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## Re-Integrating Play-Based Learning (PBL) Activities into the Primary Classroom

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RE-INTEGRATING PLAY-BASED LEARNING (PBL) ACTIVITIES INTO THE  
PRIMARY CLASSROOM

by

Katherine Horstmann

A capstone project submitted in partial fulfillment of the requirements for the degree of  
Masters of Arts in Literacy Education

Hamline University

Saint Paul, Minnesota

May 2022

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## DEDICATIONS

### To My Parents -

Thank you for teaching me the value of education. I never would have pursued higher education without the love and support from you both throughout my life. I am so grateful to you both for the opportunities and experience you have provided me with and could not have done this without you.

### To My Principal -

Thank you for believing in me four years ago and continuing to support me each day since. I would not be the educator I am today without you and I look forward to all of the future learning to come under your leadership.

### To My Students -

You are the reason I chose this profession and why I come to school each day with a smile on my face. You teach me more than I could ever hope to teach you. You are my constant motivation to be a better teacher and keep learning so I can give you the best each and every day.

## TABLE OF CONTENTS

CHAPTER ONE: Introduction.....	6
Introduction.....	6
Chapter Overview.....	7
Background.....	7
Evolution of Kindergarten.....	8
Rationale.....	9
Value to Community.....	11
Summary.....	13
CHAPTER TWO: Literature Review.....	14
Introduction.....	14
Over-Valuing of Academics.....	15
The Changes.....	16
Causes for Change.....	17
Consequences.....	18
Summary.....	19
Child Development Theories and Play.....	20
Piaget.....	20
Vygotsky.....	21
Additional Theories.....	22
Summary.....	23
Importance of Play.....	23
Forms of Play.....	24

	4
Developmental Benefits of Play.....	25
Purposeful Play.....	27
Integration.....	28
Summary.....	29
Gaps in Current Research.....	30
Chapter Summary.....	30
CHAPTER THREE: Method.....	32
Introduction.....	32
Project Overview.....	33
Setting and Audience.....	37
Project Timeline.....	38
Project Assessment.....	38
Chapter Summary.....	39
CHAPTER FOUR: Conclusion.....	40
Introduction.....	40
Major Learnings.....	41
Personal Reflection.....	41
Professional Growth.....	42
Revisiting the Literature.....	43
Changes Made.....	43
Developmental Theories on Play.....	44
Developmental Benefits of Play.....	44
Policy and District Implications.....	45

Project Limitations.....	45
Future Research and Recommendations.....	46
Communicating Results.....	47
Benefits to the Profession.....	48
Chapter Summary.....	49
REFERENCES.....	51

## CHAPTER ONE

### Introduction

*“How can we expect our children to thrive in the imagination economy of the future if we deny them opportunities for play and creativity in kindergarten?” (Miller, & Almon, 2009, pp. 43-44).*

### Introduction

The expectations of kindergarten students have changed monumentally in the last twenty years. The developmentally appropriate transition between preschool and first grade had its sensory and play-based learning replaced with grueling academic expectations. Back in 2009 when these changes were being examined there were statements made about how “kindergartners are now under great pressure to meet inappropriate expectations, including academic standards that until recently were reserved for first grade. At the same time, they are being denied the benefits of play—a major stress reliever” (Miller & Almon, 2009, p. 43). Seven years later, there was still a concern “that a focus on academic content might crowd out other important types of learning experiences that help develop social and regulation skills or foster physical and mental health, each of which is a predictor of children’s longer-term outcomes” (Bassok, Latham & Rorem, 2016, p. 1). Now consider the new technology that has officially entered the mix. 1:1 devices have appeared in most of the larger school districts in grades as early as kindergarten and that was even before the pandemic hit more than two years ago. In those past two years we have had to rely on technology more than ever to continue access to daily education and that has contributed to a dramatic increase in the expectations of some of our youngest learners. The sheer amount of consequences that resulted from this increase in academic expectations is what led me to pursue my final research question: *How can teachers increase play-based learning*

*(PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?*

## **Chapter Overview**

Play has been ripped out of kindergarten classrooms and replaced with intense academic expectations which have impacted kindergarten standards, curriculum, and assessment practices. The intention behind raising academic achievement expectations in the primary grades was to ensure a positive impact on future standardized assessment scores in the intermediate grades. However, these significant changes have left primary teachers wondering how they can meet both the academic and developmental needs of all of their students each year, especially the students with varying abilities. My professional experiences as an educator combined with research around supporting child development and learning led me to my final research question: *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?* In chapter one I cover what personal learnings and professional experiences led me to choose this topic for my capstone. I also share some of the research that highlights the major impacts this topic has on students, families, educators, and the entire educational community. Finally, I address the rationale for this capstone design, how it was created with educators in mind, and how I hope to benefit the progression of the primary classroom by meeting the needs of the whole child.

## **Background**

When I began my first job as an English as a Second Language teacher for elementary students, I gained valuable experience introducing the language to students coming from all different backgrounds and degrees of English exposure. The most beneficial learning at any grade level that I co-taught in was that of hands-on, social, and discovery-based learning because

it was not only developmentally appropriate, but the repeated hands-on exposure positively impacted the retention of academic skills. After transitioning to a first grade classroom and now kindergarten classroom for the last four years, I found myself sitting there at the end of each school year with my team looking at data that showed a certain percentage of kindergarten students who did not “meet” grade level expectations. This percentage was primarily made up of students who were multilingual, students in special education, students who had no prior exposure to schooling before kindergarten, or even just students with high behavior needs that unfortunately were not met during the year. This continued gap in achievement is what led me to the question of why student needs are not being met with our current instructional approach in kindergarten classrooms and the possibilities of what we can do to supplement our approach.

### **Evolution of Kindergarten**

Kindergarten has changed so much since I was five years old. I remember my own kindergarten classroom having a kitchen, a dramatic play area, a place for students to take naps and that it was only a half-day experience. Structured and unstructured play was at the center of my kindergarten year. I went back and actually compared the difference in report card expectations from my kindergarten and first grade years in 2000 and 2001. I found that kindergarten only had four expectations surrounding *reading readiness* that involved recognizing the names of letters, beginning consonant sounds, decoding words in context, and recognizing high-frequency words. The majority of that report card showed assessments of many different expectations in the areas of social and emotional behavior, physical and motor development, and work habits. This compared to the first grade report card that had two separate reading assessment areas regarding *reading performance* and *reading skills*. However even on the first grade report card, there was a larger focus on *work habits* and *social behaviors*. Since the early

2000s, those *reading readiness* expectations in kindergarten have been removed and replaced with the *reading performance* expectations that were once intended only for first grade and higher.

### **Rationale**

This was my prior knowledge of kindergarten going into my first student teaching experience back in 2016. I was thrilled to be placed in a kindergarten classroom in a suburb outside of Des Moines, Iowa. I had the privilege to spend nine weeks in that classroom each day learning what the day in the life of a kindergartener could look like now. What I experienced was exciting in so many ways because students still had so many opportunities to explore their environment and develop at their own pace. Students had a full day of kindergarten, but it included three recesses a day and a full hour of play-based centers led by student-choice. These play-based centers included interacting with students from all kindergarten classes because a certain number of centers were established in each of the four classrooms. Students would choose which center they wanted to participate in that day right when they arrived at school. The intention behind this hour of center time was for students to learn social skills, collaboration, communication, creativity and how to self-regulate. They still had a time during the day for teachers to pull small groups of students to differentiate literacy and math instruction based on their specific needs. The growth I saw even during that short amount of time teaching was enough to impact my beliefs about what is developmentally appropriate in kindergarten. Now that I have been a kindergarten teacher for the past four years, I have experienced the opposite side of the spectrum in terms of a more academic-focused approach to kindergarten. We teach full day kindergarten with one recess and play was completely removed from the daily schedule years before I was hired. Our math and literacy curriculums have been adopted and

taught with fidelity where students are sitting for periods of 30-45 minutes listening, writing, or reading. The most independent time of the day for students is when I pull small groups for reading instruction, but that time is also structured with writing or reading expectations since the ultimate focus in kindergarten is to get every child reading independently by the end of the year. Universal screeners are used three times a year to assess progress of students and teachers towards this goal because data and academics have taken over as the center of focus in the first year of a student's schooling.

