying, "no no," as I watched her do it on her own. She began to sing and bounce up and down while putting the fish in the correct spot. Then she looked around and said, "all done," as she saw someone leave the room. She ran towards the door and waved goodbye to them. *Where do I find the right time to step in to assist her and when to let her do it on her own? How do I keep her persist on this task without getting frustrated in finishing this task?*



LDC-1f: Respond to gestures, facial expressions, tone of voice, and some words that show emotions.

ESD-2e: Show confidence in their ability to make things happen by repeating or changing their actions to reach a goal (move closer to reach an object they want).



In this experience and engagement with Delilah, she demonstrated persistence and knowledge through her senses. Delilah used her small muscle hand coordination to put the different puzzles together. She used her body and emotions to express her thoughts and feelings. She demonstrated positive communication with an adult as they took turns communicating to each other. Delilah persists in challenging task with a positive attitude and is practicing her skills in her play. She is beginning to use her skills and knowledge to gain understanding and independence in the world around her.

Figure 5. Marie's pedagogical documentation of Delilah's exploration of math, social, emotional, and communication concepts while working on a puzzle.

Marie documents Delilah and her interaction with a puzzle. Marie takes the reader through Delilah's process of completing the puzzle. She captures the moment in detail so the reader understands the way Delilah interacts with the puzzle and Marie. Marie shows Delilah's interest, exploration, and enjoyment of the puzzle as well as her enjoyment of engaging with an adult. By recognizing Delilah's interest, Marie explains how she guides Delilah to put the pieces in the puzzle.

She is able to create a developmental picture of Delilah as she works on a complex task. The puzzle is difficult and requires a great deal of fine motor strength and finesse to complete. Where other children might become frustrated, she shows Delilah's resilience and persistence. She details Delilah's communication by documenting her words, actions, and facial expressions. She facilitates Delilah's success by offering support when needed and

makes connections to *NC FELD*. She makes an ordinary moment into a powerful teaching and learning moment. Not just for Delilah but also for herself as a teacher. This demonstrates complex practice instead of a one and done interaction.

Marie is using this moment to think critically about her practice. Marie questions how she might make adjustments the next time she engages with Delilah or another child and a puzzle. She specifically thinks about how she can use language as a way to scaffold the interaction. Marie thinks about how to interact with Delilah in a way that does not negate her exploration but supports her success as she reaches the goal of putting the puzzle together.

This section has presented the finding that pre-service teachers can engage in complex pedagogical and constructivist practices that facilitate a deeper understanding of teaching and learning. The next section presents a finding for research question number four.

Finding: Pre-service teachers can begin to engage in activism to push back against didactic learning experiences. (RQ4)

During the course of the class, I wanted participants to think deeply about current paradigms in ECAE settings and introduce them to activism to push back against didactic learning experiences. I facilitated experiences I hoped would help them frame their ideas in a way that supported their ability to engage in activism. We completed two experiences specifically for this purpose. One was a metaphor for teaching and another was a photo essay.

Teaching Metaphor

Here is the prompt for the teaching metaphor experience:

A "metaphor" is the application of a word or phrase to an object or concept, which it does not literally denote, in order to suggest a comparison with another object or concept. A metaphor represents lived experiences in the form of unexpected relationships that bring a new perspective to the writer and reader.

Metaphor can be used to capture the essence of teaching in a creative or expressive manner that challenges us to be imaginative, to think, to reflect, and to find deeper meanings and understandings (Hill, Stremmel, & Fu, 2005 p.31).

You will create a metaphor that you believe describes the art of teaching. You will also create a visual representation of your metaphor.

Jillian's Metaphor for Teaching.

Teaching is creating a home... Your classroom is your brick amongst the building, which is your school. You cannot choose the materials (or students) your brick is made of. Rather it is your role to use the materials you have (students) to build the strongest foundation in your classroom, thus strengthening your school. Each material (student) is valuable, needed, and used in the process of creating a home. As the bricklayer in the school (lead teacher) your encouragement and investment into each student is used in the strengthening and creating of your home (classroom). The collaboration in your classroom makes for a tighter interwebbing of relationships that is not easily broken, like family. Teaching is creating a home where students feel safe, welcomed, and encouraged to be the strongest version of themselves. May we all see teaching as an opportunity to let the competence and strength of our students shine forth from our classrooms, and not only create stronger classes and schools, but stronger communities. Teaching is creating a home.



Figure 6. Jillian's visual representation of her teaching metaphor. Jillian sees teaching like creating a home.

Jillian sees teaching as a process of building a home for students. Children are the building materials and their strength and capability have the potential to build strong school systems and communities. She sees the learner as valuable and critical to the process of schooling. The quality of the system is correlated to the investment the teacher makes in the student and she believes strong relationships are the foundation for creating a home/classroom for children. The teacher has the responsibility for creating safe and welcoming classrooms so children can thrive in the learning environment. She believes classrooms are comparable to families. She is able to articulate that children come into the space with their strengths and challenges, but it is the teacher's responsibility to find out what they are and build the curriculum for and around children.

Marie's Metaphor for Teaching.

Teaching is like painting a picture on a canvas. First, the artist must find an interest or idea to express to its viewers. In the same sense, as caregivers, it's essential to know every child's interest and background before moving to the next step. It may take the artist a few trials before coming to a conclusion. As caregivers, it takes a process to learn from each child and how to build on their knowledge. Once the artist has the picture or image, they take careful consideration into color, lines, and space within a picture. Each child has their own set of ideas and thoughts as teachers may present something to them. Every child could approach it differently and it's how the caregiver receives the thought of the process that the caregiver should engage to want to build on it. In the end, the artist has its own unique style to express their own work. Children all learn differently and caregivers should emphasize the child's knowledge through their work.



Figure 7. Marie's visual representation of her teaching metaphor. Marie sees teaching like creating a painting on canvas.

Marie likens teaching to the process of creating art. She believes that children have interests and ideas and the teacher has the responsibility to find out what they are in order to create curriculum by building upon what children know and want to learn. Children are individuals who have their own ideas and beliefs. Once the teacher understands this, they think carefully about how they will scaffold children's learning, but recognize knowledge is created from within the child and is solidly child centered. Children provide teachers an opportunity to engage in the co-creation of knowledge.

Jillian and Marie are able to articulate their view of teaching with metaphor. They both see teaching as a creative process. They understand that teaching and learning, children and teachers are in symbiotic relationships. One requires the other to be actively involved in the process in order for learning to be meaningful and engaging. This type of teaching requires an investment in relationships and sees teaching as the facilitation of learning. They see teachers as having the responsibility to invest the time children need to be active and

equal participants in the teaching and learning process. They understand that teaching requires an investment in time and relationships with children. This view of teaching and learning is in contrast with the current paradigm presented in the literature review in chapter two. The literature speaks clearly to the assertion that teachers feel they must move quickly through material in order to meet goals set through courses of study and standards. In doing so, they express they feel pressure to show learning in testable and measurable ways.

These students are able to clearly articulate their beliefs about teaching and learning. Being able to articulate their beliefs is a way to push back against the current narrative that is prominent in ECAE settings. After completing the metaphor experience in class, I asked the students to share. Students in the class responded positively to Jillian's belief that classrooms are extensions of home. One student said, "I want my classroom to be a place where children feel safe. The idea of building something with children resonates with me. Not just the physical environment, although I think that's important, but building a positive, warm and welcoming community" (Class transcript, 10/16/18).

One student responded to Marie's metaphor,

I love how you define teaching. You focus more on the process, not the product. We really are working *with children* to create the world around us. I think it's important too, that you say 'caregiver' instead of teacher. It's like you see caring as an important part of the life of a classroom, like, it is so important. I think so many children come to school and they live in bad environments. Like, we don't really know what children bring to school with them. I never want to forget that" (Class transcript, 10/16/18).

After we completed sharing metaphors, I asked students if they felt comfortable hanging their metaphors and images in the classroom for other students to see. They agreed and we hung them up in the College of Education. I shared my assertion with them, that as advocates and activists for young children and families, we have to make our beliefs known

so that we can “push back” against current practices. This is a way to make their learning and beliefs visible. The next section presents how participants created tangible artifacts to demonstrate children’s engagement and learning.

Photo Essay

Another experience I facilitated for students was the creation of a photo essay. I wanted participants to learn to think deeply about how young children engage in learning and learn to highlight learning moments. By focusing on photography to capture specific learning moments, my goal was to help them learn to focus their attention on rich and meaningful experiences. In classrooms, it can be difficult to be in the moment with children because of the noise and movement that is pervasive in ECAE classrooms. The goal was for participants to train their eyes to find these moments. In doing so, they can create data that supports the analysis of the process of teaching and learning while making learning visible. Figures eight and nine highlight six images each from Jillian and Marie’s photo essay assignments. Here is the prompt for the photo essay:

For this assignment, you will take photos of children while completing your lab hours in the lab school. The definition of photo- essay is a group of photographs (as in a book or magazine) arranged to explore a theme or tell a story. Your images should tell the story of a child’s discovery/learning. Remember, you have no words to explain what’s happening in the pictures. Your pictures need to be “worth more than a 1000 words” in terms of showing children’s development, experience, and learning. When taking images, get on the children’s level, focus on their hands or expressions, and make the learning visible. Take many pictures so you can edit out those that don’t convey the message you want.

You will create at least 25 images that show children engaged in learning while discovering their environment.

You will create:

Two - 5 image sequences (refer to the example in class) that show a child engaged in an in-depth learning experience

15 images of your choosing

You will share these images with your classmates and facilitate a discussion as to why you choose this moment to document via photography.

Figure eight highlights Jillian's images for the photo essay assignment.



Figure 8. Six images from Jillian's photo essay. Jillian captures children engaging with materials while highlighting their enjoyment in the process.



Figure 9. Six images from Marie’s photo essay. Marie captures children exploring the natural world with their senses.

Jillian and Marie present images of children actively engaging with the world. Both present children as natural investigators who make sense of the world by manipulating materials. They capture children’s movement, wonder, concentration, creativity, joy, investigation, imagination and thought processes. They present images of children engaging in exploration that supports all developmental domains. They show play and investigation as the medium for children’s construction of knowledge. An important part of this assignment was to seek to negate the “cute” narrative that impedes the image of a child as competent and capable. Before students went into the lab to capture images, they were part of a lab

orientation. I challenged them to look beyond “cute” to see children’s active and meaningful participation with the environment and the teachers around them.

When sharing their images with the class, I asked each student to share one image that they thought represented constructivist teaching principles. I then asked them to tell why they chose the image and asked them to think about the image from a developmental perspective.

Jillian’s photo essay image and large group sharing of an image that represents constructivism shown in figure ten.



“I chose this image because he worked hard to balance the tubes to hold the turtle. He has created a structure that required engineering and balance. His investigation required both gross and fine motor movements. You can see in the image how carefully he is handling the turtle. His finger movements are precise and his face shows his excitement at his success”
(Class transcript, 10/2/18).

Figure 10. Jillian’s choice of photo to share with the class that she felt represented constructivist teaching practices.

Marie's photo essay image and large group sharing of an image that represents constructivism shown in figure eleven:

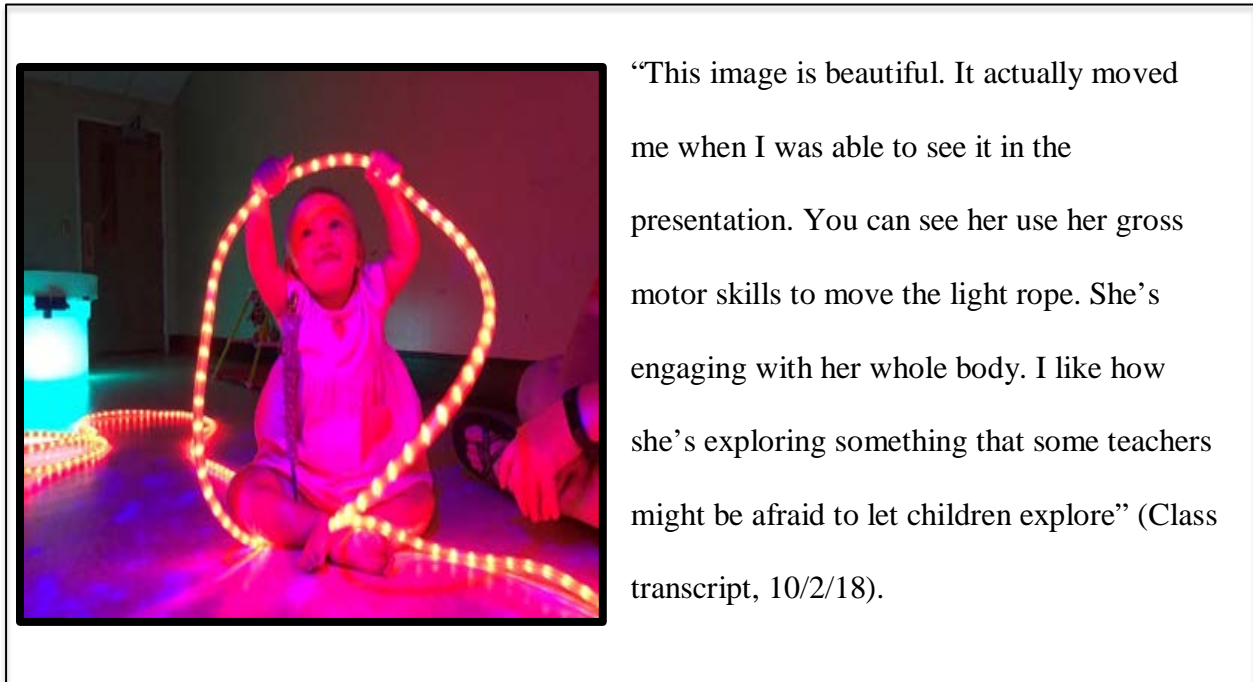


Figure 11. Marie's choice of photo to share with the class that she felt represented constructivist teaching practices.

Through their images, they portray children as the protagonist in their own learning. This is in direct contrast with a didactic and instructivist paradigm sees children as vessels to be filled with knowledge and posits that play has no academic value. Through this experience, students are engaging in activism to push back against didactic learning experiences. As part of this learning moment, we created collages that we placed in the classrooms for other students and faculty to see. We had an exhibit that showed the depth of children learning through the images. A professor from another class noticed participants work and noted, “Your student’s images are so powerful. You can see the learning and they

really have good eyes for seeing children engaging in the construction of knowledge. They show children as competent and capable” (Memo, 10/23/18).

This section has presented the finding that pre-service teachers can engage in activism to push back against didactic learning experiences.

Finding: Pre-service teachers can engage in constructivist pedagogies, but constructivism in itself is not enough to change the current narrative. (RQ3)

In the previous sections, the results have shown that pre-service teachers can engage in complex constructivist pedagogies; however, this research suggests that understanding constructivism in itself is not enough to change the current narrative in ECAE settings. For the research that was completed in the context of the class, I used three texts to guide the discussion. The main text was *Developing Constructivist Early Childhood Curriculum: Practical Principles and Activities* by DeVries et al. (2002). The first two chapters are an introduction to constructivist practice and interpretations as to how teachers implement constructivist pedagogies in the context of play. During one particular class, we discussed the reading and through a constructivist lens looked at different types of classrooms. The following section highlights the class discussion from the 9/4/18 class in which we discussed different learning paradigms as defined by the text. DeVries et al. (2002, p.14) define as:

- Classroom A: Play is peripheral to learning academic work. The primary goal is academic and the teacher’s role is authoritarian.
- Classroom B: Play is disguised academic work. The primary goal is academic and the teacher is disengaged.

