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## How Can Play-Based Teaching Strategies Increase Healthy Development of Kindergarten Students?

Melissa Schooley  
melissalundgren@hotmail.com

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How Can Play-Based Teaching Strategies Increase Healthy Development of Kindergarten  
Students?

Melissa Schooley

Concordia University, St. Paul

MA in Education: Early Childhood

ED 590 Course Instructor: Dr. Kelly Sadlovsky

Second Reader: Professor Elisabeth Amirahmadi

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## Table of Contents

|  |    |
|--|----|
| Abstract.....  | 4  |
| Chapter One: Introduction.....   | 5  |
| Chapter Two: Review of Literature.....                                       | 12 |
| The Mental Health Crisis in Young Children.....                              | 12 |
| The Importance of Teaching Social and Emotional Learning in Kindergarten.... | 13 |
| How Play Can Support Social-Emotional Learning.....                          | 14 |
| How Play Can Support Academic Learning.....                                  | 16 |
| Play-Based Learning and Literacy Development.....                            | 17 |
| Developing Writing Skills Through Play.....                                  | 20 |
| Developing Language Development Through Play.....                            | 22 |
| Play-Based Learning and Mathematical Development.....                        | 22 |
| The Teacher’s Role in Using Play-Based Strategies.....                       | 24 |
| The Connection Between Cognitive Competence and High-Quality Play.....       | 26 |
| Student Engagement in Play-Based Literacy.....                               | 27 |
| Chapter Three: Research Summary and Conclusion.....                          | 31 |
| The Mental Health Crisis in Young Children.....                              | 32 |
| How Play Can Support Academic Learning.....                                  | 33 |
| Play-Based Learning and Literacy Development.....                            | 34 |
| Play-Based Learning and Mathematical Development.....                        | 35 |
| The Teacher’s Role in Using Play-Based Strategies.....                       | 36 |
| The Connection Between Cognitive Competence and High-Quality Play.....       | 36 |
| Student Engagement in Play-Based Literacy.....                               | 37 |

Chapter Four: Discussion, Application, and Future Studies.....39

    Limitations in the Research.....39

    Future Studies Needed.....40

    Future Educational Policies.....42

    Future Instructional Practices.....43

References.....46

### Abstract

Kindergarten's original intention was to be a place where young children could learn and grow through a natural and playful setting. Kindergarten was designed to be a place where children could use various play materials to experiment with and learn about the world around them, all with minimal adult participation (Pyle, Prioletta, & Poliszczuk, 2018). However, with the greater demand on academic learning, assessments, and mandated benchmarks, play and exploration in the kindergarten classroom have diminished. Kindergartners are forced to learn through manners that are not developmentally appropriate, and it has been shown to have detrimental effects on children's physical and mental health. This push-down of academics into kindergarten does not have research to prove the positive effects on future academics, instead it could be hampering those as well. This paper synthesized scholarly articles and research studies surrounding the positive effects of play-based learning in kindergarten and the detrimental effects of a kindergarten curriculum that is not developmentally appropriate. Some believe that academics need to be pushed into kindergarten to further academic success; however, these articles and research studies demonstrated that a play-based kindergarten curriculum can successfully promote developmentally appropriate academic achievements along with social-emotional successes for all children. Promoting the healthy development of the whole child through play-based teaching strategies allows children to be better prepared for future school and real-world success.

*Keywords:* developmentally appropriate practices, early childhood education, mature dramatic play, play-based learning, push-down curriculum

## Chapter One: Introduction

Kindergarten originated in 1837, founded by Friedrich Froebel. In a time where the world felt that children under the age of seven were not capable of attending school in a social or academic manner, Froebel believed that early education was important. He believed that a teacher's role was to guide children in active learning, rather than to lecture. Some of the guiding principles in Froebel's kindergarten included physical activity, pleasure of singing, creative expression, and the experience of living among others (Scholastic Early Childhood Today, 2000). Kindergarten has changed drastically in the United States since it was adopted in 1856. Over the last thirty years, children have lost an average of twelve hours per week of free play, including outdoor play (McRae, 2015). Research has shown that young children learn best through play. Free play changes the connections of the neurons in a child's brain, and without that experience those connections are left unchanged (McRae, 2015). Play gives children the opportunity to socialize, problem solve, research, and be creative. Play also lays the foundation for academic learning including mathematics, reading, and writing skills. Play is essential for the overall healthy development of children in kindergarten. How can play-based teaching strategies increase healthy development of kindergarten students?

### **Keyword Definitions**

Throughout this paper there will be a few keywords and terms that are important to understand while reading. Developmentally appropriate practices (DAP) refers to the National Association for the Education of Young Children (NAEYC) position statement on the best ways that young children learn. Developmentally appropriate practice focuses on the intentionality of early childhood educators to help each child reach learning goals that have been purposefully set, that are both challenging and achievable. For this to happen, early childhood educators must: be

knowledgeable on child development; get to know the students and have a strong relationship with each child in the class; and get to know each of the families worked with to better gain an understanding of the families' culture, values, and beliefs (Copple & Bredekamp, 2009).

Early childhood education (ECE) refers to the education of any child under the age of eight years old. ECE lays the foundation for future school success, and children in this age range learn in a different manner than older children. Effective early childhood educators must have a wealth of knowledge of the developmental milestones, and the continuum of these milestones, for the age level worked with. An early childhood educator also needs to build authentic relationships with students to best identify the developmental levels, strengths, and interests of the students (Copple & Bredekamp, 2009). The next key term to understand is mature dramatic play, which is defined by Bodrova (2008) as advanced play in which children are involved in role-play and can use objects and gestures to represent real life objects and actions. This play can incorporate many different themes and can last for weeks. When mature dramatic play is used in the early childhood setting, children can set a foundation for academic learning (Bodrova, 2008).

Play-based learning is referred to as the intentional use of play to promote the healthy development of children. Through the use of play-based learning, early childhood educators create goals for each play experience in the classroom. These goals could be to practice academic skills, encourage language development, teach social-emotional skills, or to boost physical development. While using play-based teaching strategies educators can observe and scaffold the learning to meet each child at each own's level and further develop growth and development (Bodrova, 2008). Lastly, push-down curriculum is defined as the recent trend in education of adding more academics into the kindergarten classroom that was once reserved for

first grade. The thought behind the push-down curriculum is that adding more academics into kindergarten can give children an advantage on learning and attempt to close the achievement gap that is prominent across the nation (Is kindergarten the new first grade?, 2017).

### **Play and the Young Brain**

Pushing academics into early childhood has not been found to guarantee later academic success, but rather could create behavior and social-emotional problems for some children (Bodrova, 2008). As children role-play using imaginary scenarios, abstract and symbolic thinking is developed. Literacy learning is also improved through play by developing the pre-requisite skills needed for reading and writing. Children use imaginations through dramatic play which can affect oral language and metalinguistic awareness development. Moreover, while children play, reading and writing skills in a real-life scenario is used, thus giving it a meaningful context (Bodrova, 2008). Through play children can gain cognitive skills while also promoting and helping to develop social skills. People are not born with executive function skills, which the Center on the Developing Child (2011) described as a person's working memory, inhibitory control, and mental flexibility. Due to this, developing and acquiring these executive function skills can be thought of as one of the most important skills early childhood educators can impart on young students (Center on the Developing Child, 2012).