My school district specifically adopted a new literacy curriculum during the last four years that did indeed benefit a lot of our students, but unfortunately the gap remains when it comes to our students of varying abilities. This is when I reflected on my previous experience with English as a Second Language and the different types of play-based activities that supported cognitive functioning and retention of new learning. Research supports these ideas, most importantly the constructivist theory based on Piaget's theory of cognitive development which explains that "Children acquire concepts through active involvement and interaction with their environment and construct their own knowledge through this exploration" (Taylor & Boyer, 2019 p. 128). Ultimately, these scripted literacy curriculums are meeting the *neurotypical* students who come to school each day with their basic needs met and the social and emotional skills developed to allow them access to learn new academic skills. This project is not designed for students who can access the learning in current curriculums, but for the students who have other needs such as sensory, fine motor, social emotional, and developmental that bar them from accessing the academic learning. The re-integration of play-based learning into the kindergarten classroom could be the answer to making kindergarten literacy activities accessible to all students regardless of need. Finally, I believe the re-integration of play-based learning increases

learning retention and can diminish student behaviors that were present due to developmentally inappropriate academic expectations for five and six year olds.

### **Value to Community**

The main focus of the research question, *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention*, is to support the five and six year old students who are entering school only to be pushed down a track that may or may not meet all of their needs. My district specifically strives to *personalize learning* for each student to give them one to one and a half years academic growth. It sounds like such a strong and effective goal for teachers to aim for and for families to hear, but what is missing is the focus on their learning of how to be a person in this world, how to interact with others, how to regulate their emotions, and that learning is not just a one way track but can look many different ways. Unfortunately standards and curriculums cannot be changed overnight so this capstone aims to help primary teachers bound by strict expectations to have the opportunity to weave the best of play-based learning into their current literacy curriculums. Whether students have unique abilities, multiple languages, or high sensory needs, teachers can feel more empowered to use and defend their choice of activities during independent work rotations.

When it comes to how this capstone will benefit families of students, we are seeing more and more families facing tough conversations about their children not meeting grade level expectations, not yielding typical or aggressive growth, or that their children have higher behavior needs than can be met within the general classroom. Kindergarten is the time where students can be mistakenly referred for a special education evaluation because of behaviors in the classroom or lack of sufficient academic progress. We have seen this occur year after year

without questions being asked about the curriculum instruction or academic expectations. My hope is that by embedding more structured play-based learning into the kindergarten school day, that it will engage students at a higher level while also meeting developmental needs. A positive side-effect of this capstone project could be less student behaviors to manage as student needs are met in the classroom. The goal is a more positive experience for families who have children in kindergarten or even first grade by acknowledging and meeting the needs of the whole child. They will also be more informed about how their child learns and how best to support them in the future.

This topic also directly impacts educators and policy makers because we are in a time where teacher burnout is prevalent. More and more research has appeared about teacher burnout statistics and even estimated that over a third of teachers leave the profession within their first five years (Rajendran, Watt, & Richardson, 2020, p. 478). Teachers are not feeling supported as we continue to see not how children have changed, but how parenting has changed and the effects that this has upon their children. More behaviors are occurring in classrooms which has a ripple effect on the state of academic achievement, relationships with families and administration and finally the feelings towards careers in education entirely. This project is only one step in the direction of placing less pressure on primary teachers to push a student to an academic level that they are not ready for just because the trajectory says so. With developmental needs being met in the classroom it could begin to result in less behavior issues for school staff and administration to handle. The more student needs met in the primary grade levels, the opportunity for higher levels of learning to be met in the intermediate grade levels which will benefit those educators as well. Instead of teachers having to find the resources to teach a fourth grade student kindergarten and first grade reading skills, more time can be spent on grade level content.

## Summary

The research question that guides this capstone project is *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?* I have introduced the significance of this topic in relation to how kindergarten has evolved. I have shared personal and professional experiences that led me to choosing this topic, including the impacts it has on the students, families, educators, and community members. I have also explained how the design of this project will benefit primary educators to meet not just the academic needs of their students, but the needs of the whole child through the incorporation of play-based learning activities into each day.

The following chapters of my capstone support the foundation that was laid in this first chapter outlining the rationale behind my capstone. Chapter two introduces and explains how the literature relating to the inclusion of play-based learning activities in the present-day kindergarten classroom is reviewed. Chapter three describes the overview of the project, the design process, the description of the final product and how it will be shared with the community. Chapter four will reflect on what was learned throughout the creation of the project, distribution of it to the community, and the research process in its entirety. It will also bring up new questions that could expand on my current research and final project to continue to meet the needs of the education community.

## CHAPTER TWO

### Literature Review

*“Play is any activity freely entered into that is fun or enjoyable and that is appropriately matched to one’s skill to represent an attainable challenge” (Kuhaneck, Spitzer, & Miller, 2010, p. 6).*

#### Introduction

The purpose of this capstone is to redefine the concept of play and its role in the kindergarten classroom after the pedagogical shift to academics left students and educators to deal with the dire consequences. Now when our five and six year old children begin their first year of schooling they are entering what is termed *the new first grade* meaning their expectations have been raised to include learning advanced academics through a direction instruction and whole group model to place them on the path for high stakes testing in the future (Brown & Barry, 202, p. 2). Miller & Almon (2009) stated that “the traditional kindergarten classroom that most adults remember from childhood—with plenty of space and time for unstructured play and discovery, art and music, practicing social skills, and learning to enjoy learning—has largely disappeared” (p. 42). Even outdoor play has decreased significantly, which leaves educators extremely concerned about when children will actually be able to engage in play (Case-Smith & OBrien, 2010, p. 494). Without play, students lose crucial time to develop the social and emotional skills needed to support their ability to be successful in the future. These changes did not just occur in kindergarten overnight, but have been in the making for the last twenty years with the intention to ensure children are successful later in life. These changes are focused so much on the future that the failure to understand the importance of the “here and now” experience of kindergarten (Brown & Barry, 202, p. 4). The pedagogical shift in kindergarten

will not be moving away from academics in the near future, but this is why we can ask the question: *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?*

First, this literature analysis examines the current issue of over-valuing academics in the kindergarten classroom and how it came to be. Next, this chapter explores the child development theories that support play. Lastly, this chapter explains the importance of play in the kindergarten classroom and how it can be integrated into the current pedagogical view. All three of the elements in this literature review support the foundation for the creation of child-selected play-based learning activities to take place during independent work rotations in the kindergarten classroom.

### **Over-Valuing of Academics**

Research around how kindergarten standards have changed over the past 20 years is essential to be able to understand not only what problems are being faced, but why. The pressure is on to hold kindergarteners to inappropriate expectations that used to be reserved for first grade (Miller, & Almon, 2009, p. 43). The first section will provide an explanation about what changes have been made to kindergarten and the data-driven instruction that has replaced any and all free play time. The second part of the section will explore the reasons why educators believe these extreme changes were made and the third part of the section will explain some of the harsh consequences that have fallen upon both students and educators. It is important to understand not only what the severe changes are and why they were made, but also the consequences those changes are having on our five and six year old students.

### *The Changes*

Bassok, Latham, & Rorem (2016) published a twelve-year long study that explored the curricular changes made in kindergarten and first grade classrooms between 1998 and 2010. The sheer amount of changes identified during this study were vast, beginning with an increase in the amount of time spent on instruction in reading and math, even more specifically on teacher-directed rote tasks (Bassok, Latham, & Rorem, 2016, p. 10). The increase in the amount of time dedicated to those particular subjects meant that much less time was left for social studies and science. Even the amount of time textbooks were used in kindergarten more than doubled for both reading and math each day (Bassok, Latham, & Rorem, 2016, p. 9).