- Classroom C: Play is integrated with social and emotional development. The primary goals are social and emotional development and the teacher is non-interventionist, warm and nurturing, and sometimes mildly authoritarian.
- Classroom D: Play and work are integrated with social, emotional, moral and intellectual development. Development across domains including moral development are primary goals. The teacher is interventionist by being warm and nurturing and there is a focus on democratic teaching.

I facilitated a discussion about the types of classrooms DeVries et al. highlight in their text. DeVries et al. (2002) contend that classroom D is solidly constructivist, while C is closely related to constructivist practice. Classrooms A & B are more behaviorist and instructivist in nature. Overwhelmingly, the students in the class compared their kindergarten experiences with classroom A & B. Again, they are in their early twenties and congruent with the literature review; their kindergarten experience was different from the kindergarten of their parents. I shared with them that my kindergarten experience was much like C & D, but I am almost twenty years older than they are. I challenged them to think about how a current five year old's kindergarten may be different from their early school experience. Jillian replied, "What are we doing to children?" I shared the research I had completed for chapter two of this paper that current systems are asking too much of children academically, while not being concerned for children's social, emotional, and moral development.

One student questioned my assertion about moral development.

"Ms. Andrea, I know schools complete character development curriculums with children. I think the current system is helping children learn morals. I do get what you are saying about social and emotional development though, but I remember character

development being a part of school.” I asked her, “Tell me what you mean about social and emotional development?” She responded, “Well, I don’t remember talking about feelings the way I see that happening at Lucy Brock.” I conceded that schools do engage children in character development curricula, but asked participants to think back to Bronfenbrenner’s theory about the importance of relationships. I responded, “One of the main ideas from Bronfenbrenner is that children learn to be human by engaging with humans. That means morals, social, and emotional development is learned from another person by being with that person. Do you think a character curriculum can teach that without the context of a relationship? Thinking about what we talked about in terms of classroom A, why do teachers choose to have classrooms like this? Do you think it is their choice or do they feel pressure to move children through the curriculum?” No one responded to my question and I chose not to prompt any more discussion on that issue. I wanted to give the students time to reflect.

After a silence, I asked, “What are you all thinking?” One student asked, “How do we teach this way? I want to teach kindergarten, but I don’t know that an administrator would let me teach this way. Are El Ed [Elementary Education] students learning about this stuff?” Another student replied, “El Ed students don’t have to take development classes. They take lots of methods courses, but no development.” One participant said, “If I were a teacher right now, today, that’s how I would teach (like classroom A) because that’s what I am used to. I’m sure I would be using checklists and rewarding children with ice cream parties.” I asked her to explain and she replied, “You know, kids are rewarded with ice cream parties when they score well on an EOG and teachers use checklists to assess children’s progress” (Class transcript, 9/4/18).

One student remarked, “We’re treating them [children] like adults and are happy with the status quo.” This was an important moment for this research and in the class. “YES, I replied, we are treating children like adults and we are happy with the way things are. From the research I’ve completed for my dissertation, school isn’t much fun or meaningful for young children these days. How do we make things different? We advocate and engage in advocacy and we use tools like pedagogical documentation to show the richness and depth of children and teachers’ thinking. That’s one of the goals of this class is to introduce you to a different way, constructivism, so that together we can make changes” (Class transcript, 9/4/18).

At this point in the discussion, I felt it was important to discuss the contrast between a classroom based in behaviorism (classrooms A & B) in ECAE settings and talk specifically about what classrooms C & D (based in constructivist practice) look like. I shared with them that we work hard at the lab school to create learning spaces that are warm and engaging, focus on children as the protagonist in their own learning, and are democratic. Many of them lamented that the only experience they had with a classroom like C & D was in the lab school.

“Being at LB [Lucy Brock] has taught me so much about children’s competence and capability. I can see how children, even when they are little, can do big things.” One queried, “I wonder what a different learner I would be if I was in a classroom like D when I was little.” I responded, “Well, that’s the purpose of this class is to help you think about different ways to teach. Remember when we defined pedagogy as ‘the art of teaching’, that’s how we have to think about teaching. Art is not one size fits all. We all see art in different ways because it means something different for all of us. It’s the same with teaching. Teachers have to be willing to go with children where they need to go to learn about something they are

interested in. Have you guys heard about the Project Approach? That's an emergent curriculum. That's what we do at Lucy Brock. The children ask the big questions and the teachers help them find the answers. We can embed any academic skill in the context of play and help children find their own answers. In doing so, we are learning with them." A couple students had been introduced to project work in their classes. I explained that the purpose of this class was to give them an introduction to project work, but they would learn more specifics in their curriculum classes. However, this type of curriculum work was not typical in most ECAE settings. I left the discussion with the idea that there are other ways to engage in curriculum work than what they were used to and what was the norm in ECAE settings. At that point in the class, we transitioned to another activity and completed the class.

After class, one of the students asked if she could speak with me. She had been in the practicum class I had taught the summer before like Marie. Here is the memo I created after our conversation:

Jessica shared her concern about her summer practicum placement. She was in a program in which the majority of the teachers and administrators were graduates of the CD program. She talked with me about how she was confused about what she had experienced in practicum and what she was learning in this class. At her practicum, curriculum was built around themes and the experience was very much like Classroom B we had discussed in the context of class. She felt like the teachers were just in the space not engaging with the children. I shared with her my belief that many teachers decide to default to the status quo because this type of teaching she is learning about is hard. It requires teachers to be in the process with children and it requires deep thinking on the part of a teacher. I explained that many early education programs feel pressure to have children ready for kindergarten and they think they have to do that by pen and paper worksheets and rote memorization skills. Plus, early education teachers are paid significantly lower than their El Ed [Elementary Education] peers in public schools. For many of them it's easier to go with the flow than engage in more complex work. They also feel pressure from many sources. Teaching can be political and there are times we have to learn to navigate those waters (Memo, 9/14/18).

As we progressed through the class, I noticed an undercurrent in the conversations that had students questioning why most classrooms were like A&B that DeVries et al. depicted.

One student shared, “My mom teaches kindergarten and she tells me that she feels a great deal of pressure to complete more structured learning experiences with the children. It’s like they are already thinking about getting ready for testing in kindergarten” (Class transcript, 9/18/18). Participants were becoming more aware of the struggles that many ECAE programs face in terms of dealing with more academic content at earlier ages as well pressures teachers may feel. They were also able to have a beginning understanding of constructivism in ECAE programs. One student wrote,

In this class, I learned the importance of viewing children as competent and capable beings. I learned about the importance of learning through play especially for children, but really everyone! I learned about the importance of allowing children to be creative and free in their expressions and that one of the biggest problems in early education today is the fact that most schools try to suppress that with rigid instruction. There is so much importance placed on “school readiness” that children are not given enough time in schools to learn through their play and personal discoveries. I learned about the benefits of constructivist teaching and how it is more child led learning instead of the teacher running the whole show (What I learned in this Class Assignment, 11/27/18).

Near the end of the semester, one class was dedicated to playing with constructivist materials in the lab school and making connections between the text and practice. While engaging with materials, one student said, “This makes so much sense to me. I can see how children and teachers are learning together. It seems to me this is an engaging way to teach. Not just for the kids, but for teachers too. But I do worry that I will be able to do this when I graduate” (Class transcript, 11/13/18). This was a pivotal statement. I thought about her statement a great deal. Her program had introduced her to the conceptual framework of constructivism, but I had to think about how pre-service programs help make this work sustainable. I

wondered how pre-service programs help students engage in activism to change the current narrative *after* they graduate.

While completing data analysis, I realized that the research had introduced participants to constructivism and they were able to engage in complex constructivist pedagogies; however, I realized that constructivism in itself is not enough to change the current narrative in ECAE settings. When I began this research project, I posited that if students fully understood the constructivist paradigm, they could engage with children in the learning process, and they could begin to push back against the current narrative that focuses on accountability. While I have shared evidence that pre-service teachers can complete complex constructivist pedagogies, I theorize that ECAE pre-service and in-service programs have to develop new ways to include activism, constructivism, and other more complex ways of knowing and understanding the world around us in real, political, and conceptual ways. In chapter five, I discuss pathways to resistance to “push back” against the push down and these pathways are beginnings. ECAE pre-service teacher programs have to move beyond constructivist practice and best practice models as a panacea that solves all our problems. We have to develop and implement new ways so we do not perpetuate what we accept as normal.

Conclusion

Chapter four has presented findings for the research questions. I have given evidence to support four findings. Chapter five will present pathways for resistance for ECAE pre-service programs that “push back” against the current narrative and practices.

Chapter Five

For Longing

*Blessed be the longing that brought you here
And quickens your soul with wonder.*

*May you have the courage to listen to the voice of desire
That disturbs you when you have settled for something safe.*

*May you have the wisdom to enter generously into your own unease
To discover the new direction your longing wants you to take.*

— John O'Donohue, *To Bless the Space Between Us*

Discussion

The study seeks to understand how a constructivist pedagogy class can change students' perceptions about teaching and learning while understanding how students' personal school experience has influenced their beliefs about teaching and learning. This research is a work of activism to “push back against the push down” of more academic and didactic experiences in ECAE settings.

These interactions with pre-service teachers served as an engagement of trust as they shared with me their experiences and beliefs about how young children make their way through an educational experience. In doing so, they shared intimate and personal details about their experiences and assumptions while engaging in intersubjectivity with me as a researcher, teacher, learner, and human being. I was awed and humbled how they would open themselves up to the process. I originally thought of this research as a way to change students' perceptions of teaching and learning and ground them solidly in a constructivist

education. My hope was to challenge their views of teaching and learning while introducing them to the idea of resisting current ECAE discourses that pushes academic skills at early ages. The literature review in chapter two gives an overview of the current body of literature regarding the shift in pedagogy. The current climate seeks to move play based early care and education programs to those that are more aligned with elementary school in which the focus is the attainment of academic content.

Jillian, Marie, and Me

In chapter four, I created a form of pedagogical documentation that focuses on Jillian, Marie, and their engagement in constructivist practice and activism while they completed course assignments and engaged in class discussions. This form of ethnography allowed me to focus specifically on these two students and their class assignments. The following sections present how I saw changes in Jillian and Marie over the course of the semester in terms of constructivist practice and activism. I also discuss the changes I noticed in my own beliefs about constructivist practice and activism.

Becoming Constructivists. Through the process of completing assignments and data collection, I could see how Jillian and Marie were learning how to engage in constructivist practice. I also realized a change in my own beliefs about constructivism and teaching college age students. What follows is how Jillian and Marie became constructivists. I discuss how I became more committed to engaging in constructivist practice with pre-service teachers.

Jillian. Jillian seemed to take to this teaching and learning paradigm almost immediately. As a new major in the BK program, this was her first experience in a major course. As I detailed in chapter four, she was able to align her teaching and learning beliefs

with the constructivist framework. I presented this framework in chapter one and it was the foundation of the course. Through the *Dear Self* assignment, she understands the importance of relationships and wants relationships to be at the center of her teaching practice. This is congruent with Bronfenbrenner's theory. In the *Image of the Child Assignment*, she represents her idea that children are active learners and need the opportunities to manipulate the environment as defined by Piaget. Relationships and learning in a socio-cultural context are a part of her vision for teaching and learning as defined by Vygotsky and Bronfenbrenner. The image she presents of the child she describes is one that is a competent and capable learner who is a protagonist of their own learning and is aligned with the work of Malaguzzi and Reggio Emilia.

Jillian's *Pedagogical Documentation* represents all of the theorists and scholars represented in the constructivist framework. She recognizes play as the medium by which children manipulate the world around them as defined by Piaget. She understands the importance of the environment to create a sociocultural environment that supports learning as defined by Reggio Emilia and Vygotsky. She demonstrates the importance of facilitating learning by engaging in positive relationships as defined by Bronfenbrenner. She makes learning visible by recognizing and articulating the tenets of constructivist practice as defined by DeVries. Jillian's *Photo Essay* and *Metaphor for Teaching* demonstrates Piaget's theory of children engaging with materials via play and recognizes that teaching and learning are a symbiotic process. She believes a teacher and student learn together and they are dependent upon one another in the teaching process.

Marie. Marie is able to articulate the importance of a warm and nurturing environment in the learning process in her *Dear Self* letter. This connects to

Bronfenbrenner's theory and the importance of environment as defined by Malaguzzi and Reggio Emilia. She also shares an experience based in didactic teaching and learning. She clearly did not like this type of process and shared her belief that learning is an active process, which is congruent with all the theorists and scholars represented in the constructivist framework. In the *Image of the Child* assignment, Marie recognizes that children come to school with past experiences and teachers need to have an understanding of development to meet children where they are and work to build solid relationships with them as defined by Bronfenbrenner and Vygotsky.

In Marie's pedagogical documentation, she looks carefully at the child's interaction with material and scaffolds their ability to complete a play experience successfully. She creates an environment in which a child can explore and manipulate to find the answers to their own theories. This represents all the theorists in the constructivist conceptual framework. She thinks about her practice, engages in critical reflection, and seeks understanding as to how she could be a better teacher during the next interaction. This is a hallmark of the practice of Reggio Emilia, which is grounded solidly in Piaget's idea of reflective abstraction. In Marie's *Metaphor for Teaching*, she sees teaching and learning as a reciprocal process which is congruent with Bronfenbrenner's theory, DeVries tenets of constructivist teaching, and the practices of Reggio Emilia.

Me. In many ways, completing this research project supported my belief that constructivism is the best paradigm for helping young children learn about the world around them. However, I realized that constructivism could successfully be utilized for teaching college age students. The research did support my own growth and development in terms of how I view teaching and learning with pre-service teachers. This research required me to be

in the process with student participants and view them as equal partners in the learning process. I learned with them and used their responses and feedback to modify experiences to assure we were all learning to the best of our ability. I realized that I was trying to teach them the way I was asking them to teach young children. I provided open-ended experiences in which they manipulated their thoughts and ideas. The constructivist framework presented in chapter one influenced every interaction with participants. This framework applies to college age learners even though the theorists who fashioned these ideas were seeking to investigate how children learn best.

Becoming activists. Activism naturally occurred as we discussed the current state of early care and education.

Jillian. Over the course of the semester-long project, Jillian demonstrated her ability to engage in activism. Participating in class experiences was a gateway to activism. There were two specific moments in the project where Jillian questioned the status quo and thought deeply about what she was learning about teaching practices. In these moments, she engaged in activism. I shared the details of these moments in chapter four. I will give an overview of these moments to show how Jillian is becoming an activist.

In the moment where Jillian pushes back against her classmate when she shares her personal story in her *Dear Self* letter, she is engaging in activism. She pushed back against the classmate who called a traumatic moment for Jillian cute. Jillian details her standing at a fence trying to interact with a familiar person and the hopelessness she felt in that moment. She pushed back against the cute narrative that limits children's capability and diminishes their feelings. She prompted her classmates to understand that her feelings were real and that as teachers we need to accept children's feelings as important and valid. In the second

moment after a class discussion, Jillian openly questions, “What are we doing to children?” In this moment, she is engaging in activism as she is actively questioning current practices and learning paradigms. She understands the levity of the current situation and uses her voice to question. This is the beginning of her activism. The class helped her question the way things are and engage in activism to support alternate teaching methodologies.