Executive function skills cannot be taught separately from the rest of the curriculum, but rather, need to be incorporated into every part of the school day (Belinda, 2012). Belinda (2012) proposed that mature dramatic play is a great way to incorporate executive function skill-building in a practical and meaningful way. While involved in intentional mature dramatic play, children can develop executive function skills through working, talking, and thinking out loud. While talking and thinking out loud children are building their working memory which helps to



organize ideas and practice self-guidance. Children can also make plans for the play which requires children to maintain focus and encourages children to turn ideas into actions that meet the anticipated goals (Belinda, 2012).

Language development is another key skill children develop through play. According to Cople and Bredekamp (2009), oral language and vocabulary knowledge are important predictors of reading comprehension. Children who are able to read by decoding, but lack in vocabulary skills, tend to experience difficulty with reading later on, when comprehension is a requirement for understanding more advanced texts throughout the different subject areas in the curriculum (Cople & Bredekamp, 2009). Through mature dramatic play, children need language to keep the play scenario going. Play is a natural way for children to build on language skills and to practice using oral language skills to communicate ideas in a safe environment (Heidemann & Hewitt, 2010). In addition to building vocabulary and oral language skills for future reading success, it is important to include opportunities to practice language skills due to the increasing number of young learners whose home language is not English. There are more than two-million English-language learners in public pre-kindergarten through third grade classrooms in the United States. English-language learning students tend to be less communicative and accepted by their peers (Xu, 2010). Early childhood educators who created a caring and responsive learning environment and set up intentional, mature, dramatic play experiences promoted language practice for these students.

Physical play has benefits in the early childhood classroom as well. Through physical play children can relieve stress and anxieties, reducing the risk of developing mental health issues. Moreover, physically active and rigorous play activities can promote a healthy lifestyle and reduce the risk of obesity in young children. According to Stegeline (2005), the childhood

obesity rates in the United States and England have doubled since 1970. Childhood obesity can be linked to both physical and psychosocial problems in the future including high blood pressure, Type II diabetes, heart diseases, peer rejection, and even school failure. These problems can be reduced by including physically active play in the classroom (Stegelin, 2005). Another reason physically active play should be a staple in every early childhood classroom relates to the way boys tend to play and make social connections. Riley and Jones (2007) stated that boys tend to play games that are more active and can be considered, by some, to be rough and tumble. Activities such as wrestling and grabbing are not meant to be fighting, but rather could be boys' way of showing feelings of friendship towards one another. For these reasons it is important to keep active play a part of the everyday curriculum (Riley & Jones, 2007).

Play included in the kindergarten classroom can be used as an intentional way to promote the cognitive, social-emotional, language, and physical development of young learners. Cognitive development can be promoted by incorporating all subject areas into mature dramatic play. Social-emotional skills are developed through play by practicing executive function skills, which are essential for future success to be a productive member of society. Oral language skills are practiced as play themes are acted out due to communication being necessary to keep the play going. Lastly, physical development is enhanced when children are active in play which not only promotes physical health, but mental health as well. Early childhood educators need to be intentional in the learning objectives expected through each play theme. Educators also need to be diligent in observing, intervening, and scaffolding as required. The early childhood curriculum needs to include ample time for play each day. At least thirty to forty-minute play periods need to be planned for play objectives to be met (Heidemann & Hewitt, 2010).

According to the Center on the Developing Child (2011) early childhood educators need to create an environment where scaffolding is provided that promotes children to move from complete adult dependence to practicing on their own, and then finally, independence in performing executive function skills. For this to happen successfully, early childhood educators should be sensitive and responsive to each child's needs and promote a safe and predictable environment. When a safe and predictable environment has been established, children are more capable of staying focused, controlling behaviors and emotions, and obeying adult requests and rules. When educators make this an objective throughout the mature dramatic play that is planned, setting children up for future academic success can be achieved. For children to be successful in reading, writing, and math, children need to be able to follow and remember classroom rules, stay focused, control their emotions, sit for periods of time, and learn through listening and watching (Center on the Developing Child, 2011). Well-planned, scaffolded mature dramatic play where the teacher is intentional and actively involved is a positive way to encourage the cognitive, social-emotional, language, and physical development of young learners.

### **Conclusion**

Early childhood education has undergone drastic changes over the last few decades, and some of these changes have not kept what is best for young children in mind. The removal of play from kindergarten classrooms across the nation has been detrimental to children's cognitive, language, and social-emotional development, in addition to the physical and mental health of young learners (Miller & Almon, 2009). Due to this, it is imperative that a change occurs to ensure that all children can receive the best kindergarten learning experience. Early childhood education sets the foundation for future school success. Due to this, it is essential that

kindergarten students receive a learning experience that is developmentally appropriate and allows for the best outcome possible. Research has shown that children benefit cognitively, social-emotionally, mentally, and physically when learning through developmentally appropriate practices, such as play (McRae, 2015). Many kindergarten programs across the nation have moved away from a play-based curriculum and have begun to push more academics into the kindergarten classroom, that would have originally been introduced in first grade (Miller & Almon, 2009). Research also makes it apparent that kindergarten needs to go back to its original roots Friedrich Froebel set forth, in 1837, and put developmentally appropriate practices back at the forefront of the kindergarten curriculum (Scholastic Early Childhood Today, 2000). This paper will examine recent research on kindergarten practices throughout the nation and compare with developmentally appropriate practices. Recent research studies, clinical reports, and journal articles on play-based learning and the positive effects it can have on kindergarteners' overall healthy development will be investigated.

## Chapter Two: Literature Review

How can play-based teaching strategies increase healthy development of kindergarten students? The research on play in kindergarten classrooms has shown that it is essential for young children to succeed in school. Play sets the stage for social-emotional learning along with academic learning. The push for more academics at younger ages has happened for more than three decades and does not keep in mind what is best for early learners. Children are expected to sit for longer periods of time, have longer attention spans, show self-control, and be independent learners (Miller & Almon, 2009). These expectations are not developmentally appropriate for such young children. Research has shown that kindergarteners should be actively involved in learning, using manipulatives and games to learn math skills, acquiring reading and writing skills through mature dramatic play, and practicing social skills while communicating with peers in free play. Kindergarten needs to return to its German roots where it was thought of as a place to learn through songs, play, and life experiences to ensure the healthy development of all kindergarten students (Scholastic Early Childhood Today, 2000).

### **The Mental Health Crisis in Young Children**

Mental health disorders have risen in children and adolescents in the United States. It is estimated that one in five children and adolescents has a mental health disorder. The rise in challenging behaviors in the classroom could be a result of the increase in mental health needs in young learners (Ocasio, Van Alst, Koivunen, Huang, & Allegra, 2015). Studies have shown that there is a link between poor academic performance and the onset of disruptive behaviors in the classroom. Disruptive and antisocial behaviors can be the result of students attempting to avoid academic tasks (Lane, Menzies, Munton, Von Duering & English, 2005). Teaching social-emotional learning (SEL) in a kindergarten classroom explicitly had the potential to help teach

young students the skills needed to overcome obstacles in the school and community setting. SEL can be taught and practiced through the use of play-based learning in the kindergarten classroom.

### **The Importance of Teaching Social and Emotional Learning in Kindergarten**

Children often have difficulties with controlling actions, saying what is meant, and making reasoned decisions when unaware of feelings. Social-emotional learning focuses on teaching children how to cope with these feelings and deal with situations in a healthy and safe way (Elias & Weissberg, 2000). According to a journal article that was written in the *Journal of School Health* by Elias and Weissberg (2000), healthy SEL is important for academic success along with successes later in life, in the workplace, and for creating and maintaining relationships with friends and family members. Social-emotional learning skills such as communicating effectively, the ability to work cooperatively with others, emotional self-control and appropriate expression, empathy and perspective taking, optimism, humor, self-awareness, ability to set goals, and solve problems and resolve conflicts effectively without violence need to be taught explicitly in early childhood classrooms every day (Elias & Weissberg, 2000).