Textbooks, workbooks, worksheets, and teacher-directed instruction all increased during a time in classrooms that used to include different activity centers such as art, dramatic play, science, and even water or sand tables (Bassok, Latham, & Rorem, 2016, p. 9-10). In fact, those child-selected activities were all but erased from classrooms as a whole as well as the time previously allotted to students to choose their own activities to guide their learning (Bassok, Latham, & Rorem, 2016, p. 9). Miller & Almon (2009) contributed to this idea when they stated that “on a typical day, children in all-day kindergartens spend four to six times as much time in literacy and math instruction and taking or preparing for tests... as in free play or ‘choice time’ (p. 42-43). Now kindergarten teachers even have the added pressure of a variety of required diagnostic, interim, and readiness assessments to monitor student growth toward state standards (DeLuca, Valiquette, & LaPointe-McEwan, 2020, p. 456). Overall, the results from Bassok, Latham, & Rorem (2016) suggest that kindergarten classrooms in public schools began shifting away from art, music, and science in the late 1990s to more accurately align with the structure of

a typical first-grade classroom that places more emphasis on assessment and data than exploration and play.

### ***Causes for Change***

A common explanation provided for the severe changes in our primary classrooms is that the federal No Child Left Behind Act actually increased accountability pressures on educators and administration which ultimately raised the intensity of academic instruction in the early grades (Bassok, Latham, & Rorem, 2016, p. 2). Even though testing was not required until third grade, the argument is that the intense pressures educators felt about their students' performances on standardized tests led to an "accountability shovedown" and the "educationalization of early care and education" (Bassok, Latham, & Rorem, 2016, p. 2). Suddenly, teachers' abilities were being judged based on their students' results from one single assessment. This led to principals then being held accountable for their school's academic performance on this same test and ultimately the superintendent for their entire district's performance (Bassok, Latham, & Rorem, 2016).

The term "accountability shovedown" comes from the elimination of instructional practices that place priority on teaching to children's cognitive, emotional, social, and physical domains from the early elementary classrooms while the academic achievement expectations of the testing grades are being shoved down into the non-testing grades (Brown & Barry, 202, p. 3). The introduction of a federal policy using high-stake testing as a means of judging classrooms and districts has undermined play-based learning and has ultimately impacted pedagogical practices as a whole (Barblett, Knaus, & Barratt-Pugh, 2016, p. 41). This developmentally inappropriate kindergarten is a result of an emphasis on national test results, the undervaluing and misunderstanding of play, the lack of school and system support for play-based learning, and

parents' views of and involvement in play (Barblett, Knaus, & Barratt-Pugh, 2016, p. 41). The changes were made, but what about the impacts and effects on those who experienced the drastic changes?

### *Consequences*

The effects of these changes were not only felt in the intensity of curriculum and testing, but in social and emotional states of students and educators and even in student abilities to enter into the next grade level. The overall largest consequence seen because of the removal of play-based learning in classrooms was an increase in reports of more severe behavior problems because the students were being asked not only to grow and develop as a child should, but at a rate that was not developmentally appropriate (Miller & Almon, 2009, p. 43). This contributed to a rise in anger and aggression in young children which comes from a children's lack of self-regulation since those social and emotional skills were no longer a focus (Barblett, Knaus, & Barratt-Pugh, 2016). The lack of focus on developmentally appropriate social skills and emotional regulation paired with a heightened focus on academics may be stressful for children of this age which could negatively impact their self-confidence, motivation, and even attitudes toward school (Bassok, Latham, & Rorem, 2016, p. 41).

In addition to all of the negative impacts on the mental states of the students, it was also found that immense pressure on the high-stakes accountability led children in early, untested grades to be unnecessarily retained so that they would not be included in standardized testing and negatively affect grade level scores (Bassok, Latham, & Rorem, 2016, p. 2). The student impacts were reason enough for why this focus on academic performance should be reconsidered, but the teachers were also harshly impacted. The daily strains on educators to force children of a young age to sit at desks and on rugs for long periods of time; learning content they may not even be

able to access yet due to social and emotional needs made classroom management a constant challenge. The behaviors of children who do not yet have the social and emotional capacity to cope with their everyday experiences ended up constantly interfering with learning throughout the school year. This more difficult daily experience combined with the finding that there were times teachers who did not perform at a high enough level in third grade and above were actually reassigned to untested early elementary classrooms even though they were not passionate about teaching at the primary level (Bassok, Latham, & Rorem, 2016, p. 2).

Lastly, with this shift in pedagogical practices forced upon kindergarten classrooms educators continue to feel increasingly powerless to do what is right for their students and meet their needs because of the unrealistic pressures placed on them (Barblett, Knaus, & Barratt-Pugh, 2016, p. 41). Finally, the last outlandish finding was that in order to prepare K-2 students for future testing, outside recess was actually reduced to 15 minutes per week despite the concerns voiced by the teachers (Bassok, Latham, & Rorem, 2016, p. 2). The consequences of these significant changes to kindergarten pedagogical practices were felt widely by all involved, but still the approach remains. There is no telling what it will take to revitalize the educational system and move away from high stakes testing which means even more consequences will continue to follow.

## **Summary**

Research shows that a monumental shift occurred in kindergarten pedagogical practices due to pressures to perform well on high stakes standardized testing. This shift that completely eliminated play from the kindergarten classroom left students and educators with many repercussions that will only continue to hinder future success unless play is reintegrated into kindergarten curriculum. These conclusions provide an enormous amount of support for this

research question: *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?* The following section explores child development theories and how they relate to play.

### **Child Development Theories and Play**

The four stages of cognitive development provide a trajectory for growth from childhood to adulthood. However it is important to understand that there are also four equally important factors that explain the transition from one stage to the next because they directly affect a child's ability to develop at the appropriate rate. Maturation, experience, social transmission and self-regulation work together to move a child from one cognitive stage to the next (Piaget, 2003). The first section will explore Piaget's theory of cognitive development and the implications it has on children. The second part of the section will discuss Vygotsky's ideas about the connection to learning and development to create a foundation about what is needed in the early years of a child's life. The third section will cover the ideas of Burriss and Tsao (2002) and the fourth section will explain the dynamic systems theory and its impact on child development. It is important to understand these development theories because they provide professional context for what experiences and skills children at age five require to be successful in the future.

#### ***Piaget***

Piaget (2003) is a child development theorist who was well-known for the identification and explanation of the four stages of cognitive development: sensory-motor/pre-verbal, pre-operational, concrete operational and formal operational. These stages explained the growth and development of children from birth through maturation. The period of development that kindergarteners go through is the transition from the pre-operational to the concrete operational.

Piaget (2003) defined an operation as “ a set of actions modifying the object, and enabling the knower to get at the structures of the transformation” (p. S9). Each stage builds on the knowledge children gain about objects and the world around them and the four factors of maturation, experience, social transmission, and self regulation determine how successfully each child transitions to each next stage. Self regulation being one, if not the most important factor as Piaget (2003) explained that if learning develops spontaneously when a child is self-regulated then it will last throughout their entire life. His belief was that this overall order of development results in “cognitive maturity of adulthood” (Case-Smith & OBrien, 2010, p. 28). Currently, “most child researchers agree that the child is an active learner” and that results in a child constantly learning from their environment (Case-Smith & OBrien, 2010, p. 28).

### *Vygotsky*

Vygotsky (1978) was a development theorist who was known for identifying the zone of proximal development. He defined it as “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). As children grow, play can create a zone of proximal development because they always act beyond their average age, above their daily behavior, and in play it is as though they were more mature than they really were (Vygotsky, 1978). Play itself is considered a major source of child development because it contains all developmental tendencies in a shorter form (Vygotsky, 1978). Play can ultimately combine early childhood situational boundaries and higher-level adult thinking to advance development. Imaginary situations can actually teach children to guide their behavior using their understanding of objects, the situation and the overall meaning of the situation (Vygotsky, 1978). This results in the greatest self-control display that a

child of this early age can have. Instead of the egocentric approach to situations where children want what they want when they want it, the actual rules in the game of play unintentionally require the child to follow the group for the enjoyment of the game. Lastly, Vygotsky believed that social interaction has a crucial influence on a child's cognitive processing (Case-Smith & OBrien, 2010, p. 29). It was explained that a "child's cognitive processing first requires the assistance of another being within a social interaction before the child can mentally process on his own;" which means the development of higher-level thinking is actually a social process before it becomes an internal process (Case-Smith & OBrien, 2010, p. 29). Therefore, child development actually depends on social interaction that occurs during play.