Marie. Marie’s engagement in activism was more subtle than Jillian’s. As I described in chapter four, Marie was quiet and carefully chose moments to engage in class discussions. Through her assignments that are highlighted in chapter four, I posit she is beginning to understand activism and the role early educators could have in changing the current narrative. Her course work indicated that she had a solid understanding of the constructivist curriculum framework. After engaging in critical reflection regarding the course, I could have had a better understanding of Marie as an activist with more free writing opportunities. Through her writing, Marie was able to articulate her beliefs. I could have also gained more information about Marie as an activist by engaging her more with writing. I believe, as she develops as a teacher, she will follow a path similar to mine; it will become clearer when she begins her career. When she starts working with children and families on a daily basis, I believe she will find her voice as an activist.

Me. Over the course of the project, it became clear to me that the study participants’ views, beliefs, and perceptions were not the only ones being challenged, but mine were as well. Spending time with participants, critically reflecting on the class discussions and readings, and completing a deep dive in the data provided opportunities to discover connections between the literature, participant responses, and my own beliefs. As reported in chapter four, I believe that constructivism in itself is not enough to change the political

landscape. I will propose in the later part of this chapter that we need a new learning paradigm to change the current narrative. This class was my attempt to engage in more deep and meaningful activism by which I came to this finding.

This research proposes the following recommendations for those seeking to work with pre-service teachers in early care and education settings. One class is not enough to change how teaching and learning is happening in ECAE programs. I suggest there needs to be a more orchestrated and holistic effort on the part of pre-service and in-service programs to “push back” against the political climate that imposes experiences that are in conflict with the constructivist curriculum framework. In the next section of chapter five, I give recommendations for pathways for resistance against the push down. These recommendations could help students gain an understanding of their beliefs and the current political climate. They seek to “push back” against the idea that easily quantified legislative defined outcomes are the best predictors of learning success and are appropriate measures to shape pedagogical decisions.

Pathways for Resistance

Research participants in the study had experiences to help them gain an understanding of the current political climate regarding ECAE settings while engaging in constructivist pedagogies. The following section presents pathways for resistance for ECAE pre-service programming. These pathways present strategies for practice to help pre-service teachers understand that curriculum in ECAE programs is multifaceted and requires that children and teachers be engaged in the process of teaching and learning while thinking critically about practice and social contexts. In as much, these strategies are ways to “push back” against current practice and discover other truths than those presented in current political contexts.

Unsettle Views of Early Care and Education

As resistance to the current educational climate, it is important for pre-service teacher preparation programs to be leaders in “pushing back” against policy and practice that mold settings for young children. Higher education programs have a responsibility to facilitate experiences that challenge students’ assumptions, beliefs, and experiences. Curtis and Carter (2017) say educational settings are arenas for hope and struggle. School provides hope for a better life in a better world, but is produced through the struggle to understand by questioning, thinking about what could be, being open to the other, and enacting thoughts and ideas (Curtis & Carter, 2017).

My goal in this research was to challenge participants’ ideas about the purpose of education. Now more than ever, it is important to think about school as the basis for democratic practice. During the course of the conception of this research idea and project, the political discourse has been divisive. As discussed in the literature review, education serves a political purpose. It represents a philosophy, a political point of view, and an agenda (Curtis & Carter, 2017). This research presented a way for participants to reflect on their own experiences while examining their beliefs and assumptions. There were many times over the course of the research where participants had opportunities to practice “pushing back” against constructs that had informed their own development. In this way, this work was political and engaged in the process of activism. Pacini-Ketchabaw, Nxumalo, Kocher, Elliot, & Sanchez, (2015) say, ECAE teachers “work with the assumption that all the work we do is political and that therefore our actions and thoughts need to be embedded in activist frameworks” (p.12). This section highlights three areas discussed in chapter four’s results

and presents ways pre-service teacher preparation programs can create pathways of resistance.

Name Political Ideologies. As suggested in the literature review, schools are informed by political ideologies. This particular research was concerned with neoliberalism and its effects on the educational process. ECAE programs can be arenas for democratic practice. In-service ECAE teachers know it is there but cannot name it or understand the implications this ideology has on how the field views children. It has direct implications for teachers' daily interactions with children and families (Anderson, 2010). Many pre-service teacher preparation programs are bowing down to the current educational climate. As an act of resistance, this research sought to give participants a beginning understanding of neoliberalism and offered a counter narrative to this ideology.

This research facilitated experiences in which college students engaged in the democratic process with young children. A pathway of resistance that could unsettle current views of ECAE programs would be for pre-service teacher education programs to name ideologies that affect teaching and learning. This research project was conducted with students in a junior level class. Not one of them had heard of the concept of neoliberalism. I, myself, had not discovered neoliberalism until taking a doctoral level class. As a veteran teacher, I did not understand the political forces I was up against while teaching in a public school system. Pre-service teacher education programs need to educate students about these ideologies and make their implications to practice explicit. Pre-service programs can facilitate students' thinking and understanding about how and when citizens can participate in democratic practice.

The programs of Reggio Emilia have created a foundation for the youngest children to be engaged in democracy. Born in political upheaval, the programs of Reggio offer an example of engaging children, families, teachers, and the community in democracy through education. We can learn from their work and implement democratic practice in our schools. Participants in this study were able to engage in a learning community, produce pedagogical documentation, (a tenant of Reggio Emilia ECAE programs) and make learning visible. Participants were able to engage with children in the democratic process while learning about the democratic process. Pre-service teacher education programs can support students by engaging with them as they learn and model democratic practice. We can create spaces of inquiry that support a mutual search for knowledge, understanding, joy, wonder, kindness, and compassion.

Endorse Play- Based Curriculum Approaches. In the current educational climate, play-based curriculum approaches are looked upon with suspicion (Curtis & Carter, 2017; Ridgeway and Quinones, 2012). As detailed in the literature review, in-service teachers have to defend their wish to allow children to explore the world and engage them in learning within the context of play. Many people, particularly those who do not have an understanding of the concepts of child development view play as a waste of time and see no value to children. Play is viewed as secondary to real learning. In schools, free play is given as a reward for good behavior or is reserved for the last twenty minutes of the school day (Anderson, 2010).

In the age of technology, children can hit a button on a device and produce immediate results. Children are accessing devices at early ages and in doing so, they are losing their ability to engage with the materials that support sustained thinking (Curtis & Carter, 2017;

Levin, 2013). The research is not clear about how children's engagement with technology over long periods of time affects the brain. Brain development is at the forefront of research in ECAE, but more longitudinal studies about technology's effect on children's brain development are needed to completely understand how technological quick fixes affect children's thinking. In addition to brain development educators need to be aware of media agendas. Pre-service teachers have to learn to question the validity of the next best technology and gain more information about how technologies can potentially harm development and hamper play.

A pathway to resistance is for pre-service teacher education programs to help students understand and endorse the importance of play in ECAE programs. This is not a new concept, but for some teacher preparation programs, play is not a valid pedagogy, particularly those that feel pressure to adopt more didactic teaching methodologies. Bodrova and Leong (2003) state, "Studies show the link between play and many foundational skills and complex activities such as memory, self-regulation, distancing and decontextualization, oral language abilities, symbolic generalization, successful school adjustment, and better social skills" (p.14). Pre-service teachers can understand and engage in pedagogy that validates play. Not just play for the sake of play, but intentional, meaningful play that facilitates a deeper understanding of the world. This type of play engages children and teachers in critical thinking and social relationships. Students need to think deeply about the pedagogy of play and how to implement play experiences that foster deep thinking. Pre-service teachers need to learn to recognize the unfolding and endless possibilities children can present in meaningful, constructive play and begin to have an understanding of children's perspectives

(Ridgeway & Quinones, 2012). By recognizing the possibilities, teachers can help children undertake new challenges and gain new understandings.

Push Back against Definitions of Quality

What is quality ECAE programming and who defines it? In terms of the ways schools frame programming and how pre-service teacher preparation programs guide teachers, these are the most basic questions. Many scholars in the field of ECAE have been concerned about the quality of current practice in North America for many years (Curtis & Carter, 2017; Gambling, 2015; Goldstein, 2015; Pacini-Ketchabaw et al., 2015). Reports rank the US and Canada among the lowest in quality ECAE programs but are some of the richest countries in the world (Doherty, Friendly, & Beach, 2003; UNICEF, 2008). In North America, the primary means of determining quality has been to set rules and regulations in terms of teacher child ratios, teacher training, and health and safety considerations. Rating scales like the Early Childhood Environment Rating Scale (ECERS) and the Infant Toddler Environment Rating Scale (ITERS) are tools used to measure a program's quality, but there is little attention given to teacher-child interactions (Curtis & Carter, 2017; Gambling, 2015; Pacini-Ketchabaw et al., 2015). These tools look to the kinds of materials in the classroom, not how teachers foster children's thinking. These measures create a curriculum that creates canned experiences for young children that are meant to facilitate development (Pacini-Ketchabaw et al., 2015). Typically, a one-size fits all intervention is used to promote growth and development and quality is objective.

It is important for pre-service teacher education programs to question the current definitions of quality and who frames it (Dahlberg, Moss, & Pence, 2013). Teaching is a complex art that requires teachers to make decisions regarding individual children and their

needs. Participants in this study were able to have a beginning understanding of the questions regarding quality and who decides what quality is. This research introduced them to the power structures that exist in schooling. Chapter four details a conversation regarding these power structures and their impact on children and teachers. These conversations are by no means easy to have nor do they have clear conduits to implement change. However, there are countries who have figured out better alternatives and are more open to counter narratives than North America. Sweden, Australia, New Zealand, and Italy are a few who recognize and promote the power of education as meaning making (Doherty, Friendly, & Beach, 2003; UNICEF, 2008). When meaning making is the prominent discourse, the focus is a “situated pedagogical experience” (Pacini-Ketchabaw et al., 2015, p.12). This type of pedagogy takes into consideration cultural, social, and political constructs and creates an experience built upon the child’s needs. It engages the child in learning while recognizing the child as the main driver in their education.

When pedagogy becomes the experience, then teachers are concerned about the here and now that informs everyday practice. They are able to consider children’s individual needs while capitalizing on children’s strengths and gain an understanding of where children are in their learning process. When teachers respond in the moment, they are able to consider current circumstances, different perspectives, cultural and social contexts, and engage in complex, multifaceted experiences with children. This promotes social justice because this type of teaching becomes grounded in ethical practice. The power dynamic shifts from the notion that children need to learn a set number of standards by the end of the school year to supporting children as drivers in their own education. Children are empowered to find the answers to the questions they have about the world. When teachers look and teach children in

this fashion, it moves the narrative from standards based education to a discourse of meaning making. This type of pedagogy supports a constructivist view of teaching and learning in that teachers and children are actively creating knowledge together. Both are active participants in the learning and teaching process and this is the true measure of quality. The programs of Reggio Emilia give us an example of how children and teachers can engage in meaning making while embedding academic skills in the context of exploration and engagement.

Understand Current Discourses

Pacini-Ketchabaw et al. (2015) highlight the need for teachers to have understanding of the current discourses regarding learning in early care and education settings. Pacini-Ketchabaw et al. (2015) say discourse frames interactions in the way concepts are presented in speech and the written word is experienced as objective and represented as fact. Foucault (1980) framed the notion that these ideas become truth. Foucault (1980) called these “regimes of truth” (p. 132) and believed discourses hold power over people, practice, and policy (Cohen, 2008; MacNaughton, 2005). They help to organize everyday experiences and provide governance over ideas and actions and societies’ way of understanding the world (Cohen, 2008; MacNaughton, 2005; Moss, 2014; Pacini-Ketchabaw et al., 2015).

The following sections look more closely at specific discourses within the field and those that were prevalent in the results highlighted in chapter four.

Image of the Child: Empty Vessel

As an act of activism, I wanted to “push back” against the dominant discourses prevalent in early care and education. In thinking about constructivist pedagogies, past experiences of research subjects and my own experiences, I wanted to disrupt the view of *a child as an empty vessel* (Pacini-Ketchabaw et al., 2015). This image presents the child as an

empty vessel that needs to be filled with knowledge given by the teacher. Children come to school with no prior knowledge or understanding of the world. In this view, children do not create their own understanding of concepts they are interested in, instead they replicate the knowledge they have been given by a proficient teacher. Typically, teachers are deemed proficient by how they are scored on teacher evaluations, some of which take into account children's proficiency in their ability to imitate back the knowledge given to them by teachers.

This knowledge can be assessed by the completion of assessments that measure children's knowledge via quantitative means. The literature review in chapter two details how this type of learning experiences is prevalent in the current educational climate and has become the norm over the last twenty years. This predetermined knowledge, typically defined by early learning standards or assessment objectives, are taught usually by direct instruction to children by a teacher. Therefore, this strategy helps children be successful in school because children can successfully succeed on assessment measures that seek to assess children's acquisition of content knowledge.

Participants in this study, specifically Jillian and Marie, were able to identify this discourse and create a counter narrative. By engaging with children and taking a critical perspective when reflecting on interactions, they were able to co-construct different perspectives. Pre-service teachers can engage with these complex ideas and gain an understanding of pervasive discourses. Pre-service ECAE programs need to be at the forefront of these discussions with students so they have an in-depth understanding of the discourses that become truth and organize current pedagogical practices.

Image of the Child: Deficient and in Need of Adult Intervention

As discussed in the literature review, many states have implemented pre-K programs for children who have been placed at risk for school failure. The thought is that children who are disadvantaged are more likely to be successful in school when an appropriate intervention is put into place. Typically, these children come to school and are seen as lacking when compared to their middle class and typically developing peers. In order for them to succeed, adult involvement is needed to get them caught up for the next level of schooling, typically kindergarten.

Most of the students in the class and both research participants indicated that they wanted to work in a pre-k or kindergarten classroom. Many states fund pre-K programs that serve as a means to engage children in a way that promotes school readiness. Again, I wanted to “push back” against the view of *the child as deficient in need of adult intervention* (Pacini-Ketchabaw et al., 2015). By thinking carefully about how to frame conversations and assignments about childhood and the purpose of schooling and learning, I was able to foster participants’ understanding of the discourse of a child at a deficit that needs an adult to intervene for their success.

I wanted to create space for participants to see alternate images of children by engaging with the research methods presented in chapter three. The goal was to resist the powerful social constructions that shape and mold ECAE pedagogies. These discourses have become, in many ways, rhizomatic. They are pervasive and create an underlying current in pedagogy and practice. There are many more than those that were addressed in this research. During the course of this research, it became clear to me that in the context of an

undergraduate junior level class, we were able to unsettle and dissect only a few of these discourses.

Counter Discourse: Children as Competent and Capable

Participants in this study were able to look beyond *the child as an empty vessel* and *the child as deficient in need of adult intervention* discourses and begin to see children as competent and capable learners. As noted in chapter four, participants created an image of the child, engaged in observations, and created pedagogical documentations that introduced them to the idea that children are competent and capable learners.

Through participants' engagement with the research methods, pre-service teachers were able to present discourses that helped define children as competent, capable, curious, intrinsically motivated and full of potential. Rinalidi (2004) says, "The child is the first great researcher. Children are born searching for the meaning of life, the meaning of the self in relation to others and the world" (p.2). This is a dominant discourse in the Reggio Emilia approach to early care and education. Participants were able to create space that gave voice for children not as empty vessels or at a deficit, but active members of a learning group and protagonists in their own learning, natural born researchers. Pre-service teachers were able to view children as meaning makers who brought their strengths and ideas to the teaching and learning process. Pre-service ECAE programs should have explicit conversations with students about their image of the child. Programs must make this a priority in order to challenge students' assumptions and unsettle dominant discourses.