Social-emotional learning programs can be incorporated into the curriculum and everyday activities of the classroom. SEL cannot be thought of as a separate curriculum that is taught occasionally. SEL can be overtly taught and practiced throughout each school day. Children need a safe environment where opportunities to learn, practice, and receive feedback on SEL are evident and available daily. When children are given these opportunities, students who may have felt anxious or upset in situations previously now have the skillset to solve problems and focus on academic learning (Elias & Weissberg, 2000).

### **How Play Can Support Social-Emotional Learning**

Play is an essential component of school engagement. According to a clinical report by Milteer, Ginsburg, and Mulligan (2012), play can allow a child's social and emotional development and cognitive development to be addressed. Play allowed children to adjust to the school setting, which then set children up for successes in school engagement, learning readiness and problem-solving skills. Play allows children the opportunity to create friendships and realize areas of strengths in school which allowed for self-confidence in the school setting. Children are able to develop a resilience that is needed when faced with new challenges in the future (Milteer, Ginsburg, & Mulligan, 2012).

Challenging behaviors in young children have been found to be a strong predictor of delinquency, aggression, antisocial behavior, and substance abuse later in life. High quality preschools have been shown to help children considered "at-risk" with intellectual development problems but have failed in addressing the social-emotional learning problems that typically occur in at-risk child populations. Ocasio, Van Alst, Koivunen, Huang, and Allegra (2015) conducted a study in four urban preschools, serving approximately one hundred fifty students, for three years. Two master's level social work clinicians and one master's level intern worked in the classrooms to provide a social skills curriculum (Second Step) for all preschool students and play therapy for individuals who needed further services. The study used a pre-experimental design using one group with a pretest and posttest to determine the cost effectiveness of providing behavior intervention in preschools.

The social-emotional competencies of the children involved in this study were assessed at the beginning and ending of the school year using the Preschool and Kindergarten Behavior Scales (PKBS-2). The assessments were conducted by the preschool teachers for the first year

and the beginning of the second year. The clinicians conducted the assessments for the ending of the second year and the beginning and ending of the third year. The study showed that all students who received the Second Step curriculum and the play therapy benefitted from these programs and made considerable gains in their social-emotional learning. Statistically significant improvements were noticed over the social-emotional domains of social cooperation, interaction, independence, and externalizing and internalizing problems. Along with the increases in social-emotional learning, the children's risk levels decreased (Ocasio et al., 2015).

This study had limitations due to the small sample group and with no control group to compare to. These limitations made it difficult to determine the effectiveness of the Second Step curriculum and play therapy compared to a control group. Despite the limitations, the positive results provided enough of an outcome to justify continued research in this area. According to Ocasio, Van Alst, Koivunen, Huang, and Allegra (2015) further research could be difficult as well due to demographic variables. To ensure the social-emotional gains in the children involved are due to the programs taught, other factors such as the contribution of universal curriculum, mental health clinician consultation, and play therapy need to be addressed in future research studies (Ocasio et al., 2015).

Free play incorporated into a kindergarten classroom is important in building a child's SEL. When free play is a part of the daily routine in a classroom, children can overcome social and emotional problems that could affect academic success. Through creating a safe, caring, and culturally responsive classroom environment, children can build up self-esteem and lessen anxieties. Children no longer need to focus on breaking the rules, pleasing the teacher, or getting a wrong answer when actively engaged in play with classmates (Allen & Barber, 2015).



Furthermore, when the social emotional needs are met children's brains may be more primed and ready for academic learning.

### **How Play Can Support Academic Learning**

A curriculum that has high academic expectations can be an emotional trigger for some young learners. Studies have shown that incorporating basic reading skills into early childhood classrooms, a practice that once was reserved for first grade, has given some students the opportunity to become better readers at an earlier age. However, the study also found that low-achieving students were not making the same gains as high-achieving students, thus widening the achievement gap (Is kindergarten the new first grade?, 2017). Under-resourced schools that have a high percentage of low-achieving students have felt the pressure to close the achievement gap through increased academics and decreased playtime, including recess. This practice has been shown to increase behavior problems. Alternatively, teachers in a report stated that adding in a break of fifteen minutes of unstructured play time led to an increase in attentiveness and academic time (Milteer et al., 2012).

Play is an important aspect in young children's healthy brain and physical development; it is a natural tool for children to learn. Through play, children can explore creatively and imaginatively while cognitive and emotional strengths are developed (Milteer et al., 2012). "Understanding a Brain-Based Approach to Learning and Teaching" is a journal article in which Caine and Caine (1990) explain the importance of emotions on brain development. The brain's wiring is affected by life and school experiences. Learning is a natural thing that occurs and is strongly tied to our emotions. Children learned best when in an environment that is emotionally supportive and included mutual respect and acceptance (Caine & Caine, 1990). Learning that is introduced through real-life experiences and connects to children's personal worlds promoted the

effective functioning of the brain. Real-life experiences in learning provided children with an environment that is low in risk and then can be high in challenge. This can be accomplished by incorporating real-life activities into the daily routine (Caine & Caine, 1990).

In a journal article titled, “Where’s the Paper?” Carol Vukelich introduced a real-life kindergarten classroom and the use of intentional dramatic play to increase literacy skills. Vukelich explained that having real-world dramatic play centers such as a grocery store, home setting or United Parcel Service store, created an environment that is familiar to a child and allowed the children to imitate behaviors observed in everyday life. Adding paper and pen next to a telephone, or a magazine in a “waiting room” allowed children to practice reading, writing, and language skills in a way that is meaningful and functional. It is important that teachers are intentional in setting up the play area in ways that will promote these literacy skills. Teachers also need to help guide and facilitate the play, but gradually release the students to learn and play independently (Vukelich, 1990).

### **Play-Based Learning and Literacy Development**

Literacy skill development in the early childhood years has been shown to increase academic learning both early on and later in children’s academic careers. Due to this, developing core literacy skills has become a main focus in the kindergarten classroom. Kindergarten used to be thought of as a place for children to investigate the world around them in a child-centered setting, but has now shifted to a narrower approach with rigorous, mandated academic curriculum taking center stage (Pyle, Prioletta, & Poliszczuk, 2018). There is much debate on the loss of playtime as a developmentally appropriate practice to ensure that students meet the academic demands. As a result of this, there has been a call for research on the

dissipation of play opportunities in the kindergarten classroom to make time for more teacher-directed instruction to meet the mandated academic standards (Pyle et al., 2018).

Pyle, Prioletta, and Poliszczuk (2018) conducted a research study that analyzed the blending of literacy skills and play-based learning to describe how play can be used to aid in children's literacy development, and to clearly state a theory that bridges the dichotomous thinking between academics and development. The researchers conducted the study in Ontario, Canada due to a recently mandated play-based approach to learning in full-day kindergarten classrooms. The participants in this study came from twelve kindergarten classrooms in two different school districts, one suburban and one urban. Each of the classrooms had between twenty-five and thirty kindergarten students and the teachers had varying years of teaching experience ranging from three to twenty-six years. The researchers observed for a minimum of ten hours in each of the twelve classrooms and focused on literacy instruction and the integration of literacy behaviors during playtimes. The researchers also conducted interviews with the teachers in each of the classrooms to gain an understanding of the teacher's perspective on the importance of play in learning literacy concepts (Pyle et al., 2018).