### ***Additional Theories***

There were a number of other theorists that contributed valuable ideas to child development. Freud was one of them who focused on play as being a release of negative feelings from events that occurred in their previous childhood. Play then replaced them with positive feelings (Burriss & Tsao, 2002). A psychoanalytic theorist, Erikson, discussed the idea that play activities can help children develop their self-esteem and sense of empowerment by allowing them mastery of objects. Then they can eventually go beyond control of objects to mastery of social interactions with their peers (Burriss & Tsao, 2002). Play is a platform that can help children practice their behaviors, beginning with the exploration of their sensory and motor skills and proceeding through to the gradual acquisition of social and emotional skills with classmates (Burriss & Tsao, 2002). In addition to the acquisition of social skills, children who have engaged in different forms of play seem to use a more flexible and original problem solving approach in the future (Dansky & Silverman, 1975). Yet another positive effect of play is creativity because of what they create during imaginary play. Children create this make-believe world through play

where they get to dictate the reality and be in control (Burriss & Tsao, 2002). The dynamic systems theory is yet another that explains how play can positively influence child development because the core belief is that “learning does not occur just in the brain and that the body and environment are all constantly changing and simultaneously influencing each other” (Case-Smith & OBrien, 2010, p. 33). There are so many positive effects on child development that come from play at this emergent age and theorists continue to support these ideas through their research.

### **Summary**

The research shows that Piaget placed a large amount of emphasis on the importance of self-regulation for this age of children in order to meet developmental goals. Whereas Vygotsky stated that play actually helps kids learn self-control while promoting higher-level thinking skills to build a solid foundation of skills to support themselves as they continue to grow. Lastly, Burriss and Tsao’s ideas contributed to Vygotsky in the way that play can help children develop the ability to think and problem solve flexibly which is what society requires as people enter the workforce. These theories not only highlight what play can do for child development, but they support the need to answer the capstone research question: *How can play-based learning (PBL) activities supplement a rigorous kindergarten literacy curriculum?* The following section explores the importance of play and how it can be integrated into the kindergarten classroom.

### **Importance of Play**

From behaviors to tantrums to shutdowns, unstructured and structured play provide an appropriate setting for children to learn how to interact with their environments. A deeper look into the entirety of play may provide more understanding about how it can support the growth and development of our youngest learners in their first real school experience. The first section will address the different forms play can take within a child’s environment. The second section

will explain the vast developmental benefits of play for children in their first five and six years of life. The third section will discuss the definition of purposeful play and why it is important, while the last section will cover the integration of play into the classroom. It is crucial to understand the sheer amount of long-term benefits that play can have on young children because of the problems in the classroom that are currently being identified by educators.

### ***Forms of Play***

In the last twenty years, a stigma has been placed on the word *play* in the kindergarten classroom. This is primarily due to the lack of understanding about the types of learning and knowledge retention that can come from teacher-designed play or even free play. However, there is so much more professional learning that needs to be done around what play can accomplish for five and six year old children. Case-Smith & OBrien (2010) stated the following:

Play... is the way the child learns what no one can teach him. It is the way he explores and orients himself to the actual world of space and time, of things, animals, structures, and people... Through play the child practices and rehearses endlessly the complicated and subtle patterns of human living and communication, which he must master if he is to become a participating adult in our social life (p. 483).

It is true that play combines skills across a wide variety of domains such as sensory, motor, cognitive, communication, and social to provide a child with a solid foundation on which to build all future learning and interactions (Case-Smith & OBrien, 2010). This can take place in a variety of forms, but they are all derived from the same characteristics: intrinsic motivation, suspension of reality, internal locus of control, and being spontaneous, fun, flexible, challenging, and even nonliteral (Case-Smith & OBrien, 2010).

Social, symbolic, and constructive play all begin to take shape at different times in life, but they continue to change and adapt to the level of a child's development. Social play occurs first between a child and parent, but it is this form of play that allows children to eventually learn about the different social systems and cultural norms through role play (Case-Smith & OBrien, 2010). An example of this would be a child taking on the role of a mother and using different language, acting older, and conveying their idea of what a mother does. Symbolic play begins to develop between one and two years old and the make-believe games that occur during this play create the foundation for self-regulation, civility, empathy, and push the child to think creatively and flexibly (Case-Smith & OBrien, 2010). Constructive play is what is seen in most preschool experiences through activities like puzzles, sandbox, and building blocks (Case-Smith & OBrien, 2010). This type of play continues to grow and develop with the child, but it becomes more abstract as the cognitive load increases.

### ***Developmental Benefits of Play***

It has been said over and over again that children cannot learn until their basic needs are met. From experience, those basic needs usually consist of food, water, shelter, sleep, love, stability and more generally work, play, rest and sleep (Case-Smith & OBrien, 2010). However two other important needs that should be added to this list are emotional regulation and social skills. With each new school year, preschool and kindergarten teachers continue to face these same barriers with ever-increasing force. Eisenberg & Spinrad (2005) stated "Children's emotion regulation has been conceptually linked to their academic success" (p. 111). It is no wonder children who have difficulty controlling their attention and behavior, forming relationships, and even meeting their own sensory needs are challenged when trying to learn and focus in a classroom setting (Eisenberg & Spinrad, 2005). Even today, teachers in the United States could

see some degree of sensory integration dysfunction in up to 20% of their students which can impact not only the type of instruction needed to meet the needs of these students, but also the class environment as a whole (Howe & McCathren, 2004). This age of children has so many social, emotional, and sensory needs that can only truly be met through the integration of play in their day.

Play can be a medium to engage a child's attention, practice specific motor and functional skills, and even promote sensory processing, perceptual abilities, and cognitive development. It can also be an agent to support social, emotional, and language development (Case-Smith & O'Brien, 2010). Taylor & Boyer (2019) also stated that:

Communication skills, routines of conversation, and oral vocabulary are extensively developed through play, experiences, and interactions with other peers and educators. Play also enhances children's self-regulation skills by learning how to regulate their behavior and emotions during play with peers (p. 129).

In addition to all of these skills needed for expected development, these opportunities with peers also explicitly teach skills such as how to take turns, share, and how to act responsibly in different situations. In a qualitative study of children's play, it was identified that playful children showed flexibility and spontaneity when it came to their ability to play. Additionally in social interactions playful children demonstrated curiosity, imagination, creativity, joy, the ability to take charge of situations, the ability to build on and change the flow of play, and total engagement with others (Case-Smith & O'Brien, 2010). On the opposite end of the spectrum, children who were not playful did not have the flexibility to handle transitions or changes, express positive or maturing speech, or engage in challenging situations. Instead, they were shutting down emotionally, engaging in physical behavior, and did not seek out peers for

interaction (Case-Smith & OBrien, 2010). This aligns with ideas from Brown & Barry (2021) about how performance on reading, math, and social-emotional assessments in kindergarten can provide insight into later school achievement and chances for success in adult life.

Social-emotional skills are learned and practiced through constant new and ever-changing social situations that occur during play. Children require these experiences in order to continue to meet age-level developmental expectations as they get older.

### ***Purposeful Play***

It is important to understand that researchers are fully aware of where society currently is pertaining to education. Kindergarten cannot go back to the free play, half-day, nap time it once was because of how far the education system has developed since then. Researchers do however propose the idea of purposeful play in an attempt to support the development of the whole child, while also meeting grade level expectations. The goal of purposeful, or guided, play is to combine specific learning targets related to state standards with the fun and high engagement level of children's autonomy to choose (Allee-Herndon et al., 2021). In fact, there is evidence that suggests guided play “approaches often outperform direct instruction approaches in encouraging a variety of positive academic outcomes” (Allee-Herndon et al., 2021, p. 120). This is because in addition to learning content based literacy skills, children also learn other skills to support social-emotional learning, cognitive development, and academic achievement (Allee-Herndon et al., 2021).