Image of the Teacher: Teacher as Technician

In "pushing back" against the discourse of viewing *the child as an empty vessel* and *the child as deficient in need of adult intervention*, it was important to examine the image of

the teacher. Teachers are created in a system that buys into ideologies and expectations. Teachers may be tempted to teach as they have been taught because of their experiences. I wanted to investigate how participants viewed the teaching process because they were solidly educated in the time of testing for accountability. I hypothesized that they had been in a relationship with teachers who presented themselves as technicians by presenting knowledge to students and then testing students' acquisition of concepts. Building off the current discourse of more academic content at earlier ages, the goal of the teaching interaction is for children to master the information given to them, essentially creating a teacher as technician (Curtis & Carter, 2017; Goldstein, 2015; Gambling, 2015; Pacini-Ketchabaw et al., 2015). Dahlberg & Moss (2004), assert that the view of teacher as technician is deeply rooted in Neoliberalism. In this view, children are constructed to be redemptive agents that are college and career ready in order to address current problems in the future. Teacher proof curricula provide a script that teachers follow so they are not the weak link between learning goals and high scores on assessments (Pelo & Carter, 2018). Children are readied based upon adult defined outcomes that are easily quantified and measured. The end goal in a neoliberal education is for children to join the workforce so that they can reach their economic potential.

In addition to the teacher as technician mentality, Curtis and Carter (2017) say, "The culture of most early childhood programs reflects an insidious mentality of compliance and scarcity" (p. 9). ECAE teachers are bound to a multitude of masters. We have to abide by program prescribed curricula, state early learning standards, principal expectations, and licensing regulations. There are precious few opportunities to exert any type of independence and adhering to such constructs promotes teaching conformity (Dahlberg et al., 2013). This

research was able to offer participants counter discourses and they were able to engage with them.

Counter Discourse: Teacher as Learner and Researcher

Palmer (2017) urges us to think about who teachers are and what draws them to this work. He urges us to think carefully about how teachers are created and nurtured. Pelo and Carter (2018) say we must “tend carefully and caringly to educators as complex, contrary, passionate, full hearted, thoughtful, deep-feeling, uncertain, bold, anxious, eager, always evolving human beings” (p. 73). Teachers are not teaching strategies, curriculum activities, assessment goals or learning outcomes, they are human beings and need to be cultivated to their fullest potential in order to help learners reach their fullest potential (Pelo & Carter, 2018). Participants in this study were able to see themselves this way and could articulate these principles in their work with young children.

A pathway to resistance is the idea that pre-service preparation programs can view prospective teachers as learners and researchers, not products to be in neoliberalist settings. As a community we have to push back against what is happening in school settings. Just like children, pre-service teachers have endless opportunities for growth and development. Programs can clearly articulate that teachers are learners and researchers in their classes and make this idea explicit so that students see themselves this way. Programs can create co-curricular experiences so that students have many varied opportunities to engage in deep meaningful experiences that promote this view of teaching and learning. Programs can seek out and cultivate partnerships with schools who see the power and efficacy of teachers as learners and researcher paradigm. Reggio Emilia gives an example of teachers as learners and researchers in practice. Programs can support students as they learn to be open to

learning and the unexpected while helping them understand the importance of research. In doing so, we can move the teacher paradigm from that of instruction to inquiry.

Counter Discourse: From Instruction to Inquiry

Moving through this research, participants had to think deeply about how they believed teachers should teach. Throughout the class, I challenged students' assumptions about teaching and learning. I specifically mentioned the phrase "from instruction to inquiry" many times throughout the class, drawing parallels from their beliefs about how young children learn. Most of the students were fresh off a child development class and could articulate theories and principles of development, but they struggled to see how to present experiences for children that fostered inquiry. They struggled to see themselves as inquiry competent. While they could see children as competent and capable, the goal was to support the participants to see themselves this way. This was the beginning of a paradigm shift.

A pathway of resistance is for teacher preparation programs to promote an inquiry-teaching model. Pre-service teachers need to learn that curriculum is not something that just happens to children, but children are protagonists/agents in their own lives. Children are co-constructors of knowledge who constantly engage in meaning making (James & Prout, 2003). In doing such, teachers become thinkers and are more open to the concept of inquiry. Pre-service programs can help foster an investigative attitude toward learning that honors children's innate abilities and their mastery of imagination. Programs can help students learn to value asking questions about the meaning of children's play and the complex nature of learning.

Programs can support pre-service teachers as they embrace uncertainty and are in the moment with young children. As the play unfolds or children engage in interactions with

people or materials, teachers can be in the learning with the children. Teachers have to let go of their preconceived notions they may have about the goals of learning or how the learning will take place. In many ways, teaching this way is altruistic. Teachers have to be brave enough to let go and let the children be in charge. In doing so, the children's needs are paramount to a teacher's wants or desires. When this happens, these moments present insights into what children are thinking and ultimately teachers and children become co-constructors of knowledge. Children and teachers engage in intersubjectivity, providing for growth and development for both parties. This can only happen when teachers are not afraid of uncertainty, value questions, and are open to divergent ideas and possibilities. Pre-service teachers can learn how to meet children with engagement, understand what the children present to them is worthy of adult consideration, and be confident in their teaching practices.

As highlighted in the literature review, The Project Approach provides a means for teachers to engage the co-construction of knowledge with children. This curriculum model is based in inquiry and fosters learning for both children and teachers. It is not bound to time or narrowly focused on learning goals. It supports children and teachers as equal members of learning communities and requires active engagement between both parties. It requires that teachers support children as they explore theories and engage in deep learning. Teachers and children are active research partners seeking answers to research questions. It requires reflection and being open to possibilities. Teachers can learn as much as children in the process of completing project work.

The Project Approach is based on the project work that is a construct of the programs of Reggio Emilia. While the purpose of this research was not to engage participants with The Project Approach, there were times in the class when we discussed this curriculum

framework. Participants were given an overview of The Project Approach and had opportunities to explore documentations about project work completed in the lab school. There are many examples of project work in the literature regarding the ECAE curriculum. Pre-service teacher preparation programs can make The Project Approach part of their curriculum mapping to assure that students have an understanding of curricula that supports teachers as learners and researchers. In order to teach in this way, pre-service programs need to be open to the concept of complexifying practice (Pacini-Ketchabaw et al., 2015).

Complexify Practice

Pacini-Ketchabaw et al. (2015) say, “When we complicate our ways of knowing and doing with children, we move beyond one ‘best’ way of responding and open up to many possibilities, we refer to a shift from understanding practice (singular) to complexifying practices (plural)” (p. 20). This research presents a narrative that pre-service teachers can engage in more complex practice and move beyond instruction that is based on testing and accountability. One goal of this research was to engage participants in more complex ways of thinking and moved into the idea of complexifying practice. As presented in chapter four, it is evident that pre-service teachers can engage in complex practices while considering learning through many lenses. This section puts forth strategies for pre-service teacher preparation programs in order to help students complexify their practice.

Engage with Pedagogical Documentation

For the purpose of this research study, participants created pedagogical documentation (hereafter-called documentation) as a way to understand the concept of making children’s learning visible. Chapter two presents a more detailed explanation of documentation. As a part of the research, participants completed lab hours in the lab school.

While in the classrooms, they engaged in learning experiences with children and took anecdotal evidence in the form of notes, transcript conversations, and photographs of children engaging with materials, teachers, and peers. In addition to creating a record of the child's experiences, participants included questions or wonderings about what children were thinking and/or doing and their practice and engagement with the children. Participants were able to act as researchers who were required to gather multiple sources of data, consider multiple theoretical perspectives in order to interpret children's actions, engage in reflection, and plan curriculum. These documentations served as a means to create a dialogue between pre-service teachers, mentor teachers, families, and children in order to make learning visible (not just children's learning, but participants' learning as well).

While completing documentation, participants were able to engage in concrete, meaningful experiences, and reflection that supported decisions regarding their practice and curriculum development. Through this process, curriculum can be evocative and have depth that standard based planning cannot facilitate. The process of documentation facilitates the idea that teaching requires teachers to look for multiple layers of meaning and think through the process in ways that are more complex. Documentation is a constructivist process and creates space for teachers to complexify their practice within the context of meaning making with children (Pacini-Ketchabaw et al., 2015). Participants in this study were engaging in curriculum development with children instead of looking at curriculum as a one and done experience. Based on the cycle of inquiry, documentation requires that teacher questions provide the basis for what happens next in the scope and sequence of curriculum. The process of documentation requires that teachers participate in the process of developing the curriculum based on children's knowledge and experiences rather than looking at curriculum

as a product. In the current climate, many teachers are mandated to use scripts to teach concepts that require little thought on the educator's part. As demonstrated in chapter four, students were able to show that children met the standards naturally in the context of emergent experiences.

Participants in this research were able to create pedagogical documentations that complexified their practice. Data in chapter four presents two projects that supported participants' deeper understanding of the process of documentation. Pre-service ECAE programs can create classes and co-curricular experiences that support this type of curriculum work and join students in the process of documentation. While the creation of documentation can be a difficult process, pre-service teachers have the ability to act as teacher researchers, engage in more complex practice, make meaning with children, move through the curriculum with children and see curriculum as a multifaceted, dynamic process.

Engage with Critical Reflection

Participants in this study were able to explore the concept of critical reflection. As noted in chapter two, reflection in itself is not a new concept in pre-service teacher education programs (Fendler, 2003). Many pre-service programs include the practice of reflection in their classes. Reflecting for the sake of personal growth while making sense of emotional experiences is not what this research suggests. This type of reflection may not have the potential to create meaningful learning experiences or systemic change. Fendler (2003) says, "Some reflective practices may simply be exercises in reconfirming, justifying, or rationalizing preconceived ideas" (p. 16). In essence, reflection can reinforce pervasive ideologies, the status quo, and social inequality. Fendler (2003) notes that reflection without

critique can diminish educational reform. Instead, I propose that pre-service programs help students learn to reflect through a critical lens.

When pre-service teachers engage in critical reflection they are able to look more closely at developmental theories, standards based curriculum, and current discourses. In the concept of critical reflection, teachers can engage and examine the broader implications that inform practice. Giving pre-service teachers the freedom to question and help them ask hard questions can be a pathway to resistance. Constructivism is the prominent lens by which most pre-service teacher programs engage students in pedagogy. Through the process of meaning making, teachers have the ability to analyze assumptions of what are considered universal truths about children, families, and the educational process. However, programs could be more explicit in helping students understand other theoretical perspectives.

Poststructuralist perspectives, specifically Postcolonial and Feminist Poststructuralist perspectives, offer students ways to examine current practices through different lenses. Through Postcolonial perspectives programs can help students begin to understand how dominant Western discourses influence practice. Pre-service programs can support students as they dissect and question what is accepted as universal practice and how these practices are creating oppressive systems. Postcolonial perspectives help define power relations embedded in universal norms that drive neoliberalist ECAE settings (Viruru, 2005). Postcolonial perspectives encourage the use of divergent thinking that seeks to move away from the norm and move to a more holistic and inclusive perspective (Pacini-Ketchabaw et al., 2015; Viruru, 2005).

Feminist perspectives can help students understand how children make sense of subjectivities and negotiate gender issues that create power structures (MacNaughton, 2003,

2005). Through these gendered structures, children learn what is powerful and desirable in educational contexts. Using Feminist theory to engage in critical reflection helps pre-service teachers to consider the inequity prevalent in dominant gender discourses, such as girls are not good scientists. When pre-service teachers understand these constructions they can work to disrupt the narrative and create pedagogy that acts as resistance to hierarchical gender structures (MacNaughton, 2003, 2005; Pacini-Ketchabaw et al., 2015).

Pre-service programs must prepare teacher thinkers who can go into classrooms and engage children in experiences that support children as free thinkers. We can help students understand the importance of questioning truths. Reggio Emilia leaders posit that no one theory represents the truth absolutely, but theory represents opportunities for testing truths in order for in-depth investigation, dialogue, and invention (Rinaldi, 2003; Pacini-Ketchabaw et al., 2015). When we question taken-for-granted structures and engage in critical reflection, our work can be transformative and be an act of resistance.

Engage with an Ethics of Care

As discussed in chapter four, participants in this study began to explore the ethical challenges that present themselves in learning environments. Dealing with these challenges presented participants opportunities to think about practice that is grounded in the current norm, but often it brought discomfort and uncertainty. This research is rooted in the belief that educators have a responsibility to be activists for practices that are ethically best for children. In order for pre-service teachers to grapple with these issues, pre-service teacher preparation programs can create spaces for students to use critical reflection on current practice and their outcomes. Taguchi (2005) believes that once we revise what we understand regarding how children learn and think, we have to change how we interact with them. When

we have a new- understanding, we cannot continue teaching in the same way, and we have an ethical responsibility to question practice.

A pathway of resistance would support the idea that pre-service teacher programs help students gain an understanding that the work of ECAE programs is permeated with ethical and political questions. In a Poststructural perspective, ethics are bound to a relational viewpoint (Pacini-Ketchabaw et al., 2015). Learning communities are overflowing with relationships. Relationships between children and teachers, teachers and teachers, teachers and families, and children with other children. These are complex, intertwined networks of relationships and each decision represents an impact of the relationships within the community. This research suggests more than a prescribed code of ethics (these are prevalent in most every discipline) but helping students understand the importance of total engagement with the mind, spirit, and heart in the context of relationships.

Based in the Poststructural and Feminist tradition, Nel Noddings frames the idea of an “ethics of care” (Noddings, 1988). An ethics of care requires teachers to invoke action rather than a prescribed list or code of ethical conduct (Pacini-Ketchabaw et al., 2015). This action is imposed and achieved by all parties in the classroom community. It requires all members to actively facilitate relationships in a caring and responsible way. In doing so, teachers become leaders and activists who take ethical responsibility for their actions even when there are ambiguities and hard choices. This work requires teachers to be in the moment with children and give the situation our full attention. In order to engage in an ethic of care, teachers have to learn to listen, see, and feel while being fully attentive in learning spaces (Curtis & Carter, 2012, 2017). This pedagogy has to be explicit and cherished in teacher preparation programs. If a pre-service teacher preparation program can help students

understand the importance of being fully attentive and engage in an ethics of care in learning spaces, then students can become activists who can “push back” against political systems that hurt children and families.

Moving Forward

My hope was to engage with the participants in a way they could interact with children. We were actively creating and exploring new knowledge together and questioning prevalent paradigms. Participants and I were engaging in collaborative research. As I began analyzing the data and thinking about the life of this dissertation, I began to realize that I was beginning to question my own understandings of pedagogy and was in essence doing what I had asked the participants in this study to do: dig a little deeper and think about practice in more complex ways. In doing so, this was inherently a political act. The pedagogy of the class was an act of resistance. It provides a means for more research even with the limitations presented in this section.

Pedagogy as a Political Act

This research serves as a way to begin the conversation regarding pedagogy and teaching as a political act. While most ECAE programs are interested in practical change, it is necessary to consider ways to enact systemic change embedded in political activism. As discussed earlier in this section, pedagogical documentation serves as a pathway to support teachers as they position themselves in the context of complex issues and problems. It serves as a way to document ordinary but extraordinary moments with children that develop themselves into our practice and curriculum. We can make these moments more visible and can make children’s learning and complexity of thought more visible. Through these moments, we can engage with social issues that help shape the way things are. We can “push

back” and make it explicit that the work we do is political and our thoughts, actions, and relationships are entrenched in an activist agenda.