The results of this study showed that teachers used play in two main ways in the classroom, free play and play-based approach to learning. One group, encompassing five of the teachers, primarily used free play in the classroom, allowing play to be completely child-directed and void of adult interference. The teachers in this group believed that academic learning and play were two separate entities and play's main purpose was to build oral language, personal, and social skills. The researchers noted that the teachers in this group shared the perspective that oral language skills are the only form of literacy learning involved in play. These teachers expressed the belief that learning how to read and write required a more formal setting. The

researchers observed the students in these classes communicated with one another as they negotiated, built storylines, and discussed their play, engaging in oral language development. The teachers in this group did not purposefully provide literacy materials in the play environment and there was little evidence of children reading or writing during play times (Pyle, et al., 2018).

The other seven teachers observed in this study shared the belief that play was both a developmentally appropriate activity and an activity that can support academic learning. The teachers in this group were observed working along a play continuum in the classroom. The play continuum ranged from free play, which is child-directed with minimal adult intervention, to teacher-directed play, which is more structured with the teacher instructing, such as using an instructional game. The researchers observed the teachers purposefully creating a play environment that lent itself to using literacy skills through play. This was seen in the dramatic play center when children wrote down customer orders or appointment times and read about the topic of the play center. These teachers expressed that not only were the students using literacy skills during play, but also had a positive attitude, were more motivated, and were more engaged in using literacy skills through play. The teachers in this group were also observed being involved in different capacities during play. At times, the teachers were observers, becoming involved as needed, other times the teachers were fully involved in the play to help the children extend the play scenario when appropriate (Pyle et al., 2018).

The researchers noted that even though all twelve kindergarten teachers expressed the importance of play in the kindergarten classroom, all stated the difficulty of balancing play and meeting the mandated curriculum standards. The teachers did not think that the academic learning that took place during play was sufficient for students to meet curriculum standards. These teachers also expressed the concern of the high student-to-teacher ratio in the classrooms

and the expectations to prepare the kindergarten students for more rigorous work in upcoming school years. The teacher perspective on play in the classroom had a vast role on how play is implemented in the classroom. The researchers noted that when teachers felt strongly about play-based learning, more opportunities for literacy skills to be practiced and strengthened during learning were provided. Children in these classrooms were observed using literacy skills during play when a literacy-rich play environment was made available. The researchers also stated that having adult intervention during play is necessary at times to help guide the literacy practices (Pyle, et al., 2018). Pyle, Prioletta, and Poliszczuk (2018) expressed the need for more research on this topic to help teachers determine how to balance teaching mandated curriculum and incorporate play-based learning opportunities in the classroom (Pyle, et al., 2018).

### **Developing Writing Skills Through Play**

Writing is a lifelong skill that children learn early in school. Writing should be introduced to young children in a meaningful way to lay the foundation for the true necessity and relevance of learning this important task (Yoon, 2014). Communicating with others incorporates reading, writing, and speaking and is often taught in isolation in school using practice drills and worksheets. However, play as an enjoyable experience that incorporates imagination and creativity with others is a developmentally appropriate way for children to use and practice literacy skills in a natural and relevant setting (Yoon, 2014). Yoon (2014) described writing as symbolic representations of meaning, which can incorporate both drawings and written letters. Writing is not only the act of writing letters or drawing pictures on paper, but also includes the meaning behind the symbols used. Through play, children use language to communicate with others and to continue the play activity. Children voluntarily use language and written symbols

in play. This can be seen when children write down orders in a restaurant, create a receipt, or design a sign for a store (Yoon, 2014).

In this qualitative study, Yoon (2014) examined how official writing lessons carried over into children's play, and how children's writing practice during play influenced official writing practices. Yoon conducted this two-month long study in a kindergarten classroom in a diverse elementary school in a small, urban, midwestern city. Within this classroom, Yoon chose four focal children whose writing, drawing, and speaking abilities varied. Throughout the two months the researcher visited the classroom twice a week to observe reading, writing, and playtimes. Yoon analyzed the data by looking at the data across unstructured and structured events. Yoon analyzed specific episodes and looked for patterns and themes (Yoon, 2014).

Through the observations and data collected, Yoon discovered that writing and play complemented each other in the classroom. It was found that the four focal students often used writing practices as a resource during play. Yoon noted that the children exhibited knowledge of the literacy lessons learned at school during playtime. Furthermore, the children naturally used writing practices when it helped further social goals. This was seen through two of the focal children writing letters back and forth. Yoon also observed that play blended into official writing lessons. The children's Writer's Workshop time was observed as an extension of the children's play, where play was initiated, and where conflicts could be mediated. Writing was not only seen as a single, isolated, daily lesson, but rather was observed intersecting throughout the entire day (Yoon, 2014). While this study showed the benefits that play had on writing, the sample of participants and timeframe was limited. More research is needed in this area that encompasses more participants across a longer period of time (Yoon, 2014).

### **Developing Language Development Through Play**

Oral language development is impacted through play. Developmental psychologist, Lev Vygotsky, was able to identify the connection between play and the increased use of oral language in young children. Vygotsky connected this by showing children's need to use language to assign new meanings to toys, props, and actions used during play (Bodrova, 2008). Mature dramatic play cannot be continued without children using words to communicate with one another. Language use is how children are able to express what is happening and what is expected, to keep the play scenario going (Heidemann & Hewitt, 2010). Incorporating play into the early childhood day to promote oral language development is extremely important for English-language learners. According to a journal article published in *Early Child Development and Care*, Xu (2010) expressed there are more than two-million children in public pre-kindergarten to third grade classrooms whose home language is not English. Playtime in the classroom can give these children a chance to practice the English language in a non-threatening environment. The research demonstrated if language barriers are not addressed, and children are not given chances to practice their language skills, it could hinder academic learning, and even turn into behavioral problems (Xu, 2010).

### **Play-Based Learning and Mathematical Development**

“Learning through play-pedagogy and learning outcomes in early childhood mathematics” (Vogt, Hauser, Stebler, Rechsteiner, & Urech, 2018) is a quantitative research study that focused on learning mathematics through play. The researchers explained the importance of early mathematical learning for later school achievement, but there is much debate on the best way to teach math to kindergarten-aged students. These researchers compared a mathematical training program and a play-based approach to a control group to gather data on

which is best practice. The researchers randomly contacted and invited kindergartens in Switzerland to participate in the study. 324 kindergarten aged students, from 35 different kindergarten classrooms, were chosen. From there, the participants in this study were selected to be in either the control group, training program group, or play-based approach group. Twelve kindergarten classrooms were chosen for each group in this study, but before the study began one of the kindergarten teachers in the play-based approach group had to opt out due to health concerns. The researchers explained that the mean age for the children was six years and three months and there were no differences between the three groups.

The children were given a pretest and posttest, one-on-one with a researcher, in this quasi-experimental study using a Swiss mathematical assessment that tests early mathematical skills including ordinality, cardinality, and quantity. The children's cognitive abilities were then measured using two different subtests. After administering the pretest, all families were given a questionnaire to complete on socio-economic background, languages spoken at home, and the home learning environment. The method results were compared to divide the children into three sub-groups, a high-level group, medium-level group, and low-level group (Vogt et al., 2018). The results revealed that children in the low-level group made slightly higher gains using the training program than play-based approach. However, children in the low-level group in both the training program and play-based approach group had a higher learning gain overall than the control group. Children in both the medium-level and high-level groups made significantly higher gains in the play-based approach group compared to the training program and control groups. In fact, the high-level group performed worse in the training program group than in the control group. The researchers indicated that if whole group instruction is to be used for mathematical teaching the play-based approach will yield the best results for all the children in



the class, since all groups performed better in the play-based approach group when compared to the control group. The researchers made note that further research is needed to create play-based approaches, which target a wider range of mathematical abilities in kindergarten (Vogt et al., 2018).