In the study conducted by Allee-Herndon et al., (2021), it was concluded that there was a large effect on students' literacy learning measures where students in the play-based classroom actually had greater reading gains than students in the direct instruction classroom. Purposeful play ultimately allows access to learning that direct instruction may block when students are

coming from backgrounds with low socioeconomic statuses and English language needs. Students from these backgrounds show needs in the areas of vocabulary, foundational literacy skills, comprehension, and concepts about print that impact their ability to access new material taught in kindergarten (Allee-Herndon et al., 2021). Purposeful play is that point of entry for not only those students, but all students at that age level.

### ***Integration***

Talk of the *achievement gap* has been at the forefront of educational conversations in the past 20 years. This gap continues to widen due to teachers not being able to meet the needs of their students, especially the students who live in poverty where basic needs are the first focus and our English learners who are doing double the work. In order to begin to close this gap, “teachers must create learning experiences to engage children emotionally, socially, and cognitively to increase children’s chances for success in school and beyond” (Allee-Herndon et al., 2021, p. 122). Integrating play-based learning is how educators can begin to target not only the academic needs, but the social emotional ones that continue to be pushed to the side (Salinas, 2016). These play-based practices are not only developmentally appropriate, but they have shown to be effective interventions that can increase educational equity for vulnerable students (Allee-Herndon et al., 2021). Play can be the pivotal factor that extends academic learning by building on prior knowledge and experiences, but it needs to be done in the right way (Taylor & Boyer, 2019).

A child-centered model of play-based learning was developed by Pyle and Danniels (2016) including a wide continuum that promotes teaching academics using an approach that is both engaging and developmentally appropriate with play-based strategies as instructional matches (DeLuca, Pyle, Valiquette, & LaPointe-McEwan, 2020). The continuum involves five

different forms of play that range from completely student-led to completely teacher-led. Teachers can change the role of play in learning to provide different opportunities to support students in their social, emotional, and academic development (DeLuca, Pyle, Valiquette, & LaPointe-McEwan, 2020). Play-types can ultimately be used in a variety of combinations to support learning in the classroom (Edwards, 2017). It is up to the educators to understand the different roles play can take on and integrate it accordingly.

The actual act of combining play-based strategies within the current scope of kindergarten academic-focused curriculum is not any easy task. Play-based classrooms in kindergarten do not simply provide random play opportunities. Instead, they encourage children to challenge themselves, reflect on their learning, discover new interests, needs, or talents, and make connections as they increase their independence as a learner (Allee-Herndon et al., 2021). An example of a kindergarten schedule that integrated play-based strategies included a 30-minute block of free choice *play centers* with activities like building blocks, puzzles, art, and dramatic play centers and a 30-minute block of *learning centers* with activities that support writing, reading, and literacy skills that align with grade level standards (Allee-Herndon et al., 2021). Play-based is where students can learn how to “collaborate and work together towards a common goal developing regulation of learning skills” as well as developing critical thinking and problem solving skills (Taylor & Boyer, 2019, p. 129).

### **Summary**

The fact that there are a number of different forms of play that can be used in any capacity in the classroom builds on the foundation created to answer the research question. Teachers can be flexible in their implementation of play in kindergarten and knowing the developmental benefits that support the integration only makes the need stronger. Kindergarten

students need the opportunity to allow for so many critical social and emotional skills to develop. It can be achieved through purposeful play that is integrated into and extends the current academic curriculum; thereby answering the research question: *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?*

### **Gaps in Current Research**

The research discovered throughout the literature review process highlighted a prominent lack of connection between play and academics in primary education. A lot of the literature either favored one side or the other and only few attempted to integrate both successfully. This capstone project strives to use the best of both approaches to create a more balanced and differentiated curriculum supplement to better meet the needs of all learners in the classroom. Whether a student has prior exposure to academics or not before kindergarten, this curriculum supplement project aims to meet children where they are at, engage them and then challenge students accordingly using play-based learning activities that align directly with curriculum and state standards.

### **Chapter Summary**

Chapter two of this capstone project provided a literature analysis of the research found to answer the research question: *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?* The information found from this analysis shows the critical need for play to be reintegrated into the kindergarten classroom. The result of this research will be the creation of play-based learning activities that align with a rigorous kindergarten literacy curriculum's

independent rotations in the areas of word work, writing, and reading for students to select for themselves.

The research in this chapter highlighted the information needed in order to create play-based learning activities for the academic kindergarten classroom to answer the research question: *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?* Moving forward to the next chapter, chapter three will not only provide the specific reasoning behind why the play-based learning activities were created, but also the overview of the research project that was based off of this literature analysis. Lastly, this chapter explains how the activities can be implemented through a classroom management lens.

## CHAPTER THREE

### Method

#### Introduction

The research collected and analyzed throughout chapter two of this capstone project set the foundation for the developmental importance of play in the kindergarten classroom and how it can be integrated without losing the focus of academic rigor and success. The obligatory next step is to provide an answer to the research question: *How can play-based learning (PBL) activities supplement a rigorous kindergarten literacy curriculum?* This answer will take the form of a play-based literacy curriculum supplement for educators to implement in kindergarten classrooms to more accurately meet the needs of their students.

For the past four years I have taught kindergarten, and before that it was first grade and English as a second language. As each year has come to a close, I have reflected on the growth of my students and questioned why some students were not able to meet grade level expectations in literacy. I determined not only was I not able to meet all of their academic and social-emotional needs, but I did not actually have the resources or understanding on how to do so. This is where my capstone journey began. I needed to first gain a more thorough understanding of what our youngest learners need for successful knowledge retention through the research analysis in chapter two. Then I needed to use all of that new understanding to create the play-based learning supplement that I felt was absent from our current literacy curriculum. This would allow me to more accurately differentiate to the needs of any student who becomes part of my classroom in the future.

The hope is that this capstone project will allow not only kindergarten teachers who use this curriculum, but any primary teacher to use these resources to expose their students to literacy

concepts in a variety of ways that include the best of play-based learning. I want to take the high academic expectations and combine them with developmentally appropriate play-based learning activities to result in more student needs being met and an increase in overall knowledge retention.

Chapter three answers the question: *How can play-based learning (PBL) activities supplement a rigorous kindergarten literacy curriculum?* This chapter describes the research project designed through the literature analysis in chapter two, which explored the developmental importance of integrating play back into the kindergarten classroom. Not only does this chapter provide a complete description of the play-based learning activity project, but also the approach to and rationale for the project design. Finally, information will be shared about the intended setting and audience in which the research project will be implemented alongside the proposed timeline and assessment process for the project implementation.

### **Project Overview**

This project was designed because the researcher's school setting began the implementation of a new literacy curriculum two years ago called Collaborative Literacy that did not include any integration of play-based learning or instruction on personalization of learning for students. Allee-Herndon et al. (2021) suggested that the goal of play-based learning is to provide hands-on manipulation of learning materials which will result not only in a greater interest in the learning, but actually support the development of the whole child by furthering understanding of the content (p. 120). Research by Taylor and Boyer (2019) supports this goal for play-based learning when they stated that it actually "shows more effective and deeper learning experiences for students than direction instruction" (p. 127). This support of recent research around the benefits of re-integrating play-based learning resulted in the idea for a

capstone project consisting of a play-based learning curriculum supplement that could provide an implementation guide for educators.

For my capstone project, I will create a play-based learning curriculum supplement for the Collaborative Literacy kindergarten curriculum. The intention behind the design of this capstone project is to provide play-based, research-focused activity options for kindergarten teachers to use to meet their students' varying sensory and developmental needs in the classroom specifically during Independent Work rotations while the classroom teacher works with reading small groups. Collaborative Literacy named three different independent work areas: independent reading, word work, and writing. They did offer a list of ideas for each work area in the appendices of the curriculum, but there are not nearly enough options to fully meet and personalize instruction to student needs. Additionally, the list of activities does not provide any guidance for educators on how to specifically teach students how to do the activity or how to use the activities to differentiate to individual student needs.