Research Possibilities

This study presents a way for pre-service teacher preparation programs to engage students in complex ways of thinking about teaching and learning and engage them in constructivist teaching pedagogies. It has presented pathways of resistance to combat the “push down” of more academic neoliberalist settings that are prevalent in ECAE. The research could be a stepping-stone for more research regarding the way pre-service programs help students understand these complex issues. I hypothesize that many do not introduce students to philosophical underpinnings and prevalent discourses, especially majors who do not want teacher licensure. It feels as if the field is not talking about these issues as they continue to be the norm. The field in general has made peace with the way things are. Pre-service programs have to take some responsibility for this as we have helped support and condone the way things are. The creation of the class, the research, and findings are inherently an attempt to “push back” against the current educational climate. Other pre-service teacher preparation programs could complete a version of this class and research in order to disrupt normalized practices.

Replicating this research with in-service teachers as they engage in the process of teaching and learning in their classrooms could be a possibility for future research. In doing this research with in-service teachers, activism could be highlighted more as they seek to understand the current norms and seek to create a counter narrative. Research with this group would allow a researcher to be more intentional about asking hard questions of participants, who work with children daily, as they facilitate the understanding that teachers can be

activists. It would be appropriate to investigate teaching as a political act with this group of participants. As discussed in chapter one, many ECAE teachers are “othered” because of the lack of understanding from upper grade teachers about how they teach in an ECAE context. This work could support ECAE teachers as they use their voice to engage in activism to “push back” against the push down and make the narrative I propose more prevalent.

It would also be appropriate to conduct this research with children and families. Children could share their view of the teaching and learning process and create pedagogical documentations with teachers. It would be appropriate to engage children in critical reflection about the experiences they engage in the learning environment. Critical reflection could support emergent curriculum and the cycle of inquiry. It would allow children to be protagonists in their own learning and support the belief that children are competent and capable learners. I posit that teachers and children learning together could transform teaching practices.

Families could engage in the research as consumers of pedagogical documentations. By employing pedagogical documentations, we could support families, as they understand development in a more developmentally appropriate and holistic way than scores on assessment measures. It would be appropriate to research how families view children’s learning by the use of pedagogical documentations. This population could and should be looked upon as an imperative and valuable source for potential activists.

Beyond what I have presented above, I believe this research supports the need for a new paradigm. ECAE and elementary education programs need a new paradigm that supports teachers as they think about the complex and divergent ways learning occurs. As the current political narrative continues to take center stage in the schooling and education,

children and teachers continue to lose their efficacy. I theorize combining the ethics of care and education theory, post-colonial theory, systems theory, and constructivism could create a more dynamic relationships based paradigm that could reinforce the notion that children are human beings that require those around them to be humane in order to develop to their full potential. As I presented in chapter two, the research clearly details how school has become an exercise in skill instruction and testing. For the majority of us who spend our days with children, this type of learning feels inhumane. To create learners who love learning, learners who can think for themselves, and are critical consumers of education, we need to think about teaching and learning in different ways. Teachers provide the model for learning with students and the political system needs to support teachers as such. By the creation of a new paradigm, we could engage in activism to show others the true potential of education when learners and teachers are at the center of the process.

Limitations to the Research

There are limitations to the study. During the proposal phase of this research, I had intended to complete interviews with participants to engage them in critical reflection about the course, garner participants' thoughts about a constructivist framework for learning, and their understandings of activism. In the month immediately after the course ended, my father-in-law passed away. The same month my mother was hospitalized with a life threatening illness. Her illness lasted about eight months and she needed me as a support for her recovery. By the time, I was available to interview participants, a great deal of time had passed and several had graduated. I was unable to contact them in an appropriate period and had to abandon my wish to conduct interviews as another data source. Another limitation is that there was a small sample size. This study could be replicated with a larger class and be

made more generalizable. It would be interesting to gather data from two semesters of the class and determine if the findings were similar based on the participants and the size of the group.

There were times over the course of the research I was concerned that I was too intertwined in participants' responses and my beliefs could have affected the results. I admit, the research had an agenda. Being at the center of the research, I tried to mitigate my feelings about the "push down" in such a way I did not let my biases impact the data. However, ethically, I acknowledge that I could not be completely objective and separate myself from the issue. As an activist, I am extremely passionate about this topic and it permeates my work with children, families, students, and colleagues.

Over the course of the research, I learned more about the concepts addressed in this section of the paper. During data collection, I most likely did not articulate the concepts to students as thoroughly as I could at this point in the project. The class created for this research has become a cornerstone in the department and all majors are required to take it as part of their degree program. As I teach this class more and more, I can integrate the pathways of resistance discussed in this chapter.

Conclusion

This dissertation began by sharing a problem statement and the issues that many teachers face in ECAE settings. In the current educational climate, ECAE programs are being forced to "push down" curriculum to children at earlier ages. The research is clear: kindergarten is the new first grade. Pre-service teacher preparation programs have to determine if they go with the status quo or if they engage students with more complex ways of thinking and knowing. This research was born in longing for pedagogies that support

children as the mighty and problem solving learners they were born to be. It was born in a longing for teachers who are thinkers and are trusted to educate children in a way that nourishes their intelligence and their hearts. It was born in a longing for systems that SEE and LISTEN to children by giving them what they want and need. This paper ends with a portion of the poem at the beginning of chapter five that prompts us to have courage to disturb what we have accepted and settled for.

May you have the courage to listen to the voice of desire

That disturbs you when you have settled for something safe.

May you have the wisdom to enter generously into your own unease

To discover the new direction your longing wants you to take.

— John O'Donohue, *To Bless the Space Between Us*

References

- Abendroth, M., & Porfilio, B. J. (Eds.). (2015). *Understanding neoliberal rule in higher education: Educational fronts for local and global justice*. IAP.
- Anderson, A.W. (2010). *Teacher perceptions of developmentally appropriate practice in early learning programs*. Unpublished thesis. Appalachian State University.
- Appalachian State University (2018). *Appalachian State University 2018-2019 undergraduate bulletin*. Retrieved from <http://bulletin.appstate.edu/index.php?catoid=15>.
- Atkinson, J. C. (2017). Countering the neos: Dewey and a democratic ethos in teacher education. *Democracy and Education*, 25(2), 2. Retrieved from <https://democracyeducationjournal.org>
- Baltodano, M. (2012). Neoliberalism and the demise of public education: The corporatization of schools of education. *International Journal of Qualitative Studies in Education*, 25(4), 487-507. doi: 10.1080/09518398.2012.673025
- Bassok, D., Latham, S., & Rorem, A. (2016). Is kindergarten the new first grade?. *AERA Open*, 2(1), 1-3. doi: 10.1177/2332858415616358
- Berk, L. E. (2008). *Infants, children, and adolescents*. Boston, MA: Pearson/Allyn and Bacon.
- Biroli, P., Del Boca, D., Heckman, J. J., Heckman, L. P., Koh, Y. K., Kuperman, S., & Ziff, A. (2017). *Evaluation of the Reggio Approach to Early Education* (No. w23390). National Bureau of Economic Research.
- Bishop-Josef, S. J., & Zigler, E. (2011). *The Pre-K debates. Current controversies and issues*. Baltimore, MD: Paul H. Brookes Publishing Company.

- Blake, B., & Pope, T. (2008). Developmental psychology: Incorporating Piaget's and Vygotsky's theories in classrooms. *Journal of Cross-Disciplinary Perspectives in Education*. 1(1), 59-67. Retrieved from <https://people.wm.edu/~mxtsch/Teaching/JCPE>
- Bodrova, E., & Leong, D. J. (2003). Chopsticks and Counting Chips: Do Play and Foundational Skills Need To Compete for the Teacher's Attention in an Early Childhood Classroom?. *Young Children*, 58(3), 10-17. Retrieved from <https://www.naeyc.org/resources/pubs/yc>
- Bogdan, R., & Biklen, S. K. (1997). *Qualitative research for education*. Boston, MA: Allyn & Bacon.
- Bowman, B., Donovan, M., & Burns, M. (Eds.). (2001). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.
- Bransford, J., Brown, A., & Cocking, R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy
- Brashier, A., & Norris, E. (2008). Breaking down barriers for first year teachers: What teacher preparation programs can do. *Journal of Early Teacher Education*. 29(1), 30-44. doi: 10.1080/10901020701878651
- Brendtro, L. K. (2006). The vision of Urie Bronfenbrenner: Adults who are crazy about kids. *Reclaiming children and youth*, 15(3), 162. Retrieved from <https://reclaimingjournal.com>
- Brooks, J. G. & Brooks, M.G. (1999). *In search of understanding: The case for constructivist classrooms*. ASCD.

- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: Sage publications.
- Brown, C. P. (2009). Helping preservice teachers learn to teach for understanding in this era of high-stakes early education reform. *Early Childhood Education Journal*, 36(5), 423-430. doi: 10.1007/s10643-009-0303-6
- Buettner, C. K., Hur, E. H., Jeon, L., & Andrews, D. W. (2016). What are we teaching the teachers? Child development curricula in US higher education. In *Child & Youth Care Forum*, 45(1), 55-175. Springer US. doi: 10.1007/s10566-015-9323-0
- Cavallini, I., Filippini, T., Vecchi, V., & Trancossi, L. (2011). *The wonder of learning: The hundred languages of children*. Reggio Emilia, Italy: Reggio Children.
- Chard, S. (1998a). *The project approach: Developing the basic framework*. New York, NY: Scholastic.
- Chard, S. (1998b). *The project approach: Developing curriculum with children*. New York, NY: Scholastic.
- Chard, S., Kogan, Y., & Castillo, C. (2017) *Picturing the project approach: Creative explorations in early learning*. Lewisville, NC: Gryphon House.
- Christakis, E. (2016). *The importance of being little: What young children really need from grownups*. New York, NY: Penguin.
- Chung, S., & Walsh, D. J. (2000). Unpacking child-centeredness: A history of meanings. *Journal of Curriculum Studies*, 32(2), 215-234. doi: 0.1080/002202700182727

- Cohen, L. E. (2008). Foucault and the early childhood classroom. *Educational Studies, 44*(1), 7-21. doi: 10.1080/00131940802224948
- Copple, C., & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. National Association for the Education of Young Children. Washington, DC: NAEYC
- Cooper, M. (2012). Is beauty a way of knowing? In C. Edwards, L. Gandini, & G. Forman (Eds.), *The hundred languages of children: The Reggio Emilia experience in transformation* (pp. 295–302). Santa Barbara, CA: Praeger.
- Crain, W. (2015). *Theories of development: Concepts and applications*. Psychology Press.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Crocco, M. S., & Costigan, A. T. (2007). The narrowing of curriculum and pedagogy in the age of accountability urban educators speak out. *Urban Education, 42*(6), 512-535. Retrieved from <https://journals.sagepub.com/home/uex>
- Crotty, M. (2015). *The foundations of social research: Meaning and perspective in the research process*. Sage.
- Cuffaro, H. K. (1995). *Experimenting with the world: John Dewey and the early childhood classroom*. Teachers College Press.
- Curtis, D., & Carter, M. (2012). *The art of awareness: How observation can transform your teaching*. Redleaf Press.
- Curtis, D., & Carter, M. (2017). *Learning together with young children: A curriculum framework for reflective teachers*. Redleaf Press

- Dahlberg, G., & Moss, P. (2004). *Ethics and politics in early childhood education*.
Routledge.
- Dahlberg, G., Moss, P., & Pence, A. (2013). *Beyond quality in early childhood education and care: Languages of evaluation*. Routledge.
- Darling-Hammond, L., Bae, S., Cook-Harvey, C. M., Lam, L., Mercer, C., Podolsky, A., & Stosich, E. L. (2016). Pathways to new accountability through the Every Student Succeeds Act. *Palo Alto: Learning Policy Institute*.
- Darling-Hammond, L., & Baratz-Snowden, J. (2007). A good teacher in every classroom: Preparing the highly qualified teachers our children deserve. *Educational Horizons*, 85(2), 111-132. Retrieved from <https://journals.sagepub.com/home/ehm>
- Doherty, G., Friendly, M., & Beach, J. (2003). *OECD thematic review of early childhood education and care: Canadian background report*. Her Majesty the Queen in Right of Canada.
- Davies, B., & Bansel, P. (2007). Neoliberalism and education. *International Journal of Qualitative Studies in education*, 20(3), 247-259. doi: 10.1080/09518390701281751
- DeVries, R. (2002). What does research on constructivist education tell us about effective schooling? *Paper submitted to the Iowa Academy of Education*.
- DeVries, R., Zan, B., Hildebrandt, C., Edmiaston, R., & Sales, C. (2002). *Developing Constructivist Early Childhood Curriculum: Practical Principles and Activities*. *Early Childhood Education Series*. Teachers College Press.
- DeVries, R., & Zan, B. (2012). *Moral classrooms, moral children: Creating a constructivist atmosphere in early education*. Teachers College Press.
- Dewey, J. (1905). *The school and society*. Chicago: The University of Chicago Press.

Dewey, J. (1916). *Democracy and education: An introduction to the philosophy of education*.
New York: The Macmillan Company.

Dewey, J. (1938). *Experience and education*. New York: Kappa Delta Pi.

Di Santo, A., Timmons, K., & Lenis, A. (2017). Preservice early childhood educators' pedagogical beliefs. *Journal of Early Childhood Teacher Education*, 38(3), 223-241.
doi: 0.1080/10901027.2017.1347588

Edwards, C. (1998). Partner, nurturer, and guide: The role of the teacher. In Edwards, C. P., Gandini, L., & Forman, G. E. (1998). *The hundred languages of children: The Reggio Emilia approach-advanced reflections*. Greenwich: Ablex Publishing.

Edwards, C., Gandini, L., & Forman, G. (Eds.). (2011). *The Hundred Languages of Children: The Reggio Emilia Experience in Transformation: The Reggio Emilia Experience in Transformation*. ABC-CLIO.

Edwards, C. P., Gandini, L., & Forman, G. E. (1998). *The hundred languages of children: The Reggio Emilia approach-advanced reflections*. Greenwich: Ablex Publishing.

Edwards, S. (2003). New directions: Charting the paths for the role of sociocultural theory in early childhood education and curriculum. *Contemporary issues in early childhood*, 4(3), 251-266. doi: 10.2304/ciec.2003.4.3.3

Epstein, A. S. (2014). *The intentional teacher: choosing the best strategies for young children's learning*. Washington, DC: National Association for the Education of Young Children.

Evans, R. I. (1973). *Jean Piaget: The man and his ideas*. EP Dutton.

- Fendler, L. (2003). Teacher reflection in a hall of mirrors: Historical influences and political reverberations. *Educational researcher*, 32(3), 16-25.
doi: 10.3102/0013189X032003016
- Foucault, M. (1980). Truth and power. In C. Gordon (Ed.), *Power/knowledge: Selected interviews and other writings 1972-1977* (pp.109-133). Brighton, UK: Harvester.
- Fosnot, C. T. (2013). *Constructivism: Theory, perspectives, and practice*. Teachers College Press.
- Galinsky, E. (2010). *Mind in the making: The seven essential life skill every child needs*. National Association for the Education of Young Children. Washington, DC: NAEYC.
- Gramling, M. (2015). *The great disconnect in early childhood education: What we know vs. what we do*. Redleaf Press.
- Gandini, & G. Forman (Eds.), *The hundred languages of children: The Reggio Emilia approach—advanced reflections*. Greenwich, CT: Ablex.
- Gandini, L. (Ed.). (2005). *In the spirit of the studio: Learning from the atelier of Reggio Emilia*. Teachers College Press.
- Gandini, L.. (2012), Foreword in C. Edwards, L. Gandini, & G. Forman. (2012). *The hundred languages of children: The Reggio Emilia approach-in transformations*. Santa Barbara: Praeger.
- Gardner, H. (2012), History, ideas, and basic principles: An interview with Loris Malaguzzi. In C. Edwards, L. Gandini, & G. Forman. (2012). *The hundred languages of children: The Reggio Emilia approach-in transformations*. Santa Barbara: Praeger.

