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The Value of Play in an International Baccalaureate Primary Years Program Preschool Classroom

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Abstract

This work sought to further understand the benefits and consequences of play in early childhood settings. Benefits included brain development stimulation, improvement in intelligence, a boost in personal creative thinking, bolstered communication skills and social emotional regulation abilities, better social competence, improved physical and mental health, increased problem solving skills, and strengthened relationships. Varying types of play provide valuable data points as to the critical importance of play in the development of young children. Research continues to suggest a strong link between the efficacy of purposeful play and the correlating benefits of children's growth and development in key areas. These key areas include, but are not limited to, improved social emotional regulation skills, strengthened relationships, greater problem solving skills, increased academic achievement, and much more. The relationship between play and literacy development is also considered. Additional factors of note include play and safety, differing types of preschool settings, teacher's perceptions on play, the impact of video games on children's development, familial income levels, and play benefits evaluated within the International Baccalaureate Primary Years Programme setting.

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CHAPTER I: INTRODUCTION

What is Play and Why is it Important for Learning?

Play is not easily defined. It is dynamic, multi-faceted, and complex. Children want to play and have a natural capacity to play (Hargraves, 2019). Play is often characterized by high levels of engagement, engrossment, and with intrinsic motivation, involving imagination and creativity, and is a voluntary and active act. It requires flexibility in thinking and metacognition and is inherently process-driven, as opposed to product-driven.

Types of Play

There are three categories of play: free play, guided play, and playful learning, where the teacher is in charge. Free play is directed and initiated by the child. Children have complete freedom in their choice of environment, interactions, toys, and experiences. They initiate the play and command their own set of rules or lack thereof. Free play is also free of adult influence, as it is both developed and sustained entirely by the children. One's social class, gender, disabilities, or ethnicity may affect the ultimate pattern of play (Hargraves, 2019).

Guided play, also known as scaffolded play, is child-centered and goal-oriented. Teachers provide clear learning goals through comments, materials, vocabulary, and problem solving, which helps to limit and curb unwanted behaviors. In guided play, teachers are meant to be responsive to the children's interests, so as to best help them focus on their learning goal through purposeful, clear, intentional, and deliberate teaching strategies. Guided play can also be between the adult and child.

Playful learning or teacher-directed play involves pre-determined teacher activities and specific modes paired with appropriate learning outcomes. In contrast to both free play and

guided play, in playful learning the teacher retains tight control over the rhythm of what occurs. This is to best ensure learning outcomes for the children.

Development of Play

"During early childhood, children's play becomes increasingly complex, involving high levels of organization and requiring increasingly sophisticated social, physical, and cognitive skills" (Hargraves, 2019, para. 18). Infants and toddlers begin to play by exploring and beginning social play. As children approach preschool age (four-to five-years-old), they begin to engage in pretend play, language play, and constructive play. They begin to demonstrate an increase in problem-solving skills, collaboration, language, and attention span, while also engaging in sociodramatic play, which is cooperatively and cognitively demanding.

Play is also impacted greatly by adult engagement level, environment, type of play, age of children, personality, and disposition of children, and all children involved. Play is a powerful learning mode and developmentally appropriate tool for children. Play is one way in which to promote a child's development (Hargraves, 2019).

Benefits of Play

There are four main benefits of play: a child's well-being, academic/cognitive benefits, social and emotional benefits, and physical benefits. Well-being includes self-efficacy, intrinsic motivation, and positive attitudes toward school. Play has academic and cognitive benefits, which support children's exploratory and discovery play, leading to the use of abstract thoughts, symbols, communication, verbal, and oral language skills. Play also helps to develop self-regulatory executive function skills, such as suppressing impulses, thought and behavior redirection, working memory, and controlling one's attention. The social and emotional benefits of play include the development of skills such as empathy, making friends, expressing emotion,

and conflict resolution, along with building general resilience. Physical benefits involve small and large muscle play and motor skills (Hargraves, 2019).

Free play, guided play, and playful learning all foster achievement growth. Overall, free play helps with socioemotional development, imagination, problem-solving and persistence, some literacy work, and general cognitive development. Guided play improves science, language, literacy and math learning, vocabulary in social situations, effective problem solving, and self-regulation skills. Playful learning is most effective with general academic learning, math gains, and a child's affect and engagement (Hargraves, 2019). "Overall, child-centered and playful learning approaches are more likely to foster academic improvements that are sustained than traditional, formal approaches, but some research finds that children are more likely to learn content in teacher-led contexts" (Hargraves, 2019, para. 45).

The Importance of Learning Through Play

Borst (2021) agreed with Hargraves (2019), noting that play is an important part of learning. Play is work for children. When actively engaged in play, children are practicing the skill sets and roles of their literacy, inventiveness, and interconnectedness skills. Play is vital to a child's growth and development, especially so in relation to early literacy and mathematics skills, along with growth of confidence, social competence, and one's ability to self-regulate.

In a preschool classroom, play is learning. Students should have ample opportunities to direct and control the play themselves, which increases their creativity and engagement in learning (Borst, 2021). Consistent and excessive playful learning experiences best set children up for improved academic outcomes throughout their education and lives.

Borst (2021) also noted the value of parental input in play. Every moment is a teachable moment with children, so playing at home is critical. Parents have the ability to provide

play-based learning opportunities in play with their children at home. Parents who actively play with their children at home build stronger relationships with their children, learn more together, and have fun together in the process. This is healthy for entire families. At home, children need rich environments through time, space, and freedom to play for learning (Borst, 2021).