My project will be organized to match each week of the curriculum's scope and sequence through the use of google drive folders. This will simplify the sharing of resources to kindergarten teachers and any other primary teachers who want to meet the needs of the whole-child during this structured independent time of the school day. Within each weekly folder, teachers will find three additional folders. One for each of the Independent Work rotations. The activities shared in those folders will not only be color-coded according to need, but also accompanied by a visual, the materials needed, and the implementation guide for educators to teach the activity to students. Just as kindergarten development and ability-level grow throughout the school year, these activities will also align with the standards that students are expected to meet at each point in the year.

The first step in this project is to identify the specific kindergarten standards that the independent work rotations currently align with. I can do this by accessing The Collaborative Literacy Learning Portal which has a section that provides the Minnesota State Standards aligned with each independent work rotation lesson that is taught in the first six weeks. This is where I will go to compile the list of standards that will align with my curriculum supplement. Next, I will use the Minnesota Academic Standards app to determine if there are any additional standards that could be met during these rotations through my project.

The next step to create this project will be to explore the Minnesota Department of Education website and to determine their approach to social-emotional skills in the elementary classroom. I already know that Minnesota does not have a set of social-emotional learning (SEL) standards, but I want to use their guidance to support my curriculum supplement. The closest state to Minnesota with a set of these standards is North Dakota. I will use the guidance from the state of Minnesota and the Social and Emotional Learning Goals by Grade-Span from the North Dakota Multi-Tier System of Supports that was published in 2018 to create the framework for my play-based learning curriculum supplement.

Next, the shared google drive folder will be created and within it will be three sub-sections. Each sub-section will be titled after the three independent work rotations. Once this is created, this will simplify the process of compiling the play-based learning activities because they can be sorted into each subsection folder as they are identified. To begin the process of compiling the different activities to be included in this curriculum supplement, I will speak with my content reviewer because he is our school Occupational Therapist. He has book resources that can guide my research in the right direction and play-based learning activity collection.

Once the shared google drive folders are created and the activities are collected, the organization process will begin. I will match the activities with the standards-aligned scope and sequence I created. Then in each subsection folder, I will create additional folders labeled with the week(s) of instruction to further organize the resources because the Collaborative Literacy curriculum is organized by weeks. This will ease the sharing of the final capstone project because educators will be able to open the folder and find the week of activities that matches where they are in instruction.

The last vital component of this project are the implementation guides for the activities shared. The purpose behind creating these guides is to assist teachers in their implementation of each activity in the classroom; especially new teachers who do not yet have the experience. There will be a guide within each subsection folder. Each guide will have a list of the play-based learning activities for that sub-section. Each activity listed will have a hyperlink that redirects the educator to a google document that provides a full description of the activity complete with an image, materials needed, and the plan for implementation of the activity.

This section provided an overview of the capstone project that was designed to answer the research question: *How can play-based learning (PBL) activities supplement a rigorous kindergarten literacy curriculum?* The play-based learning curriculum supplement was designed for kindergarten to more accurately meet the needs of the whole child. Through the shared google drive folder design, educators will be able to access a wide variety of play-based learning activities they can choose to implement in their own classroom during independent work rotations. The next section describes the setting and audience that will be used during this capstone project and the rationale behind them.

## **Setting and Audience**

The setting for this capstone project is any kindergarten or first grade classroom that utilizes the Collaborative Literacy curriculum. However, it can also be used in those grade levels without the curriculum because these are activities for independent work rotations that could be integrated into any literacy block. Specifically the setting is a public school district in suburban Minnesota. The overall population of the city is estimated to be 66,783. The district is composed of eleven school buildings and services around 8,872 students from preschool through twelfth grade. The district also includes transitional programming that services students with disabilities from ages 18-21. About 59% of students in the district identify as White, and 36% identify as students of color. Approximately 21% of students in the district receive free or reduced lunch.

The student audience that this curriculum supplement will be designed for are kindergarten students attending one of the elementary schools in the district. The elementary school is identified as a Title I school which means that additional funding and staffing are provided by the state. In the current 2021-2022 school year, 95 kindergarteners attend this elementary school between the five kindergarten classrooms. The low class sizes are due to a district referendum that ensured class sizes in kindergarten and first grade stay between 18 and 22 students. To support kindergarten students and teachers, the district also hires kindergarten paraprofessionals who split their time between two different kindergarten classrooms.

The intended audience of this project will be the kindergarten class taught by the researcher in the 2022-2023 school year. There will be up to 22 students in this class with ages from five to six years old. These students will participate in the play-based learning curriculum supplement beginning in the first week of school and continuing throughout the school year. The intention is to begin with the implementation in one classroom and then based on the data results

at the end of the first year, extend the implementation through the kindergarten and first grade classrooms of the school and eventually the district.

### **Project Timeline**

The research question for this project was created in March of 2022. The literature review and analysis was then created between March and May 2022. Lastly, the curriculum supplement design process will begin in June 2022. After collecting the research and additional resources needed, the curriculum supplement was created using the Collaborative Literacy curriculum as a foundation for the layout. The play-based activities for independent writing, word work and reading will be designed and aligned with the scope and sequence of the kindergarten acquisition of literacy skills in mind. The content reviewer will then evaluate the components of the project in July of 2022 to ensure the implementation guide stated appropriate expectations and correctly aligned with each activity. The intention is for this curriculum supplement to be implemented in a kindergarten classroom during the 2022-2023 school year.

### **Project Assessment**

The curriculum supplement will be assessed for effectiveness through whole class assessment records that will be modeled after Collaborative Literacy's assessments. The purpose behind creating similar assessments is to more effectively align the play-based learning supplement to the Collaborative Literacy curriculum. After implementing this curriculum supplement for one school year, the goal is for the intended audience to expand to all kindergarten classrooms in the school and then the district. The whole class assessments will be aligned with the kindergarten standards and the social and emotional learning skills and will take place each of the first six weeks of independent work rotation instruction. Once the independent work rotations are established in the classroom, the following assessments will be created

specifically on the social and emotional learning skills to ensure students are developing skills needed to be successful in the future. The assessments will be conducted monthly with the intention of tracking data in this important area of development.

### **Chapter Summary**

Chapter three provided a description of the project created to answer the research question: *How can play-based learning (PBL) activities supplement a rigorous kindergarten literacy curriculum?* This chapter also included references to the research that supports the creation of a play-based learning curriculum supplement for a kindergarten classroom and a rationale for why the researcher chose this project design. The last three sections explain the intended setting and audience for the project, the timeline for completion, and the assessments created not only for the effectiveness of the project, but for the tracking of student data.

Chapter four will explain what the researcher learned as a result of creating the capstone project. It will also include which parts of the literature review in chapter two proved to be most vital to the creation of the project with references to the specific sources that influenced the design process. The chapter will also go on to describe any implications and limitations of the project that provide understanding for future research around this topic. Finally, chapter four will explain how I plan to communicate the results of the project and its overall benefit to the teaching profession.

## CHAPTER FOUR

### Conclusion

#### Introduction

The intention of this capstone was to answer the question: *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?* The combination of my research and the development of my curriculum supplement led to the confirmation that the transition between preschool and kindergarten has become increasingly difficult not only in the United States, but around the world. This comes from the removal of play-based experiences in kindergarten to ultimately increase academic outcomes. The challenge a lot of teachers are facing now is how to bring those integral hands-on learning experiences back into the classroom while still meeting the high academic expectations that are being placed upon our youngest learners. The play-based curriculum supplement I created is just one small step towards solving this problem, but it is one that needs continuous research in order to meet the needs of all students entering into kindergarten.

In the previous chapters of this capstone, I explained how a review of the literature led to my project design to answer the research question: *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?* In chapter one, I discussed my personal and professional stake in this topic and what my intentions were with the creation of this capstone project. Chapter two explored the analysis of the current literature about the over-valuing of academics, child development theories and play, and the overall importance of play. Chapter three described

the overview of the proposed curriculum supplement as well as the timeline for implementation. This chapter also contained information about the setting, audience, and the plan for assessment.

Finally, chapter four covers my reflections after completion of the capstone project. This chapter shares my major learnings and revisits beneficial information found in the literature review in chapter two that I utilized as I created my curriculum supplement. It also describes the implications and limitations of the project, recommendations for future research, and its overall benefits to the profession. Lastly, it includes a summary of the chapter and a conclusion to this project.