### **The Teacher's Role in Using Play-Based Strategies**

Pyle and Bigelow (2015) investigated the different approaches to play-based learning in a kindergarten classroom and how the teacher's perspective on the purpose of play influenced how play is incorporated into the classroom. The researchers described existing research that identified play as a great tool to enhance learning. Through sociodramatic and literacy rich play children can improve vocabulary, increase literacy skills, and increase mathematical skills. Play has also been found to support development of creativity, problem solving, and self-regulation (Pyle & Bigelow, 2015). Pyle and Bigelow also mentioned that teachers in classrooms that incorporated child-centered play rated students higher in ability levels, observed students choosing harder math problems, were more self-directed, smiled more in the classroom, and expressed less worry about school. Despite the benefits play has shown, there is much debate on how to incorporate play into the classroom and still meet rigorous curriculum demands (Pyle & Bigelow, 2015).

Three kindergarten classrooms in Ontario, Canada were selected to conduct this qualitative study. These classrooms had teachers from diverse communities that were identified as "exemplary" with varying teaching experience. This study was conducted over a four-month period and data was collected from extended observational periods along with interviews with the teachers and students to determine how play was incorporated into the classroom, and to understand the teacher's perspective on the purpose of play. From the data, Pyle and Bigelow

found that three distinct approaches to play in the classroom were displayed. These approaches were titled: play as a peripheral to learning, play as a vehicle for academic learning, and play as a vehicle for social and emotional development (Pyle & Bigelow, 2015).

Linda, the teacher in the classroom profile of play as a peripheral to learning, had a focus on academic learning to meet the curricular standards. In this classroom play was used as a break from academic learning and teacher involvement consisted of supervision of behaviors. Children in this classroom were never observed using literacy materials in the play context.

Karen, the teacher in the classroom profile of play as a vehicle for social and emotional development, expressed the belief that social and emotional development was important in kindergarten and play was a great way to develop these skills. Through interviews with the researchers, Karen expressed that play should be child-centered, thus supported the development of social-emotional skills and oral communication. Karen found it difficult to make a connection between play and learning academic skills. The students in the class were observed playing together nicely and discussing the importance of learning positive social interactions. In the third classroom, Samantha held the belief that play could serve the purpose of both social-emotional and academic learning. It was expressed that play is a place where students can practice the skills that have been taught. The researchers observed Samantha being involved in the play in different capacities, occasionally involved directly and other times allowing more child-centered play. Through observations, the researchers found the students' interests piqued through the play environment, academic skills being practiced, and students played collaboratively. Even though Samantha believed academic skills can be enhanced through play, most of the learning in the classroom occurred through teacher-directed academic instruction (Pyle & Bigelow, 2015).

Pyle and Bigelow (2015) found through the study that all three teachers had very different beliefs on the purpose of play in the classroom, which then guided how play was incorporated into the day. The researchers discussed that the study does not answer whether or not the different play pedagogies in these classrooms supported the targeted development of the students in the classroom. Instead, the different play pedagogies of these three teachers revealed the challenge teachers face in attempting to incorporate play-based learning and meet academic standards. The researchers discussed that the study was limited by a small sample size. Pyle and Bigelow called for more research to be done across differing kindergarten contexts on the different approaches to play-based learning. Pyle and Bigelow stated that if more research could be conducted to help validate these approaches, precise measurement could be done on the impact play has on the academic and social-emotional development of kindergarten students (Pyle & Bigelow, 2015).

### **The Connection Between Cognitive Competence and High-Quality Play**

Pretend play has been shown to engage many areas of the brain, because when involved in pretend play emotion, cognition, language, and sensorimotor actions are naturally incorporated. When children take part in high quality, pretend play, children role play, improvise, and transform objects and actions symbolically, all while socializing and negotiating with peers (Gmitrova & Gmitrov, 2003). Gmitrova and Gmitrov (2003) studied the effects of two forms of pretend play on cognitive and affective performance of children in a mixed age environment. The research study took place over a three-month time frame in two mixed age classrooms in Slovak Republic. The children were between the ages of three and six years old and were from the same geographic region with similar ethnic and socioeconomic backgrounds (Gmitrova & Gmitrov, 2003).

The study investigated teacher-directed pretend play that involved all of the students in the classroom and child-directed pretend play where the children played more freely in smaller groups. The researchers collected data on the children's cognitive and affective indicators while involved in child-directed play and teacher-directed play. Through the data collected, it was found that when children were involved in child-directed play children were observed exhibiting higher levels in both the cognitive and affective domains when compared to the teacher-directed play. During teacher-directed play the researchers discovered the children's persistence gradually decreased, which led to a shortened lesson time. When children were involved in child-directed play, children were observed using problem-solving and caretaking skills and relied on peer or adult assistance less often. Children spent more time on task, remembered more, learned more and were more productive when involved in child-directed cooperative play groups when compared to the teacher-directed play. Gmitrova and Gmitrov (2003) concluded that high-quality pretend play helped support cognitive competence. The researchers stated that if children are not given these sort of high-quality play opportunities, important metacognition, problem solving, social cognition, and academic development could be diminished. The researchers noted that more research is needed to develop better methods of organizing the play process in order to enhance the natural academic potential during pretend play across different cultures and contexts (Gmitrova & Gmitrov, 2003).

### **Student Engagement in Play-Based Literacy**

Children's early years of learning have a significant impact on future success. Due to this, it is important that educators offer the most beneficial activities to promote high achievement, such as play. Through play children can explore literacy skills, develop linguistic abilities, practice problem solving, and use imaginations. When children play, communication

with one another in an authentic way is used that helps to understand the foundations of language and prepares them for writing and reading (Cavanaugh, Clemence, Teale, Rule, & Montgomery, 2017). Cavanaugh, Clemence, Teale, Rule, and Montgomery (2017) discussed guided play as a way to connect teacher-direct instruction and free play as a means to develop academic and social-emotional skills in a developmentally appropriate way for kindergarten students (Cavanaugh, et al., 2017).

The quantitative study was conducted in two kindergarten classrooms in two public schools of differing socio-economic classes in central United States. The researchers' goal was to determine how students' scores on a standardized test, the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), compared when using guided play during literacy instruction to teacher-directed instruction. The students in the experimental condition were taught the standard activity on phonemic awareness and phonics using hands-on materials and then were asked to create games using the materials. The students in the control condition were only taught the standard activity. The data showed students at both schools made larger gains on the DIBELS assessment when involved in the experimental condition when compared to the control condition, exhibiting that students made larger academic gains when guided play was incorporated into the lesson. As well as learning the letter sounds that the phonemic awareness and phonics lesson taught, the students in the experimental group also practiced storytelling and sequencing through play. The researchers also studied whether or not the phonemic awareness and phonics practice enhanced the students' journal writing. While the teachers observed the students in the experimental group using the letters practiced more often in journal writing when compared to the students in the control group, the results were not statistically significant (Cavanaugh et al., 2017).