- Genishi, C. & Dyson, A. (2014). Play as the precursor for literacy development. In L. Brooker, M. Blaise & S. Edwards *The SAGE handbook of play and learning in early childhood* (pp. 228-239). London: SAGE Publications Ltd
doi: 10.4135/9781473907850.n20
- Giroux, H. A. (2015). *Dangerous thinking in the age of the new authoritarianism*. Routledge.
- Glesne, C. (2011). *Becoming qualitative researchers: An introduction*. Boston, MA: Pearson.
- Goldstein, D. (2015). *The teacher wars: A history of America's most embattled profession*. Anchor.
- Gonzalez-Mena, J. (2001). Cross-cultural infant care and issues of equity and social justice. *Contemporary Issues in Early Childhood*, 2(3), 368-371.
doi: 10.2304/ciec.2001.2.3.8
- Graue, E. (2009). Reimagining Kindergarten: Restoring a developmental approach when accountability demands are pushing formal instruction on the youngest learners. *School Administrator*, 66(10), 10-15. Retrieved from <https://www.aasa.org/SchoolAdministrator.aspx>
- Graue, M. E., Ryan, S., Nocera, A., Northey, K., & Wilinski, B. (2017). Pulling pre K into a K-12 orbit: the evolution of pre K in the age of standards. *Early Years*, 37(1), 108-122. doi: 10.1080/09575146.2016.1220925
- Hall, K., Cunneen, M., Horgan, M., Cunningham, D., Murphy, R., & Ridgway, A. (2014). *Loris Malaguzzi and the Reggio Emilia experience*. Bloomsbury Publishing.
- Haslip, M. J., & Gullo, D. F. (2018). The changing landscape of early childhood education: Implications for policy and practice. *Early Childhood Education Journal*, 46(3), 249-264. doi: 10.1007/s10643-017-0865-7

- Heckman, J. J., Birosoli, P., Del Boca, D., Heckman, L. P., Koh, Y. K., Kuperman, S., & Ziff, A. (2017). Evaluation of the Reggio Approach to Early Education. *Research in Economics*, 1(10742), 1-48. Retrieved from <https://iris.unito.it/retrieve/handle/2318/1663075/398198/ReggioIZA.pdf>
- Hewett, V. M. (2001). Examining the Reggio Emilia approach to early childhood education. *Early Childhood Education Journal*, 29(2), 95-100. Retrieved from <https://www.springer.com/journal/10643/>
- Hoffman, J., Paciga, K., & Teale, W. (2014). Common Core State Standards and early childhood literacy instruction: Confusions and conclusions. *UIC Center for Literacy Research Report*, 2, 1-16. Retrieved from <https://cfl.uic.edu/publications-2/early-childhood-literacy/>
- Horn, M. L. V., Karlin, E. O., Ramey, S. L., Aldridge, J., & Snyder, S. W. (2005). Effects of developmentally appropriate practices on children's development: A review of research and discussion of methodological and analytic issues. *The Elementary School Journal*, 105(4), 325-351. doi: 10.1086/429946
- Howe, N., Jacobs, E., Vukelich, G., & Recchia, H. (2011). In-service professional development and constructivist curriculum: Effects on quality of child care, teacher beliefs, and interactions. *Alberta Journal of Educational Research*, 57(4), 353-378. Retrieved from <https://journalhosting.ucalgary.ca/index.php/ajer/>
- Ingersoll, R. M. (2009). Who controls teachers' work?: Power and accountability in America's schools. Harvard University Press.

- Isikoglu, N. (2008). The effects of a teaching methods course on early childhood preservice teachers' beliefs. *Journal of Early Childhood Teacher Education*, 29(3), 190-203.
doi: 10.1080/10901020802275260
- James, A., & Prout, A. (2003). *Constructing and reconstructing childhood: Contemporary issue in the sociological study of childhood*. Routledge.
- Johnson, R. (2000). Colonialism and cargo cults in early childhood education: Does Reggio Emilia really exist?. *Contemporary issues in early childhood*, 1(1), 61-78.
doi: 10.2304/ciec.2000.1.1.8
- Katz, L. G., & Chard, S. C. (1996). *The contribution of documentation to the quality of early childhood education*. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education.
- Katz, L., Chard, S. & Kogan, Y. (2014). *Engaging children's minds: The project approach*. New York, NY: Praeger.
- Kaufman, M. J., Kaufman, S. R., & Nelson, E. C. (2015). Beginning together: Reforming schools by investing in early childhood education. *Schools*, 12(1), 133-149.
doi: 10.1086/680698
- Kohn, A. (2009). Early childhood education: The case against direct instruction of academic skills. Appendix A, "The Hard Evidence," of *The Schools Our Children Deserve: Moving beyond Traditional Classrooms and "Tougher Standards."* Boston: Houghton Mifflin.
- Kroll, L. R. (2005). *Teaching as principled practice: Managing complexity for social justice*. Sage.

- Kroll, L. R., & Laboskey, V. K. (1996). Practicing what we preach: Constructivism in a teacher education program. *Action in Teacher Education*, 18(2), 63-72.
doi: 10.1080/01626620.1996.10462834
- Lazzari, A. (2012). The Public Good. Historical and Political Roots of Municipal Preschools in Emilia Romagna. *European Journal of Education*, 47(4), 556-568.
doi: 10.1111/ejed.12005
- Levin, D. E. (2013). *Beyond remote-controlled childhood: Teaching young children in the media age*. Washington, DC: National Association for the Education of Young Children.
- Lindsay, C. K., & Duvall, E. (2013). *Teacher observations and interpretations in early childhood emergent curriculum*. Unpublished dissertation. University of Idaho.
- Lindsay, G. (2015). Reflections in the mirror of Reggio Emilia's soul: John Dewey's foundational influence on pedagogy in the Italian educational project. *Early Childhood Education Journal*, 43(6), 447-457. doi: 10.1007/s10643-015-0692-7
- Lindsay, G. (2016). John Dewey and Reggio Emilia: Worlds apart-one vision. *Australian Art Education*, 37(1), 21-37. Retrieved from <https://www.arteducation.org.au/about-australian-art-education>
- Lipsey, M. W., Farran, D. C., & Hofer, K. G. (2016). *Effects of a state prekindergarten program on children's achievement and behavior through third grade*. Working Paper. Peabody Research Institute.
- Mac Naughton, G. (2003). *Shaping early childhood: Learners, curriculum and contexts*. McGraw-Hill Education (UK).

- MacNaughton, G. (2005). *Doing Foucault in early childhood studies: Applying poststructural ideas*. New York: Routledge.
- Malaguzzi, L. (1993). For an education based on relationships. *Young children*, 49(1), 9-12.
Retrieved from <https://www.naeyc.org/resources/pubs/yc>
- Mardell, B., & Carbonara, R. (2013). A research project on the Reggio Emilia approach and children's learning outcomes. *Innovations in Education*.
- McIntyre, L. L., Eckert, T. L., Fiese, B. H., DiGennaro, F. D., & Wildenger, L. K. (2007). The transition to kindergarten: Family experiences and involvement. *Early Childhood Education Journal*, 35(1), 83-88. doi: 10.1007/s10643-007-0175-6
- McMullen, M.B., Elicker, J., Goetze, J., Goetze, G., Huang, H., Lee, S., Mathers, C., Wen, X., & Yang, H. (2006) Using collaborative assessment to examine the relationship between self-reported beliefs and the documentable practices of preschool teachers. *Early Childhood Education Journal*, 34(1), 81-91. doi: 10.1007/s10643-006-0081-3
- Miller, E., & Almon, J. (2009). *Crisis in the kindergarten: Why children need to play in school*. New York, NY: Alliance for Childhood.
- Morris, M. (2016). *Curriculum studies guidebooks: Concepts and theoretical frameworks*. Vol 1. New York: Peter Lang.
- Moss, P. (2014). *Transformative change and real utopias in early childhood education: A story of democracy, experimentation and potentiality*. Routledge.
- Müller, U., Carpendale, J. I., & Smith, L. (Eds.). (2009). *The Cambridge companion to Piaget*. Cambridge University Press.

- Nicolopoulou, A. (2010). The alarming disappearance of play from early childhood education. *Human development*, 53(1), 1-4. doi: 10.1159/000268135
- Noddings, N. (1988). An ethic of caring and its implications for instructional arrangements. *American journal of education*, 96(2), 215-230. doi: 10.1086/443894
- Pacini-Ketchabaw, V., Nxumalo, F., Kocher, L., Elliot, E., & Sanchez, A. (2015). *Journeys: Reconceptualizing early childhood practices through pedagogical narration*. University of Toronto Press.
- Palmer, P. J. (2017). *The courage to teach: Exploring the inner landscape of a teacher's life*. John Wiley & Sons.
- Pelo, A., & Carter, M. (2018). *From teaching to thinking: A Pedagogy for Reimagining Our Work*. Exchange Press.
- Perry, B. D., & Szalavitz, M. (2010). *Born for love: Why empathy is essential--and endangered*. Harper Collins.
- Phillips, D, Mekos, D., Scarr, S., McCartney, K. & Abbott-Shim, M. (2000). Within and beyond the classroom door: Assessing quality in child care centers. *Early Childhood Research Quarterly*, 15(4), 475-496. doi: 10.1016/S0885-2006(01)00077-1
- Phillips, D. A., & Shonkoff, J. P. (Eds.). (2000). *From neurons to neighborhoods: The science of early childhood development*. National Academies Press.
- Piaget, J. (1952). *The origins of intelligence in children*. New York: International Universities Press.
- Project Zero. (2003). *Making teaching visible: Documenting individual and group learning as professional development*. Cambridge, MA: Harvard University.

- Pucci, A. (2015). The consumed university: Neoliberalism in academia. In Abendroth, M., & Porfilio, B. J. (Eds.). (2015). *Understanding neoliberal rule in higher education: Educational fronts for local and global justice*. IAP.
- Pulaski, M. A. S. (1971). *Understanding Piaget: An introduction to children's cognitive development*. New York: Harper & Row.
- Ramachandran, V. S. (2012). *The tell-tale brain: Unlocking the mystery of human nature*. Random House.
- Raver, C., & Knitzer, J. (2002). *Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year old children*. New York, NY: National Center for Children in Poverty.
- Ridgway, A., & Quinones, G. (2012). How Do Early Childhood Students Conceptualize Play-Based Curriculum?. *Australian Journal of Teacher Education*, 37(12), 46-56. doi: 10.14221/ajte.2012v37n12.8
- Rinaldi, C. (2003). The teacher as researcher. *Innovations in early education: The international Reggio exchange*, 10(2), 1-4. Retrieved from <https://www.reggioalliance.org/resources/innovations-articles/>
- Rogoff, B. (1995). Observing sociocultural activity on three planes: Participatory appropriation, guided participation, and apprenticeship. In J. V. Wertsch, P. del Río, A. Alvarez, J. V. Wertsch, P. del Río, A. Alvarez (Eds.). *Sociocultural studies of mind* (pp. 139-164). New York, NY, US: Cambridge University Press. doi: 10.1017/CBO9781139174299.008

- Rogoff, B. (2003). *The cultural nature of human development*. New York: Oxford University Press.
- Russell, J. L. (2007). *Not kid stuff anymore? Institutional change in kindergarten education*. University of California, Berkeley.
- Rubin, K.H., Bukowski, W., & Parker, J.G. (1998). Peer interactions, relationships, and groups. In N. Eisenberg (E), *Handbook of child psychology, 5*, pp. 619-700. New York: Wiley.
- Russell, J. L. (2011). From child's garden to academic press: The role of shifting institutional logics in redefining kindergarten education. *American Educational Research Journal*, 48(2), 236-267. doi: 10.3102/0002831210372135
- Ryan, J. E. (2006). A constitutional right to preschool?. *California Law Review*, 94(1), 49-99. doi: 10.2307/20439027
- Sandall, S., Hemmeter, M.L., Smith B.J., & McLean, M.E. (Es.). (2005). *DEC recommended practices: a comprehensive guide for practical application in early intervention/early childhood special education*. Missoula, MT: Division for Early Childhood.
- Schiller, P. (2010). Early brain development research review and update. *Exchange*, 196, 26-30. Retrieved from <https://www.childcareexchange.com/>
- Shayer, M. (2003). Not just Piaget; not just Vygotsky, and certainly not Vygotsky as alternative to Piaget. *Learning and instruction*, 13(5), 465-485. doi: 10.1016/S0959-4752(03)00092-6
- Shonkoff, J. P. (2017). Breakthrough impacts: what science tells us about supporting early childhood development. *Young Children*, 72(2), 8. Retrieved from <https://www.naeyc.org/resources/pubs/yc>

- Sims, M. (2017). Neoliberalism and early childhood. *Cogent Education*, 4(1). 1-10.
doi: 10.1080/2331186X.2017.1365411
- Sims, M., Forrest, R., Semann, A., & Slattery, C. (2015). Conceptions of early childhood leadership: Driving new professionalism?. *International Journal of Leadership in Education*, 18(2), 149-166. doi: 10.1080/13603124.2014.962101
- Singer, D. G., & Revenson, T. A. (1997). *A Piaget primer: How a child thinks*. Madison, CT International Universities Press, Inc.
- Skinner, B. F. (1953). *Science and human behavior*. New York, NY. Simon and Schuster.
- Somekh, B. (2009). *The SAGE handbook of educational action research*. Sage Publications.
- Stipek, D. (2006). No child left behind comes to preschool. *The Elementary School Journal*, 106(5), 455-466. doi: 10.1086/505440
- Stringer, E. T. (2008). *Action research in education*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Taguchi, H. L. (2005). Getting personal: How early childhood teacher education troubles students' and teacher educators' identities regarding subjectivity and feminism. *Contemporary Issues in Early Childhood*, 6(3), 244-255. doi: 10.2304/ciec.2005.6.3.5
- Unicef. (2009). *The child care transition: A league table of early childhood education and care in economically advanced countries*. UN.
- Vartuli, S. (2005). Beliefs: The heart of teaching. *Young Children*, 60(5), 76.
<https://www.naeyc.org/resources/pubs/yc>

- Vartuli, S., & Rohs, J. (2009). Early childhood prospective teacher pedagogical belief shifts over time. *Journal of early childhood teacher education*, 30(4), 310-327.
doi: 10.1080/10901020903320262
- Vecchi, V. (2010). *Art and creativity in Reggio Emilia: Exploring the role and potential of ateliers in early childhood education*. Routledge.
- Viruru, R. (2005). The impact of postcolonial theory on early childhood education. *Journal of Education*, 35(1), 7-30. Retrieved from <https://journals.co.za/content/journal/joe>
- Vygotsky, L. S. (1962). *Thought and language*. MIT press.
- Walter, M. (2009). Participatory Action Research. Social Research Methods. In A. Bryman (Ed.), *Social Research Methods* (pp. 151-158). London: The Falmer Press.
- Wiersma, W. and Jurs, S. G. (2009). *Research methods in education: An introduction* (9th ed.). Montreal/Boston: Pearson/Allyn and Bacon.
- Wilgus, G. (2005). "If you carry him around all the time at home, he expects one of us to carry him around all day here and there are only TWO of us!" Parents', teachers', and administrators' beliefs about the parent's role in the infant/toddler center. *Journal of Early Childhood Teacher Education*, 26(3), 259-273.
doi: 10.1080/10901020500369829
- Wohlwend, K. E. (2018). Playing to our strengths: Finding innovation in children's and teachers' imaginative expertise. *Language Arts*, 95(3), 162-170. Retrieved from scholarworks.iu.edu
- Woodson, K. (2017). Why kindergarten is too late: The need for early childhood remedies in school finance litigation. *Arkansas Law Review*. 70(1), 87-137. Retrieved from <https://scholarworks.uark.edu/alr/vol70/iss1>

Yin, R. K. (2009). Case study research: Design and methods (applied social research methods). *London and Singapore: Sage.*

Appendix A: Consent Form

Information to Consider about this Research

Title: Pushing Back Against the “Push Down”: An Examination of Pre-Service Teachers’ Beliefs and Intentions as Resistance to the Accountability Movement in Early Care and Education Settings

Principal Investigator: Andrea Anderson

Department: Lucy Brock Child Development Lab School

Contact Information: 828 262 3006 (phone) andersonaw@appstate.edu (e-mail)

Principal Investigator: Denise Brewer

Department: Family and Child Studies

Contact Information: 828 262 7966 (phone) brewerdm@appstate.edu (e-mail)

You are invited to participate in a research study about pre-service teachers’ perceptions of teaching and learning.