### **Major Learnings**

This capstone project process resulted in not only developing my skills as a writer and as a learner, but improved my abilities as a researcher. During this process, two major learnings materialized throughout the development of my curriculum supplement. Those learnings were of personal reflection and professional growth.

### ***Personal Reflection***

This capstone process took place during one of the most difficult school years I have experienced in my career so far. The pandemic left us with a lot of young children who did not have the opportunity to attend preschool or even be exposed to the structure and experience that comes along with schooling. As I began this capstone process, I was constantly reflecting not only on how the literature I was analyzing was going to drive the creation of my curriculum supplement but also on how I could make a difference with the children we have as students today.

Ultimately, the most difficult aspect of this capstone process for me was the literature analysis because I had to learn and relearn the writing process in terms of appropriate academic

formatting. The reflection cycle during this time was strenuous because there were some new learnings in this topic even for myself. I found myself not only having to read through each article and peer reviewed journal I found, but go back through, print them out, highlight important ideas, cut them out and then organize them by theme. This was all before I could even think about how to organize my own thinking about each topic and how it relates to my research question. The constant reflection about what I want to share and how I want to share the research went round in my mind as I completed this process. Eventually I was able to wrap my head around the new information I was learning in my research and compile it appropriately, but it showed me that this will be an ongoing learning process even after the completion of my capstone.

Additionally, the reflection process continued throughout the design and completion of my curriculum supplement. My approach to the design process changed multiple times as I reflected not only on how I could best use it, but also how a brand new teacher could benefit from this project. I had two first year teachers on my kindergarten team this past year which helped my reflection as I asked them questions about the type of support they felt they needed in this area. I continued to revise my plan until I was able to develop a project that could be used by teachers of all experience levels and teachers who use the curriculum and teachers who do not. This led me to realize that I can only do so much in terms of this project and it will be a good starting point for future curriculum development and research. This understanding really helped me find some peace as I completed the capstone process to the best of my ability.

### ***Professional Growth***

When completing this capstone, I discovered how much I had grown as a professional in the field of education. I was no longer just taking things at face value, but rather researching the

background and reasonings behind new expectations. Kindergarten was not only important to me because I taught it, but I realized its importance to the overall success of elementary students in the future. Students who came into kindergarten with no previous academic exposure had one year to experience and learn what some other students their age had learned in the past two or three years in preschool. This is why the capstone project became a driving force for myself and my fellow educators to be able to provide our students with learning experiences that will allow them to be successful from the very beginning.

This process pushed me to meet with other educational professionals in my district for resources and conversations about how to meet the needs of our learners through my capstone. I began to advocate for additional professional development in areas of our curriculum to better understand how and why the curriculum was developed the way it was. I was also constantly meeting with my content reviewer about his background in play-based activities to understand how to better design my project. I believe I became a better educator throughout this process and I am now in a much better position to lead my kindergarten team this coming year.

### **Revisiting the Literature**

The literature published about the over-valuing of academics, child development theories and play, and the importance of play played a key role in the development of my capstone project. The most integral elements were the changes made in kindergarten academic expectations, developmental theories on play, and the developmental benefits of play.

### ***Changes Made***

The research published by Bassok, Latham, & Rorem (2016) and Miller & Almon (2009) surrounding the curricular changes made in kindergarten over a twelve-year period provided the foundational drive for my curriculum supplement. Miller & Almon (2009) specifically reported

that children in all-day kindergarten settings began spending four to six times more time in direct literacy and math instruction than in play, or other subjects (p. 42-43). This is what encouraged me to reflect on what consequences resulted from these changes. Things like behavior issues, a wider gap in academic achievement, and teachers leaving the profession were highlighted during my research. These changes in academics and the resulting consequences left behind created a demand for more appropriate responsiveness to student needs in kindergarten.

### ***Developmental Theories on Play***

Throughout the creation of my project, I continued to reflect on the idea from Vygotsky that a “child’s cognitive processing first requires the assistance of another being within a social interaction before the child can mentally process on his own;” basically reinforcing the fact that the development of higher-level thinking skills needs to be successful in higher grade levels is actually a social process before it becomes an internal process (Case-Smith & OBrien, 2010, p. 29). The idea that child development actually depends on play-based learning experiences with peers is one that allowed me to design my project in a way that includes activities that could promote this development in the classroom.

### ***Developmental Benefits of Play***

As I began the project development process, I gained a new understanding about some of the literature I analyzed in terms of developmental benefits of play. Case-Smith & OBrien (2010) discovered that students who engaged in play actually showed more developed skills in flexibility and spontaneity as well as the ability to take initiative in situations and contribute purposefully and thoughtfully to situations. These benefits helped me reflect on the types of activities I was choosing to include in the project because it was important that students could choose from a wide variety of learning experiences. Not only should there be play-based

activities that require practice with fine motor skills and communication skills, but collaboration and critical thinking as well to fully support students' social and skill development. As a result I created a scope and sequence that included activities spanning across varying skill levels to better differentiate what each student needs.

### **Policy and District Implications**

One of the implications of this project involves the lack of funding for resources. In the project I provided a wide variety of options for play-based activities, but the amount of choices available for students will depend on the educators' ability to purchase and/or make the different activities. Some schools provide stipends for teachers at the beginning of the year and some are severely lacking in resources.

Another implication could be district or even state policies regarding the use of certain materials in kindergarten classrooms. For instance, a lot of policies require these rotation activities to be very basic with paper and pencils in order to prepare them for the expectations in first grade. This would be due to the removal of play from classrooms and not wanting to integrate any sense of it back into kindergarten.

### **Project Limitations**

As previously mentioned, the funding and acquisition of a variety of resources for this project could be a challenge in certain schools and districts. This curriculum supplement is created around students having choice in their activities, but with activities that accurately meet their needs in hands-on experiences. The activities that are purchased and created at the beginning of the year focus on beginning skills such as letter name and sound acquisition, concepts about print, and letter formation. Whereas activities later in the year need to focus on

blending, segmenting, writing words and sentences, and reading leveled texts. Lack of funding and resources can limit the choices teachers can provide for their students.

The other limitation would be the planning process because these choices change throughout the year as kindergarten standards increase in their level of complexity. This requires educators to be constantly reflecting on where their students are at and what their needs are as they introduce new activities to that independent work time. If teachers are not used to differentiating these independent work stations because they are more focused on their guided reading groups, this can be an added expectation and time to plan could be that limitation. Even though my focus was to take as much planning out of the process as possible through the creation of this curriculum supplement, it could be an added task to teachers.

### **Future Research and Recommendations**

As a result of this project, I found play-based learning to be an area in primary education that is in need of a lot of support and future research. I sifted through so many articles that either promoted solely play or solely high academic standards. This shows that there are still wide gaps in research about how to successfully combine the two in today's primary classrooms in a way that meets the developmental needs of students in kindergarten while holding them to high academic expectations. I suggest that districts bring in or consult professionals in education on the importance of play and how to re-incorporate it into primary classrooms in a way that aligns with their vision for success. This will hopefully result in more research being published about how to use play-based activities to more accurately meet the needs of learners who did not have the opportunity to participate in play-based learning experiences in preschool.

Another recommendation I have as a result of this capstone process is more vertical team collaboration between kindergarten and preschool teachers in districts. I have seen schools who

pride themselves in encouraging teachers to observe other educators teach and that can sometimes be the best professional development because of what we can learn from one another. Enabling kindergarten and preschool teachers to observe and meet with each other as a form of professional development could result in the sharing of activities, strategies and a more smooth transition between the two. When teachers are more aware of what learning experiences their students are bringing to the classroom, it can better support both the student and teacher to create a path towards success.

### **Communicating Results**

There are three different avenues I plan to take when communicating the results of my project. The first is to my colleagues at Hamline University at the end of this course because not only will it provide the opportunity to share my curriculum supplement as a resource for them, but also promote my views on re-incorporating play into the kindergarten classroom. Throughout this graduate program I have been introduced to so many different resources through conversations with my peers and I want to return the favor through my presentation. This could ultimately open up a discussion between us to share additional thoughts and extensions of the project I created.