The students in the experimental condition developed executive function skills while creating and playing games with one another. Executive function skills are necessary for school and life success and help students to show flexibility, creativity, discipline, and self-control. Observations of students in the experimental condition showed that the students enjoyed learning and having the freedom to be creative with learning. The teachers observed that the students in this group were all on task when creating literacy games and did not need redirecting. The teachers also noted that students who typically exhibited problems sharing and had emotional breakdowns during partner activities were able to be respectful, shared, and compromised while generating phonics games. Moreover, the teachers also observed the students playing the literacy games during recess and lunch times. Practicing these skills more often resulted in better mastery of the literacy skills. The addition of literacy games created high motivation and engagement as shown through the students' enthusiasm to create literacy games, to continue playing the games during other times in the day, and excitement in learning new letter sounds and word families. The study was limited by the small number of participants. The researchers noted that a larger population for the study could help to make the findings more generalizable. The researchers also discussed future studies contemplating using additional, or different, assessments to measure the differences between the experimental and control groups (Cavanaugh et al., 2017).

### **Conclusion**

It can be concluded through these research articles and studies that play is a valuable aspect of the kindergarten daily routine. Through play-based learning, kindergartners can gain academic, oral language, and social-emotional skills (Milteer et al., 2012). When play was intentionally used in the classroom to incorporate learning goals, students were observed

working and using higher order thinking skills with more engagement. Students were more motivated and had a positive outlook toward school and learning (Pyle et al., 2018). The research demonstrated the importance of teachers recognizing that academics can be learned through play when learning objectives were purposefully scaffolded into the play setting, literacy items were made available within the play context, and adult support was available to help guide the learning in play. Teachers were more likely to include this sort of high-quality play into the day when the benefits were acknowledged (Pyle & Bigelow, 2015). In addition to academic learning, executive function skills can be developed and strengthened through play-based learning, which are essential for future success in and out of the school setting (Cavanaugh et al., 2017). Even though research has shown that play-based learning can help advance cognitive and social-emotional development, further research studies are needed. Studies that encompass a greater number of participants over longer periods of time are required to determine the extent to which play can increase cognitive and social-emotional development in young children and the effects play-based learning can have on children in the future. The next section synthesized the research studies in the literature review and discussed how these studies are connected to play-based teaching strategies increasing the healthy development of kindergarten students.

### Chapter Three: Research Summary and Conclusion

Purposeful play in the kindergarten classroom can allow for children to learn in a developmentally appropriate and authentic way to increase cognitive, social-emotional, physical, and mental development of kindergarten students. Play has been shown to aid in the development of executive function skills, which lays a foundation for academic learning and future successes. Moreover, when children learned and practiced executive function skills, fewer behaviors were exhibited in the classroom (Ocasio et al., 2015). Research showed that when purposeful play-based teaching strategies were incorporated into the school day, children could learn and practice academic skills such as reading, writing, and mathematics along with developing oral language skills (Stegelin, 2005).

Research showed that play-based learning worked best when kindergarten teachers had the knowledge of developmentally appropriate practices. This knowledge allowed teachers to fully understand how play can be utilized to drive instruction and on best ways to implement play-based teaching strategies in the classroom. When the understanding is established, learning through play can be accomplished in a way that is engaging for students and allows for children to work at higher levels (Bodrova & Leong, 2005). Research articles, journals, and studies have pointed out the importance and benefits of play-based teaching strategies, however, many kindergarten classrooms are faced with the dilemma of pushing play out for mandated curricular standards. The research studies in this literature review demonstrated the importance of including play-based teaching strategies to increase the overall healthy development of kindergarten students and how play-based teaching strategies can be used to reach curricular standards in a developmentally appropriate way.



### **The Mental Health Crisis in Young Children**

Research has shown that children's social-emotional development is key in future school and life successes. Children are not born with executive functions skills; rather these skills need to be taught and practiced. Disruptive behaviors have been identified to have a connection with poor academic performances in the classroom when children attempt to avoid undesirable academic tasks (Lane et al., 2005). Schools need to address the problem of the estimated one in five children and adolescents in the United States who have a mental health disorder (Ocasio et al., 2015). Explicitly teaching SEL could teach the skills necessary for children to succeed socially in school and with academic tasks. Social-emotional learning programs that are play-based and incorporated throughout the entire school day can have significant benefits for children.

Play in the kindergarten classroom allowed for children to become accustomed to the school setting. Milteer (2012) explained that when children are comfortable and feel safe in the environment higher levels of learning were more likely to occur. Through free play children gained self-confidence and created friendships (Miltier et al., 2012). Statistically significant progress had been shown in children's SEL when involved in social-emotional learning programs and play-based therapy. Many of the articles and research studies involved preschool students, therefore it could be thought that play-based learning might not be as effective in kindergarten. This study also used a small number of participants without a control group in only urban neighborhoods. Therefore, there are holes in the research that could be resolved if a broader area with a larger sample size were used.

### **How Play Can Support Academic Learning**

Kindergarten teachers have been faced with higher demands on academic standards over the past few decades. Due to the push-down curriculum that kindergarten teachers have been faced with, play has been drastically reduced or completely pushed out of the kindergarten classroom. Some teachers assumed that pushing more academics into kindergarten gave students an academic advantage. However, research has shown that pushing curriculum down into kindergarten could be the cause of an even bigger achievement gap due to low-achieving students not making as big of gains as high-achieving students (Is kindergarten the new first grade?, 2017). An additional issue some schools are faced with after pushing curriculum down into kindergarten is increased mental health problems and disruptive behaviors. Teachers have reported that giving students a fifteen-minute break of unstructured play time, or recess, has helped to decrease behaviors and increase attentiveness (Milteer et al., 2012).

Play in the kindergarten classroom has exhibited increases in brain and physical development (Milteer et al., 2012). Children are engaged in learning when it is fun and involves real-world, authentic, learning experiences. The effective functioning of the brain has been shown to thrive through meaningful real-life activities which can be promoted through intentional play-based learning opportunities (Caine & Caine, 1990). Kindergarten teachers promoted healthy brain and physical development using mature-dramatic play in the classroom daily. This sort of play is intentional, has clear learning objectives, allows for time to develop the play scenario, and is guided by the teacher. The kindergarten teacher should be involved in the mature-dramatic play at varying levels to ensure the learning objectives are being met and to scaffold when needed (Vukelich, 1990). While involved, the educator can explain the academic objectives that are being met through play and can show documentation on the objectives to

stakeholders who may not believe the cognitive and social-emotional benefits of play-based learning.

### **Play-Based Learning and Literacy Development**

Play has been found to be an excellent tool for children to learn and practice literacy and language skills. Many research studies have been conducted on the benefits play has on reading, writing, and oral language development, along with the benefits this can have for students whose first language is not English. The benefits that have been shown through these studies validated that play can demonstrate the original intent of learning. Through mature-dramatic play, children are able to understand the reasons behind learning to read, write, and speak clearly. Children learned that in learning how to write a new way of communication emerged and were found to incorporate writing into more of the day (Yoon, 2014).

Play served as a natural tool for language development. Vygotsky found that children needed to communicate to continue a mature-dramatic play scenario and to express new meanings to the toys and actions used through play. Without language children would not be able to keep play scenarios going, therefore language is constantly used throughout these mature-dramatic play times (Bodrova, 2008). Play is a natural place to practice oral language use which is also important for those children whose home language is not English. English-language learners in the classroom setting have been found to use more language in the non-threatening play setting than in the formal academic setting. English-language learners who practiced language through play allowed for a decrease in the language barriers which then increased academic and behavioral performances (Xu, 2010).