If you agree to be part of the research study, you will be asked to share your ideas and responses to prompts and assignments about your beliefs and intentions regarding teaching interactions with children and families. You will complete these prompts and assignments in the context of class work. You may be asked to participate in a short interview to determine more information regarding your beliefs and intentions. Classes, responses to prompts, and interviews will be recorded for data analysis but will be deleted upon completion of the study.

Participating in this study is completely voluntary. Your grade will not be affected by your participation in this study. You will not be compensated for this research. Even if you decide to participate now, you may change your mind and stop at any time. You may choose not to allow your responses for the prompts or assignments to be included in the research for any reason.

If you have questions about this research study, you may contact Andrea Anderson, Primary Investigator and Dr. Denise Brewer, Faculty Advisor and Co-Investigator

The Appalachian State University Institutional Review Board (IRB) has determined that this study is exempt from IRB oversight.

By continuing to the research procedures, I acknowledge that I am at least 18 years old, have read the above information, and agree to participate.

I agree to participate in the study.

Signature

Date

Appendix B: IRB Approval



INSTITUTIONAL REVIEW BOARD

Office of Research Protections ASU Box 32068
 Boone, NC 28608
 828.262.2692
 Web site: <http://researchprotections.appstate.edu>
 Email: irb@appstate.edu
 Federalwide Assurance (FWA) #00001076

To: Andrea Anderson
 Lucy Brock Child Dev Lab Prog Lucy Brock Child Dev
 Lab Prog CAMPUS EMAIL

From: Robin Tyndall, IRB Administrator

Date: 8/22/2018

RE: Notice of IRB Exemption

Agrants #:

Grant Title:

STUDY #: 19-0012

STUDY TITLE: Pushing Back Against the "Push Down": An Examination of Pre-Service Teachers' Beliefs and Intentions as Resistance to the Accountability Movement in Early Care and Education Settings

Exemption Category: (1) Normal Educational Practices and Settings,(2) Anonymous Educational Tests; Surveys, Interviews or Observations

This study involves minimal risk and meets the exemption category cited above. In accordance with 45 CFR 46.101(b) and University policy and procedures, the research activities described in the study materials are exempt from further IRB review.

All approved documents for this study, including consent forms, can be accessed by logging into IRBIS. Use the following directions to access approved study documents.

1. Log into IRBIS
2. Click "Home" on the top toolbar

3. Click "My Studies" under the heading "All My Studies"
4. Click on the IRB number for the study you wish to access
5. Click on the reference ID for your submission
6. Click "Attachments" on the left-hand side toolbar
7. Click on the appropriate documents you wish to download

Study Change: Proposed changes to the study require further IRB review when the change involves:

- an external funding source,
- the potential for a conflict of interest,
- a change in location of the research (i.e., country, school system, off site location), the contact information for the Principal Investigator,
- the addition of non-Appalachian State University faculty, staff, or students to the research team, or
- the basis for the determination of exemption. Standard Operating Procedure #9 cites examples of changes which affect the basis of the determination of exemption on page 3.

Investigator Responsibilities: All individuals engaged in research with human participants are responsible for compliance with University policies and procedures, and IRB determinations. The Principal Investigator (PI), or Faculty Advisor if the PI is a student, is ultimately responsible for ensuring the protection of research participants; conducting sound ethical research that complies with federal regulations, University policy and procedures; and maintaining study records. The PI should review the IRB's list of PI responsibilities.

To Close the Study: When research procedures with human participants are completed, please send the Request for Closure of IRB Review form to irb@appstate.edu.

If you have any questions, please contact the Research Protections Office at (828) 262-2692 (Robin). Best wishes with your research.

Websites for Information Cited Above

Note: If the link does not work, please copy and paste into your browser, or visit

[https://researchprotections.appstate.edu/human subjects](https://researchprotections.appstate.edu/human_subjects).

1. PI responsibilities:

<http://researchprotections.appstate.edu/sites/researchprotections.appstate.edu/files/PI20Responsibilities.pdf>

2 IRB forms: <http://researchprotections.appstate.edu/human-subjects/irb-forms>

CC:

Denise Brewer, Family and Child Studies

Appendix C: Syllabus

FCS 3250 – Reflective Practices: Observation and Constructivist Pedagogy in Early Care and Education Settings (3 hours- Combined Lecture and Lab) (prerequisite: FCS 2102)

Course Description:

FCS 3250. Reflective Practices: Observation and Constructivist Pedagogy in Early Care and Education Settings. This study will engage students in an understanding of the tenets of constructivist pedagogy and examine exemplars of constructivist practice. Students will learn the importance of observation, planning, and reflective practice in early care and education settings that focus on inquiry and the facilitation of relationships. Students will observe children and create pedagogical documentation that facilitates the constructivist practice of learning with children and families.

TEXT:

Curtis, D., & Carter, M. (2013). *The art of awareness: How observation can transform your teaching*. St. Paul, MN: Redleaf Press.

Curtis, D., & Carter, M. (2008). *Learning together with young children: A curriculum framework for reflective teachers*. St. Paul, MN: Redleaf Press.

DeVries, R., Zan, B., Hildebrandt, C., Edmiaston, R., & Sales, C. (2002). *Developing constructivist early childhood curriculum: Practical principles and activities*. VT: Teachers College Press.

Student Objectives:

1. Understand and articulate tenets of Constructivist practice in early care and education settings.
2. Develop a deep and lasting respect for children's competence and capabilities.
3. Examine and use observation methods while documenting and planning care and curriculum experiences.
4. Examine experiences through the lens of young children and their families.
5. Understand the connection of the awareness of children's perspectives and the co-construction of experiences for children and families.
6. Understand the connection between observation, theories of child development, and emergent learning experiences.
7. Examine different interpretations of the incorporation of play in early care and education settings.

Classroom Policies

Academic Integrity

As a community of learners at Appalachian State University, we must create an atmosphere of honesty, fairness, and responsibility, without which we cannot earn the trust and respect of each other. Furthermore, we recognize that academic dishonesty detracts from the value of an

Appalachian degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form and will oppose any instance of academic dishonesty. This course will follow the provisions of the Academic Integrity Code, which can be found on the Office of Student Conduct Web Site: www.studentconduct.appstate.edu.

Cell Phones

Electronic devices should be turned OFF during class. See instructor before class if there is an emergency situation where you will need to keep your cell phone turned on. In an emergency situation, with instructor permission, the phone should be on the vibrate function and the student will leave the room before talking on the phone.

Computer usage during class time.

Please be respectful of the learning environment. Checking e-mails, shopping, or browsing Facebook is not an appropriate use of the computer during our time in class. If students are found to be using a computer for anything other than taking notes or completing in class assignments, students will lose points in the same progression as the attendance policy below. The instructor reserves the right to implement a “no computer” rule during lecture if students fail to be respectful of this policy.

Classroom Decorum

Everyone is expected to be respectful of other students, other opinions, other cultures, and children at all times. Diversity of all areas will be honored in class and in course assignments. Students are also expected to be attentive and prepared in class. They are expected to arrive on time. Sleeping in class is not permitted and will result in loss of points. Also, students who work on outside assignments for this or other courses will lose points.

Inclement Weather

Please refer to the Appalachian website for class cancellations. If classes are not cancelled, the instructor will make every effort to be present for class. If there are class cancellations, the instructor will send an email to the class via their ASU email accounts at least two hours before class.

Instructor/Student Contact

Students can contact the instructor during posted office hours or via phone message or via email message. If the instructor needs to contact students, contact will be made via your ASU email accounts.

Disabilities

Appalachian State University is committed to making reasonable accommodations for individuals with documented qualifying disabilities in accordance with the Americans with Disabilities Act of 1990, and Section 504 of the Rehabilitation Act of 1973. Those seeking accommodations based on a substantially limiting disability must contact and register with The Office of Disability Services (ODS) at <http://www.ods.appstate.edu/> or 828-262-3056. Once registration is complete, individuals will meet with ODS staff to discuss eligibility and appropriate accommodations.

Homelessness and Food Insecurity

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students, 324 Plemmons Student Union, for a list of resources and support. The ASU Food Pantry and Free Store is a free resource with pantry and personal care items, located in the Office of Sustainability on the bottom floor of East Hall. Furthermore, please notify the professor if you are comfortable in doing so. This will enable him/her to assist you with finding the resources you may need.

Course Requirements

Attendance, Punctuality, and Participation:

Perfect attendance is expected. I will keep a close record of class attendance. You will be allowed one absence. Any absences beyond that, excused or otherwise, will result in the loss of points. Be aware that failure to attend class sessions or coming to class tardy will result in the loss of points. observation experiences are just as important as coming to class. Please make every effort to make your scheduled observation times. You are also expected to complete readings and participate in class discussions. Failure to do so will result in the loss of points.

Each absence beyond the one allowed will result in the following loss of points:

1st absence:	0
2nd absence	-100
3rd absence:	Automatic failure of FCS 3250

Note the progression. Two tardies equal 1 absence. Lack of preparation and participation, as well as inappropriate classroom behavior (i.e. talking when the instructor or other students are speaking, sleeping in class, etc) are equal to one tardy per incident.

Grading:

A = 100-93%	A- = 92-90%
B+ = 89-87%	B = 86-83%
B- = 82-80%	C+ = 79-77%
C = 76-73%	C- = 72-70%
D+ = 69-67%	D = 66-63%

FCS 3250 Course Outline

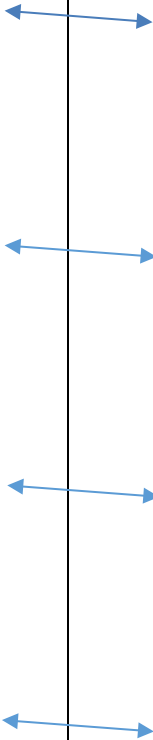
Tuesday 5-7:40

*Course syllabus may be changed by professor if necessary:
this document is dynamic therefore updates will be
posted periodically on ASUlearn and discussed in class.*

August 21	Welcome and syllabus review
28	Art of Awareness – Introduction & Chapter 1 <i>Choose lab times/lab orientation</i> Dear self-letter ... (in class)
September 4	Developing Constructivist Early Childhood Curriculum - DeVries Art of Awareness Chapter 2 Photo essay instructions Image of the child (metaphor in class) Preparing for the lab
11	Lab week
18	ON ASUlearn Developing Constructivist Early Childhood Curriculum - DeVries - Ch.2 Art of Awareness Chapter 3
25	Lab week
October 2	For the first half of class we will meet in the COE - review the material we covered on ASUlearn- print out your discussions threads and bring to class Photo Essay due - we will move to LB to print and laminate sequences after we go over presentations
9	Meet in class - 5-6 Observation form Ordinary Moments reading- posted on ASUlearn Documentation Exemplars Lab week- 2 hours

16	Teaching metaphor (in class) Art of Awareness Chapter 4 Developing Constructivist Early Childhood Curriculum - DeVries - Ch.3
23	Lab week
30	Observation 1 due on ASUlearn by the beginning of class Art of Awareness Chapter 5 Developing Constructivist Early Childhood Curriculum - DeVries - pt II, Ch 4 Ramps and Pathways Clay Shadow Work
November 6	Lab week
13	CLASS AT LUCY BROCK - Start 5:30 Engaging with materials 2 hours lab week
20	Lab week – Observation 2 due on ASUlearn by 11:59 pm
27	Art of Awareness Chapter 6 Developing Constructivist Early Childhood Curriculum - DeVries - Ch 5
December 4	Pedagogical documentation due on ASUlearn by 5:00 pm Present to class
11	Final Exam Period

Appendix D: Observation Form

Observation – THE FACTS	My Interpretation – Questions/ Wonderings Gateways into the children’s thinking and learning Gateways into teachers thinking and learning	Connections to NC FELD
		

Appendix E: Assignments by Student

Marie

Dear Self-Letter

Dear Self,

I remember in kindergarten, my teacher would ask us to sit on the carpet as she turned the lights down and introduced us to a book about a hermit crab. I loved her enthusiasm while reading and the actual hermit crab that she brought into the classroom. I looked forward to reading time and how she would engage with the text.

I remember my 2nd grade teacher would reward us with candy or with a squirt of juice he kept by his desk. I remembered receiving a handful of candy, because I was the only child who didn't talk and listened.

For high school, I remembered the dreadful index cards I had to write to remember for final exams. My teacher would reserve days for us to write definitions all day. I never enjoyed it!

I believe that learning does come through a child's interest and environment. It can be difficult to teach meaningful things when there are end of grade exams. Every child learns differently and at a different rate. It is important as a future caretaker or educator to dig deeper into the child you work with to meet their needs to help them reach their full potential.

Response:

What an amazing memory of story time as a young child. You painted a picture of such an inviting environment and engaging teacher. What an interesting reward system for 2nd grade, but how nice to feel appreciated. And, oh the flash cards, I remember them well too. What good memorization skills we practice, but so little applied knowledge and such a waste of paper!

You are so right how the environment changes are learning and the way we feel about it. It was obvious to me how pleasant that first experience you shared was, but how much you disliked days devoted to flashcards. So true that all children learn differently and so great you see the importance of meeting all children's needs.

ENVIRONMENT

Image of the Child

Colored and scarred with memory of your loving mother who left you in your arms. Being tough and resistance was all you knew to cover what was underneath. Slowly as I gave you blocks and gave you the chance to express yourself, your bright smile that lit up that frown you always had on your face brought the happiest moments that I strived to do. You began to smile more, laugh more, and joke around with me. Such a delightful, smart, and caring boy who strives to be better and smarter. A young boy who felt he wasn't smart enough and who would never feel loved again. A young boy who was almost my height with a charismatic

persona, only to reveal how kind and strong will you are to pursue your dreams. To a young boy who had many doubt and pain, I believed you and believed you could do anything to change your world. Don't forget to keep that bright smile on your face and the burning desire to keep trying. Many people may not know you go through, but believe in yourself. To the young child who will make a difference in life, never stop trying.

Teaching Metaphor

Teaching is like painting a picture on a canvas. First, the artist much find an interest or idea to express to its viewers. In the same sense, as caregivers, it's essential to know every child's interest and background before moving to the next step. It may take the artist a few trials before coming into a conclusion. As caregivers, it takes a process to learn from each child and how to build on their knowledge. Once the artist has the picture of image, they take careful consideration into color, lines, and space within a picture. Each child has their own set of ideas and thoughts as teachers may present something to them. Every child could approach it differently and it's how the caregiver receives the thought of the process that the caregiver should engage to want to build on it. In the end, the artist has its own unique style to express that it is their own work. Children all learn differently and caregivers should emphasize the child's knowledge through their work.