The second avenue I plan to take to communicate results will be with my previous kindergarten team. I worked with that team for four years and my team members are a huge part of why I chose to research this topic and create this project. Our experiences through the pandemic before and after are what highlighted the importance of play and the developmental benefits it could provide for our students who did not have the opportunity while at home during that time. Even though I have moved schools in the district for this upcoming year, I plan on meeting with them before the school year starts to present my project and share access to the

curriculum supplement. My goal is for them to feel more confident in bringing hands-on and play-based learning experiences back into their classrooms from the very first day of school. This will also provide me with more opportunities to receive feedback and assessments of its success.

The third and final avenue I plan to take is to present and share this project with my new kindergarten team. This curriculum supplement will benefit our collaboration and planning throughout the year as we introduce and manage our independent work stations. At our weekly literacy planning meetings, this curriculum supplement can now play an important role in our planning for differentiation and meeting the social skills, sensory, and exposure needs of our students. This will also encourage more discussions on the progress we are seeing with our students who arrived in kindergarten with no prior exposure to schooling through continuous data analysis in both formative assessments in small groups and our universal screeners that occur three times a year.

### **Benefits to the Profession**

This curriculum supplement creates an important link or rather transition between preschool and kindergarten in order to more accurately support students who did not have the same opportunities as others who attended preschool. Until preschool is free to all children, there will continue to be a large academic exposure gap between students who enroll in kindergarten. The intention of this curriculum supplement is to provide choices of hands-on, play-based learning experiences for all students of this age. We are at a time in education where kindergarten students are now expected to not only be able to read and comprehend complex leveled texts, but also write two complete sentences by the end of the year to be considered ready for first grade. Students with no prior exposure to the alphabet or books before kindergarten have a much

steeper hill to climb to find success and this curriculum supplement could be that integral support that provides hands-on learning experiences, repeated exposure, and developmentally appropriate skill building.

The other main benefit this provides to the field of education is knowledge and learning for teachers about the developmental importance of play-based activities at this age. The research shared in the literature review in chapter two is eye-opening to teachers who were previously informed that play no longer has a place in the kindergarten classroom. This curriculum supplement can provide educators with a diverse menu of choices to differentiate according to their students' needs and increase engagement in the learning experience overall. This also supports classroom management while ensuring that students are learning valuable skills in independence, collaboration, creativity, communication, and critical thinking.

### **Chapter Summary**

Chapter four of this capstone shared my personal reflections on the major learnings, current literature, as well as the curriculum supplement that was developed as a result of this capstone project. These components were essential in answering the research question: *How can teachers increase play-based learning (PBL) activities in order to supplement a rigorous kindergarten literacy curriculum and increase overall knowledge retention?* This chapter discussed how the creation of this capstone not only helped me grow as a writer, researcher, and learner, but also reviewed the literature critical to the foundation of this play-based curriculum supplement. Lastly, this chapter shared the project implications and limitations, recommendations for future opportunities and research, and the benefits of this project to the profession of education.

The capstone process became a cycle of reflection, learning, and writing as I continued to grow as a teacher and as a student. The research process led me to confirm my belief as an educator about the importance of play in kindergarten, while also contradicting previous understandings I had about the role of play in the classroom. This project reminded me of my passion for learning and creating resources that will support student growth. I truly hope my curriculum supplement will support educators of all experience levels to better meet the needs of the learners in their classrooms. I also hope that this capstone encourages others to do further research on the topic and develop more play-based supports for kindergarten students. It all starts with conversations about personalizing learning to meet the needs of our students. Together we can do that in kindergarten by working together to create play-based learning experiences that will support knowledge retention for years to come.

## REFERENCES

- Allee-Herndon, K. A., Roberts, S. K., Hu, B., Clark, M. H., & Stewart, M. L. (2021). Let's Talk Play! Exploring the Possible Benefits of Play-Based Pedagogy on Language and Literacy Learning in Two Title I Kindergarten Classrooms. *Early Childhood Education Journal*, *50*(1), 119–132. <https://doi.org/10.1007/s10643-020-01141-6>
- Barblett, L., Knaus, M., & Barratt-Pugh, C. (2016). The pushes and pulls of pedagogy in the early years: Competing knowledges and the erosion of play-based learning. *Australasian Journal of Early Childhood*, *41*(4), 36–43. <https://doi.org/10.1177/183693911604100405>
- Bassok, D., Latham, S., & Rorem, A. (2016). Is kindergarten the new first grade? *AERA Open*, *2*(1), 233285841561635. <https://doi.org/10.1177/2332858415616358>
- Brown, C.P., & Barry, D. P. (2021). Make Kindergarten “Funner”: Examining how Kindergarteners Made Sense of the Changed Kindergarten. *Teachers College Record* (1970), *123*(6), 1–28. <https://doi.org/10.1177/016146812112300605>
- Burriss, K.G., & Tsao, L.-L. (2002). Review of research: How much do we know about the importance of play in child development? *Childhood Education*, *78*(4), 230-233. <https://doi.org/10.1080/00094056.2002.10522188>
- Case-Smith, J., & OBrien, J. C. (2010). *Occupational therapy for children*. Maryland Heights: Mosby Elsevier.
- DeLuca, C., Pyle, A., Valiquette, A., & LaPointe-McEwan, D. (2020). New Directions for Kindergarten Education. *The Elementary School Journal*, *120*(3), 455–479. <https://doi.org/10.1086/707008>

Edwards, S. (2017). Play-based learning and intentional teaching : Forever different?

*Australasian Journal of Early Childhood*, 42(2), 4–11.

<https://doi.org/10.23965/AJEC.42.2.01>

Eisenberg, N., Sadovsky, A., & Spinrad, T. L. (2005). Associations of emotion-related regulation

with language skills, emotion knowledge, and academic outcomes. *New Directions for*

*Child and Adolescent Development*, 109–118. doi: 10.1002/cd.143

Howe, M. B., Brittain, L. A., & McCathren, R. B. (2004). Meeting the Sensory Needs of Young

Children in Classrooms. *Young Exceptional Children*, 8(1), 11–19.

<https://doi.org/10.1177/109625060400800102>

Kuhaneck, H. M., Spitzer, S. L., & Miller, E. (2010). *Activity Analysis, Creativity, and*

*Playfulness in Pediatric Occupational Therapy: Making Play Just Right*. Jones and Bartlett Publishers.

Miller, E., & Almon, J. (2009). Crisis in the Kindergarten: Why Children Need to Play in School.

*The Education Digest*, 75(1), 42–45.

Murray-Slutsky, C., & Paris, B. A. (2005). *Is it sensory or is it behavior?: Behavior problem*

*identification, assessment, and intervention*. San Antonio, TX: PsychCorp, a brand of Harcourt Assessment.

Piaget, J. (1977). *The essential Piaget*. Basic Books.

Piaget, J. (2003). Part I: Cognitive Development in Children--Piaget Development and Learning.

*Journal of Research in Science Teaching*, 40. <https://doi.org/10.1002/tea.10090>

- Salinas, E.P. (2016). *A Multiple Case Study of Bilingual Kindergarten Classrooms Utilizing Play-Based Learning Strategies*. ProQuest Dissertations Publishing.
- Taylor, M. E., & Boyer, W. (2019). Play-Based Learning: Evidence-Based Research to Improve Children's Learning Experiences in the Kindergarten Classroom. *Early Childhood Education Journal*, 48(2), 127–133. <https://doi.org/10.1007/s10643-019-00989-7>
- Vygotsky, L. (1978). *Mind in society: the development of higher psychological processes*. Harvard University Press,.
- Vygotsky, L. (1996). *Interaction between learning and development*. In Readings on the development of children.
- Walsh, G., McGuinness, C., & Sproule, L. (2019). “It”’s teaching ... but not as we know it’: using participatory learning theories to resolve the dilemma of teaching in play-based practice. *Early Child Development and Care*, 189(7), 1162–1173. <https://doi.org/10.1080/03004430.2017.1369977>