Many kindergarten teachers had different beliefs about the purpose of play in the kindergarten classroom. The two main beliefs presented by Pyle, Prioletta, and Poliszczuk

(2018) were: play should be incorporated in the classroom to build oral language skills and play can be used to incorporate literacy skills. The teacher's belief of play's purpose in the classroom determined the amount of literacy development the children were exposed to. Due to this idea, when teachers had more training and knowledge of how to incorporate literacy skills into play time, literacy materials were incorporated into the play setting, and the teachers knew when to aid in the play-based learning environment, the students' literacy skills were practiced and strengthened and the students showed more enthusiasm and engagement in learning (Pyle et al., 2018). The problems presented are that every teacher does not share the same belief regarding play's purpose and that teachers struggle with balancing the mandated curriculum standards and incorporating play into the day. Pyle, Prioletta, and Poliszczuk (2018) conducted a study in Canada after it was mandated that a play-based approach to learning be implemented in full-day kindergarten classrooms. Although the government had mandated play to drive instruction, educators still struggled with finding a balance between the two (Pyle et al., 2018). More research is required to determine the best methods of incorporating play-based learning opportunities in the kindergarten classroom.

### **Play-Based Learning and Mathematical Development**

Just as there is a continuum of play in literacy, there is also a continuum of play when it comes to mathematics. Mathematics and play are complementary to one another. When children were allowed to play with cards and games with an intentional purpose, higher academic gains were made when compared to the children in the control group and the children in the teacher-led training program (Vogt et al., 2018). These gains were made across the low, medium, and high-level groups. The gains were not the same for each ability level; however, with each group having made gains it was determined the play-based method of mathematic

instruction best met the needs of the diverse classroom. The researchers mentioned the teacher's beliefs on the role of play in learning was an obstacle in this study. The researchers also discussed the limitations of the math concepts studied, and that future research is required to determine the benefit of play in all domains of kindergarten mathematic learning (Vogt et al., 2018).

### **The Teacher's Role in Using Play-Based Strategies**

There are many perspectives on the purpose of play in the kindergarten classroom. After play-based learning was mandated for full-day kindergartens in Ontario, Canada, research was conducted to determine how play could be utilized best to meet high curriculum demands. It was found there were three distinct approaches to play-based learning which included using play for social emotional development, play to drive instruction, and play used as a mental break. Each of these approaches differed in the amount of academic learning incorporated into play and the teacher's involvement in the play. More research is required on each of these approaches to determine the best approach for maximum benefits for kindergarten students (Pyle & Bigelow, 2015). The research validated that students could benefit greatly if teachers were better instructed on research-based best methods for incorporating play-based learning in the kindergarten classroom.

### **The Connection Between Cognitive Competence and High-Quality Play**

Play has many forms, reasons, and benefits in the kindergarten classroom. The type of play that is used should be intentionally chosen by the educator. When the purpose is to gain cognitive skills, high-quality play-based learning is a great tool. High-quality play was found to be child-directed pretend role-play that helped to promote symbolic thinking, negotiation with peers, improvisation, and socialization (Gmitrova & Gmitrov, 2003). Through this high-quality

play children role-played in small groups with teacher support when needed. The research pointed out that the child-directed high-quality play promoted problem-solving, caretaking, and independence. These children were also observed having remembered more, were more attentive, and were more productive. This research is limited by the sample size and area in which studied (Gmitrova & Gmitrov, 2003). A clearer picture could be presented if this study were conducted across other regions and with a larger group of children observed.

### **Student Engagement in Play-Based Literacy**

Early childhood education is a crucial stage in the development of important skills for children. The educational experiences children are offered during this vital time should promote the highest quality of developmentally appropriate opportunities. When children were given the opportunity to learn literacy through guided play by using manipulatives and creating literacy games, higher academic gains on a standardized test of phonics and phonemic awareness were noted (Cavanaugh et al., 2017). Along with the students making higher gains on a standardized test, the students were observed carrying over the lessons into other areas of the day, which included recess and lunch time. Students were also observed incorporating the literacy lessons into journal writing, although the results were not statistically significant. The students who used the play-based approach to literacy development were found to have developed executive function skills. These children were witnessed getting along better, compromising, showing respect, and sharing. The students in this study stayed on task and needed less redirecting due to the enjoyment of having the freedom to be creative with learning. The more involved the children were in learning, the more engagement was observed, along with higher academic gains being made (Cavanaugh et al., 2017).

### **Conclusion**

The research synthesized in Chapter Two demonstrated that play-based teaching strategies in the kindergarten classroom can be an effective way to promote the healthy development of kindergarten students. The research showed that when kindergarten teachers had an understanding of developmentally appropriate practice and could find a balance between play-based learning and meeting mandated curricular standards, children benefited socially and cognitively. When play-based learning opportunities are presented in the kindergarten classroom, children's mental health can be increased through learning and practicing executive function skills (Belinda, 2012). Play-based learning opportunities have also been shown to increase children's literacy, oral language, and mathematical development all while children are engaged and having fun with learning (McRae, 2015). However, with the decline of play in the kindergarten classroom there is much to be accomplished to bring play back to kindergarten classrooms. The next chapter analyzed limitations in the current research on play-based learning opportunities in the kindergarten classroom, considered future studies that could help to demonstrate the benefits of play-based learning in kindergarten, contemplated possible future educational policies to create a more developmentally appropriate kindergarten experience, and discussed what future instructional practices might look like with the new educational policies in place.

#### Chapter Four: Discussion, Application, and Future Studies

Research reveals the developmental appropriateness of incorporating play into kindergarten. When play-based learning is utilized research provides evidence of the cognitive, social-emotional, and health benefits to kindergarten students. However, with more rigorous mandated academic curriculum being pushed down into kindergarten, play has dissipated, or completely disappeared, in some classrooms (Bodrova, 2008). To ensure that kindergarten students across the nation have equal access to developmentally appropriate learning opportunities, research supports that change needs to happen. First, many of the current research studies have limitations that need to be addressed. After addressing these limitations future studies will need to occur across the nation that fills in the gaps of past research. Once future studies have been conducted and analyzed new educational policies can be put into place. The new policies could then drive new instructional practices to promote developmentally appropriate practices, such as play-based learning, in kindergarten classrooms across the country.

#### **Limitations in the Research**

The research on play-based teaching strategies in the kindergarten classroom investigated in this paper describes benefits to play-based learning; however, there are numerous limitations in many of the studies. Most of these studies were conducted in one area of the world, and many of them were not performed in the United States. Another common limitation through the studies was a small sample size which makes it difficult to determine the validity across a larger population. The short length of time was an additional limitation of these studies; most of the studies were completed over the course of a few months to three years. Lastly, many of the studies were conducted in a specific setting, urban or rural. Future studies that address these limitations can help to fill in the current research gaps.



### **Future Studies Needed**

Some educators believe that it is necessary to push academics down into the younger grades to overcome the achievement gap. However, research shows that this can have the opposite effect and hinder later learning (Bodrova, 2008). In order to get opponents on board with play-based learning in kindergarten the research needs to be clearly laid out to highlight the damage that can come from pushing academics on young children and using teaching practices that are not developmentally appropriate. Many of the research studies in this paper display limitations, were studied in other countries, and used small sample sizes. To have research that can confirm the benefits of learning through play in early childhood classrooms, future studies need to be implemented to verify the benefits of play-based learning for children.