What did you learn in this class?

In this class, there were so many learning moments I had that I continue to apply to my philosophy of child development. I loved the open class discussions about our readings and wonderings. It helps me a lot to think in a different perspective and to dig deeper in our readings and discussions. This course was a great refresher for me in documenting and exploring children's wonderings and play. It helps me to practice capturing learning moments children experience in the classroom while we may not think of it to be a huge moment. I loved capturing those moments and digging deeper to understanding children.

Overall, I learned taking new perspective in education and development in our society and classroom and how to support or implement the ideas into our classrooms or career.

Photo Essay







Documentation Project

Delilah and the Fish Puzzle



One morning during free play, a colorful fish puzzle laid on a table near the block center. The puzzle had light and dark colors of fishes. All the fishes on the puzzle were different shapes and sizes. Delilah approached the fish puzzle and picked up a magnet that was attached to a string with a truck at the end. She started to lift each colorful fish off the puzzle with a delightful smile each time.

HPD-5f: Use simple tools (spoon for feeding, hammer with pegs, crayon for scribbling.)
 ESD-2: Children express positive feelings about themselves and confidence in what they do.

Every time Delilah lifted each fish off the puzzle, she would throw them on the ground next to her. Then I asked her if she could put all the fish back on the puzzle while I pointed to the empty spots on the board. Delilah took a step back and bent down and said, "yeah." She picked up a fish and the magnet from the ground. She placed them on top of the puzzle and brought three more fish to the table. *What made Delilah commit to a challenging task that may bring some frustration in the process?*



APL-Children are willing to try new and challenging activities.

Delilah picked up a blue fish on the table and smiled at it. She tried to place the blue fish on the board in three different spots. I directed her where on the board it said that the blue fish would go in. She looked around the puzzle and put her hands on the table. I picked up the blue fish and placed it near the empty spot that it would go in. I asked her to try and twist the fish into the empty spot. She began to twist and turn the blue fish and smiled with excitement as got the fish to go in the puzzle. *How could my language with Delilah help her through this process?*



LDC-2: Children participate in conversations with peers and adults in one-on-one, small and larger group conversations.
Goal HPD-5: Children develop small muscle control and hand-eye coordination to manipulate objects and work with tools.

Delilah bent down and grabbed two more fish off the floor. She put them on the table as she looked around the puzzle. I told her where the red fish was on the puzzle as she followed through by placing it in the correct spot by twisting and using both hands to push it down. However, Delilah said something I couldn't understand while I encouraged her that the fish will fit in the empty spot. She tried to put the red fish back into the correct spot by lifting and turning the fish once again. She lifts the red fish off the puzzle and bit it. Then, I put the red fish in the puzzle to demonstrate that it would go in the empty spot she's been trying to do so persistently. *How was Delilah's confidence affected as she tried a second time to put the red fish in the puzzle? What prompts or motions could I have used to support her play?*



HPD-5: Children develop small muscle control and hand-eye coordination to manipulate objects and work with tools.
LDC-1e: Respond to others by using words or signs.

Soon after, Delilah grabbed a yellow fish off the ground. She put the yellow fish on a random spot on the puzzle. I told her that the yellow fish was on the other side of the puzzle. She moved the fish to the other side of the puzzle and got it in the first try. She smiled as she got the fish to go in and began to say a short phrase as she laid her hands on her chest. *What made this interact a lot easier than the last one?*



ESD-2: Children express positive feelings about themselves and confidence in what they can do.

Delilah saw another fish in front of her and reached over to grab it. She said, "green," as she picked it up and started moving it around the puzzle. She twisted and turned the fish as I directed her where it belonged on the puzzle. *Did Delilah really need my assistance since she got the yellow fish in herself? Why did I have to assist her this time? Were there too many empty spots on the puzzle that she needed assistance?*



LDC-1e: Respond to others by using words or signs.
HPD-5e: Use hands and eyes together (put together and take apart toys, feed themselves finger foods, fill containers). HPD-5e

I picked up a light green fish and told Delilah it went in a certain spot where it said light green. Delilah said something I couldn't understand and I told her it would fit. I picked up the fish and put it near the empty spot on the puzzle. Delilah said, "Let me try," as she grabbed the green fish and moved it in different areas on the puzzle.



APL-5: Children are willing to try new and challenging activities.

LDC-2: Children participate in conversations with peers and adults in one-on-one, small, and larger group interactions.

Now Delilah only had three more puzzle pieces to go until she was completely finished. She found one fish on the ground next to her feet and brought it back to the table. She found two empty spots on the puzzle that she wanted to try to fit it in. Then I asked her if she needed some help and she said, "yes." I directed her that she would need to turn it around and push it down. She responded saying, "no no," as I watched her do it on her own. She began to sing and bounce up and down while putting the fish in the correct spot. Then she looked around and said, "all done," as she saw someone leave the room. She ran towards the door and waved goodbye to them. *Where do I find the right time to step in to assist her and when to let her do it on her own? How do I keep her persist on this task without getting frustrated in finishing this task?*



LDC-1f: Respond to gestures, facial expressions, tone of voice, and some words that show emotions.

ESD-2e: Show confidence in their ability to make things happen by repeating or changing their actions to reach a goal (move closer to reach an object they want).

Jillian

Dear Self-Letter

Dear Self,

I know you remember clinging to the fence during outdoor play so you could talk to your cousin through the fence. I know you tried to hide from the teachers, who would tell you to go and play then proceed to stand in the adult circle in which you were not welcome. I know your heart needed to be valued and have a deep conversation rather than run and play, and that is okay. You are healed and seen today. (Parents divorced at age 3)

I know you remember your teacher who let you stand at her feet while she talked to another teacher and played with your hair. She always let you go to the cozy corner and read whenever you felt you needed to. She valued your presence and still does to this day. May the same love, patience, and joy you felt to be with this teacher, also reside in your kiddos.

I know you remember feeling overlooked and unimportant, but your teacher saw your capabilities as a leader in the kitchen. She fostered a community, that wasn't only academic, but also inspired you in your love for motherhood and family. May you remember how capable she made you feel and give your students the same opportunity. I love you.

Response:

Thanks for letting me read your letter! I understand what having divorced parents can do to a child that young. I found it to be both cute and funny, the story of you climbing the fence during play time. I know you will have great experiences with your children and that they will feel that they can have these deep conversations with you. I also hope that you will be able to foster these communities both in and out of school for and with your children.

CONNECTION

Image of the Child

Hey Friend...

I see your cute dimples and glowing smile.

I see your curly blonde hair and beautiful skin tone.

I see your smile creases under your eyes that smile back at me...

I see your arms stretched out in front of you every time we greet each other and

I love your high 5 wave when you're meeting someone new

I admire your resilience in a time filled with so much change.

I admire your willingness to learn new words and practice gentle hands.

I admire how you are excited for school and look forward to seeing your friends.

I admire the way you let me hold you before nap, thank you for trusting me to care for you.

I love the energy you bring to our learning space.

I notice how you are exploring ways to make new friends with kiddos your age.
 I notice how you like to engage in your environment with your hands.
 I notice how much you love your mommy... and I've enjoyed becoming her friend.
 I notice how happy you are to see me... believe me I'm happy too.

I love to watch you zoom around the room with the shopping cart.

You see the sunshine in all those around you .
 You admire the patience and love of others.
 You notice when someone is genuine, and boy, I love you...

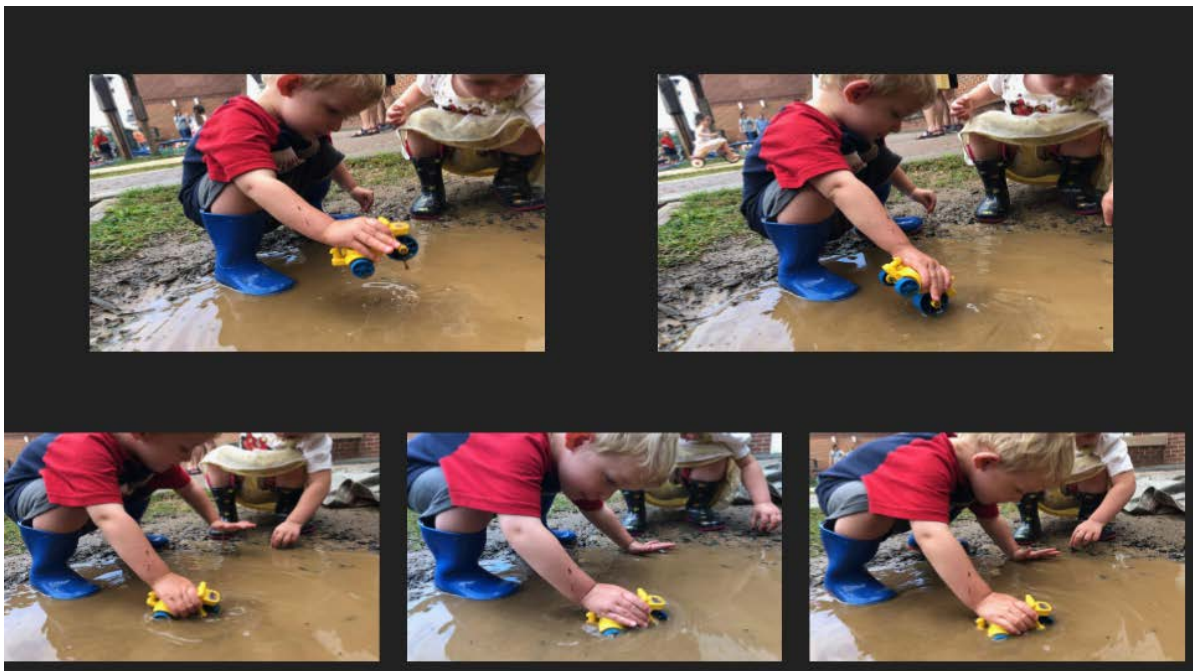
Although I don't see you everyday... I look forward to growing with you the next time I am at school with you. You are the highlight of my mornings. I'll see you Saturday day at the Farmers Market.

Teaching Metaphor

Teaching is creating a home... Your classroom is your brick amongst the building, which is your school. You cannot choose the materials (or students) your brick is made of. Rather it is your role to use the materials you have (students) to build the strongest foundation in your classroom, thus strengthening your school. Each material (student) is valuable, needed, and used in the process of creating a home. As the bricklayer in the school (lead teacher) your encouragement and investment into each student is used in the strengthening and creating of your home (classroom). The collaboration in your classroom makes for a tighter interwebbing of relationships that is not easily broken, like family. Teaching is creating a home where students feel safe, welcomed, and encouraged to be the strongest version of themselves. May we all see teaching as an opportunity to let the competence and strength of our students shine forth from our classrooms, and not only create stronger classes and schools, but stronger communities. Teaching is creating a home.



Photo Essay







Documentation Project

Silent Science

S.I.L.E.N.T. SCIENCE

It was a sunny afternoon at the Lucy Brock preschool playground and they began to take interest and a new and exciting element on the playground. Can you guess what it was? No, it wasn't cotton balls, dress up, or reused dirty rain... it was CLEAR, CLEAN, & COLD water delivered via pitcher to the playground. What started as a tea party between the girls expanded to a unique play experience with many students and a SILENT science experiment for Arlo.

S- SKILL

Arlo noticed EmmaLeah, Evelynnn, Everleigh, and Leah pouring clean water into cups. He was playing in a bowl of sand and *paused*. He filled up a cup of water and brought it over to his bowl of sand...

I wonder if he was thinking what he can do with the clean water and sand or if he just wanted to play with the clean water like his classmates. Did he have a plan before starting the experiment? Has he ever done this before?

NC Foundation for Early Learning and Development: Curiosity, Information-Seeking, and Eagerness: APL- 1 : Children show curiosity and express interest in the world around them.



I-INTEREST

Arlo treated the water and sand, as if it was a treasure, with great gentleness and curiosity as he experimented by mixing the two materials. After filling the cup, he stepped with eagerness to his bowl of sand, being careful not to spill any water. He squatted down to the ground and used his left hand to make a hole in the bowl of sand.

I wonder if he wanted to treasure the water, and use it in the best way possible? Was he thinking conservatively? I wonder if he meant to pour it all into the bowl so he could have lots of water to mix and experiment with? Was he asking himself if it could all fit in the hole?

NC Foundation for Early Learning and Development: Curiosity, Information-Seeking, and Eagerness: APL- 2 : Children actively seek to understand the world around them.



L-LEARN

I wonder if he was planning on dumping it all back into the bowl when he was carefully putting it into the cup? What could I have asked him to inquire about his plan without stunting the curiosity?

Well, the water fit in the bowl... all of it. Arlo patted the top of the water gently and created a little splash with his flat hand. He seemed to be displeased that all the water was gone and it was evident this was just the beginning of experiment. So he used his hand to grab part of the sand and water and put it in the cup. Arlo didn't grab it with monster-like claws, it was with the same mindset that this water was a treasure. He picked up a little bit at a time, using his 4 fingers and thumb like a clasp. Watching as the sludge-like mixture fell into the cup. Once the cup was filled, he dumped the mixture back into the bowl, yet now the water was not sitting on top of the sand, it was mixed.

NC Foundation for Early Learning and Development: Construction of Knowledge :Thinking and Reasoning: CD-1 Children use their senses to construct knowledge about the world around them.



E-EXPERIMENT

NC Foundation for Early Learning and Development: Construction of Knowledge: Thinking and Reasoning : CD-2 Children recall information and use it for new situations and problems.



Arlo then got another cup of clean water, *I wonder what will happen if I add another cup of water to my mixture? This time I am not going to create a hole in the top.* He slowly, and carefully poured the water onto the sand watching it shape and form around the textures in the sand. As the water made it to the other side of the bowl from where he poured it in, he scooped a handful of sand up and placed it down in between the canal of water going from the pond to the hole he created. *I can stop the water from overflowing by creating a dam, like a pond.* Arlo was able to recall information to solve the current problem in his experiment. He looked intensely after creating the dam and continued to experiment.

I wonder if he has been to a dam in a pond before to make him recall the purpose of a dam? If I asked him why he put the lump of sand there, would his answer be to block the water?



VITA

Andrea Anderson grew up in Appalachia surrounded by strong women who loved caring for young children. She graduated from Appalachian State University with a B.S. in Child Development in 1994. She received her Birth through Kindergarten teacher licensure from Western Carolina University in 2001. Her son's arrival prompted her next adventure in academia and she graduated with a M.A. in 2010 from Appalachian State University. Not content with the status quo, in 2015, she began the doctoral program at Appalachian and earned her Ed.D. in Educational Leadership in 2020.

Ms. Anderson has taught in a variety of settings including, Head Start, public school, private centers, and in higher education. Currently, she is director at the Lucy Brock Child Development Lab in the Reich College of Education at Appalachian State University. She understands that the best teachers never stop learning and continues to learn more about early care and education daily. Ms. Anderson enjoys working with pre-service and beginning teachers, mentoring teachers as they complete project work, and engaging in activism to try to make the world for children and families a bit better. She has presented professional development sessions in various settings. She also loves being in the classroom with young children, especially reading a book or having a makeover in the dramatic play center.

Ms. Anderson resides in Deep Gap, NC with her husband, son, and a motley crew of rescue animals.