Pyle and Bigelow's (2015) study describes the different forms of play in the kindergarten classroom and the benefits children get from each form. A future study that better defines the different forms of play in the kindergarten classroom, and the benefits to each type of play could be beneficial. Play has many purposes in the classroom. Teachers may use play to give a break, for socializing and developing social-emotional skills, for exercise, or to practice and enhance academic skills. This future study could be broken down into multiple studies, one for each form of play, or could be one large study of play. This study should take place in various locations across the nation, ensuring that many settings are represented. Kindergarten teachers could use the information from this study to determine the benefits of each form of play and use that information when planning. The knowledge teachers can gain from this study could help to promote play-based learning as an acceptable form of play, and way to learn, in the kindergarten classroom.

A study that focuses solely on play-based learning in the kindergarten classroom is needed, along with the previously mentioned future study. Many research studies have been able to show the benefits to social-emotional and cognitive growth through high-quality play-based learning. However, many of these studies were limited by the length of time the study was conducted and by a small sample size (Cavanaugh et al., 2017). This study should be performed using a large sample size, across the nation, and the children in this study should be tracked for many years. Using an experimental group and a control group for this study assessing cognitive and social-emotional skills at the beginning and end of kindergarten could help to determine how beneficial play-based learning can be in kindergarten. Along with those assessments, these children should be followed for the next twelve years assessing cognitive and social-emotional skills at the end of each grade level. Conducting this sort of research study can help to determine if play-based learning in the kindergarten classroom makes a difference in the lives of children long-term.

“Is Kindergarten the New First Grade” (2017) discusses the push-down of academics into kindergarten and instead of closing the achievement gap a greater disparity is being created across socioeconomic and racial backgrounds. Another future study to help understand the benefits of play-based learning on the healthy development of kindergarten students would be to study the effects of play-based learning using a racial framework. A long-term study where children’s social-emotional and cognitive skills are assessed prior to entering kindergarten and at the end of the kindergarten year could be beneficial to filling in previous study limitations. These children could be assessed at the end of every grade level, for the next twelve years, to help determine long-term effects of play-based learning on the social-emotional and cognitive development of children. The focus of this study would be on the racial and socioeconomic

backgrounds of children across the nation. Determining the benefits of play-based learning broken down by race could help to ascertain if play-based learning could be an approach to help close the achievement gap in the nation.

### **Future Educational Policies**

Current trends in research indicate that kindergarten classrooms have increased academic expectations and decreased time for play. Kindergartners are expected to sit for long periods of time and learn through ways that are not always developmentally appropriate (Miller & Almon, 2009). Not every kindergarten program is the same: some kindergarten classrooms have very little, or even no playtime at all, where some school districts value play in kindergarten. Writing a legislative piece for kindergarten classrooms across all settings could allow for kindergartners to learn through play. The legislative piece could use the research to display that play is a fun and motivating way for children to learn and practice skills at a higher level (Heidemann & Hewitt, 2010). In doing this, it could allow for teachers to scaffold, and tailor the learning, for each individual child. Kindergarten students come into school with a wide range of abilities; learning through play gives teachers the opportunity to meet each child's individual needs (Coppie & Bredekamp, 2009). The legislative proposal could state that kindergarten classrooms would be required to offer multiple play experiences every day that totals a minimum of ninety minutes. The ninety-minute minimum does not have to be a consecutive ninety minutes, but there should be at least one forty-minute time block to allow for high-level dramatic play scenarios to be fully developed (Heidemann & Hewitt, 2010). A variety of play experiences could be offered that target gross motor, fine motor, creativity, social skill building, oral language development, and present both structured and non-structured times of play (Stegelin, 2005). Teachers could use learning and developmental goals, either social or

academic, for each of the types of play offered throughout the day (Pyle et al., 2018). The academic, play-based learning goals can be standards based and assessed through observations, checklists, and portfolios. These educational policies will require some educators to change instructional practices.

### **Future Instructional Practices**

To create the change for kindergarten classrooms to allow for developmentally appropriate practices, like play-based teaching strategies, to become a reality, instructional practices may need to change. First, all stakeholders in the education of kindergarten students including teachers, principals, school board members, superintendents, and families need to have an understanding of the importance and purpose of play-based learning (Pyle & Bigelow, 2015). Once this is established instructional practices can begin to change. Kindergarten teachers need to have an understanding of the importance of play-based learning, along with extensive professional development opportunities to recognize the different forms of play and the role of the teacher in each type of play. Research shows that even among kindergarten teachers there is a disconnect in beliefs surrounding the purpose of play in the classroom (Pyle & Bigelow, 2015). Once teachers have current research that demonstrates the outcomes that can come from different forms of play, and professional development surrounding that research, it can be incorporated purposefully into each classroom. The research can help teachers determine the best methods to incorporate mandated learning standards into play-based learning, create play-based learning opportunities with clear objectives, determine the amount of scaffolding and teacher support that is needed, and create an observation checklist for documentation purposes (Pyle et al., 2018). Kindergarten teachers may need to teach students how to play in a mature-dramatic play scenario that can produce high-quality learning (Gmitrova & Gmitrov, 2003). Sufficient time every day

(at least forty consecutive minutes) should be provided to allow for high-quality play to unfold (Heidemann & Hewitt, 2010). Teachers will need to scaffold the learning and know when to release the students into learning through play independently (Pyle et al., 2018). These changes in public kindergarten classrooms across the nation could encourage a sense of unity and equality.

### **Conclusion**

While research has shown that play is key for young children to learn, early childhood educators continue to be faced with many barriers in keeping play a focus in the classroom. Play is no longer globally thought of as an acceptable method of learning for young children (Bodrova & Leong, 2003). In today's early childhood classrooms, play often does not resemble the mature play that is known to increase academic and social skills in young children. Play in these settings is often associated with play that would be more typical of toddlers and younger preschool students (Bodrova, 2008). When play is not producing the academic and social outcomes it could be, it is undervalued, thus being pushed out for more academic activities (Bodrova & Leong, 2003).

Research reveals many changes need to occur for play-based learning to become a valued part of the kindergarten classroom again. First, kindergarten teachers need to realize the importance of mature-dramatic play and the theory behind it (Bodrova, 2008). Kindergarten teachers need to have clearly defined objectives for the play and the learning outcomes that are expected. Educators must also have strategies ready to help support the achievement of the objectives set forth. Additionally, kindergarten teachers need to observe during play time and step in to help scaffold when necessary (Vukelich, 1990). The teacher's role is essential for mature play to be successful in implementation. Kindergarten teachers need to promote

working, talking, and thinking out loud. Thinking out loud promotes executive function skill development because it allows children to organize ideas and is a form of self-guidance.

Kindergarten teachers should also encourage children to plan out and reflect on play (Belinda, 2012).

When teachers can explain the learning objectives of play, what the children are learning, and why it is important, play-based learning can be thought of as a valued part of the kindergarten classroom once again (Belinda, 2012). The harm that can come from forcing methods of learning on young children, that are not developmentally appropriate, needs to be made evident. Early Childhood educators need to continue advocating for the rights of children. Educators can help policy makers understand the importance of developing executive function skills and the methods best suited for fostering the development of these skills (Center on the Developing Child, 2011). With enough early childhood supporters advocating for developmentally appropriate practices in the kindergarten classroom, changes can materialize. As Kay Redfield Jamison said, “Children need the freedom and time to play. Play is not a luxury. Play is a necessity” (Jamison, n.d.).

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