When young children begin to start using a language, they point to objects and people using words to name reality. This early type of play helps to prepare students for early literacy by hearing different sounds and their connections to words. Incidentally, recognizing words is also an important stage in early literacy development. Any word read automatically helps to stimulate the learner's experiences and background so that, in time, meaning can be made from print and print concepts. According to Ehri (2014), this helps children with orthographic mapping, which is connecting sounds to letter patterns that are useful in spelling, pronunciation, and meanings of specific words in memory. Johns and Wilke (2018) ascertained that young readers who master sight words by late in childhood will become effective and efficient readers. Teachers use this knowledge to set up the classroom environment in a purposeful and effective way, using labels, words, and meaningful print within the environment.

O’Connor (2017) acknowledged that play is a basic need of children, noting that even children in extreme conditions such as prison camps find ways to play. The United Nations considers play as a basic human right of children, equal to shelter and education (O’Connor, 2017). Play is something that children need to do, rather than just something they simply enjoy. Furthermore, it has been revealed that basic play is also seen in young animals in nature. Their play is conditional to their immediate environment, as animals have been observed to cease playing during times of food scarcity or drought. But scientist experts ascertained that young animals play, much like children, for vitality of social competence and enjoyment, which

contributes to maturation. As scientists have observed play in select young animals, they have observed connections between that of play in young animals and play in human children. These connections speak primarily to the innate value of play (O'Connor, 2017).

Recess is one way children can play during their school day. Partially due to increased demands of education through standardized testing, children have less recess time as it is shortened to make room for more academic instruction. Children need the physical activity of play, especially in light of the increase in childhood obesity as about 20% of American children are obese, which has tripled since the 1970's (O'Connor, 2017). To encourage creativity and innovation, children need time away from structured activities, which occurs through play. There are long-term benefits of play, academically and emotionally. But ultimately, the main goal of play is that it is fun (O'Connor, 2017).

Early Childhood Education Methods

Providing a foundation of a quality early childhood education program is crucial for children. There are numerous education models and variables to consider. Each method of education comes with its inherent strengths and weaknesses, pros and cons, and therefore different models may work best for different families and students. Konen (2023) reviewed the Montessori, Waldorf, Reggio, and Primrose methods, along with other options such as religious and immersion schools.

Montessori

Maria Montessori, an Italian physician, was primarily responsible for developing the Montessori method of education. She based this teaching method and style off of the idea that students are naturally curious, preferring to focus their attention on hands-on discovery, exploration, and are self-motivated to grow. Montessori schools use mixed-age classrooms and

are most common for children two-and-a-half years to six years of age. Maria Montessori stated, “To assist a child we must provide him with an environment which will enable him to develop freely” (as cited in Konen, 2023, para. 4). At the preschool level, a teacher's responsibilities include frequent reviews of each student’s needs and the preparation of a rich and meaningful learning environment. Each Montessori classroom also typically has a set, yet flexible, schedule with defined work times in which the students choose their own form of exploration and learning. Teachers in the Montessori school put a large emphasis on life skills study, such as students washing the dishes and wiping counters, with the intent that these skills translate over into the child’s home life. Montessori schools also put a great emphasis on language development (Konen, 2023).

Waldorf

The Waldorf mode of education is an educational philosophy based on the teachings of Rudolph Steiner. The aim is to create well-rounded students by offering a holistic education of academic, physical education, social education, music, art, and emotional education. The Waldorf philosophy presents three developmental stages: birth to age seven, seven to 14, and 14 to 21 years old. The age of the student will dictate which learning strategy is most appropriate. Students ages birth to seven learn best, in theory, through unself-conscious imitation and opportunities for imaginative play. Teachers in the Waldorf system remain with their students for the entirety of each developmental stage (birth through age seven, for example). “This creates a sense of family within the classroom and an intimate and loving place for children to learn” (Konen, 2023, para. 26). The school also emphasizes the arts, a low use of technology, and the great Toddler and Me program (Konen, 2023).

Reggio-Emilia

The educational philosophy of the Reggio-Emilia schools primarily focuses on student-centered and self-guided curriculum with an increased focus on relationship-driven environments. Together, students and teachers are viewed as both "co-learners" and observers to the children's self-driven curriculum. Reggio-Emilia learning suggests that students form their personality in the early years, therefore encouraging children to express themselves through symbolic languages such as the arts: painting, sculpting, and/or drama. Teachers within the Reggio-Emilia schools help foster the creativity of their students, while also encouraging repetition of and/or modification of the lessons. There is also a nature-based component to the school (Konen, 2023).

Primrose

The foundation of Primrose is a preschool education model in that all children learn differently and that skills should be introduced when students are ready. An additional aim is that children develop a love of learning to best prepare them for their educational journey beyond preschool. Primrose ultimately combines the teaching philosophies of early educational philosophers such as Montessori, Gesell, and Vygotsky. These philosophies are paired with modern research as to how children learn most effectively. The educational intent is to help students build on previously acquired skills in literacy, math, science, language, and social and emotional understanding. At its core, Primrose is a research-based learning philosophy (Konen, 2023).

Religious Schools

Private schools that have a religious component to their function or teaching explicitly teach from religious texts and/or values. For example, a Catholic school may engage students in

science, math, art, history, and Bible classes. The curriculum of each religious affiliated school varies greatly depending on which religion/religious text its teachings are centered around. Most private religion schools aim to provide students with a well-rounded education, albeit viewed and executed through the lens of one specific religion (Konen, 2023).

Language Immersion Schools

Language immersion schools are a form of education that primarily promotes bilingualism. These schools present this educational technique by students learning in a language other than their native tongue. For example, instead of taking Spanish as a single class, students may learn math, writing, and reading all in Spanish. This core philosophy is that language is best learned through daily immersion, rather than through only one course. Several versions of immersion schools exist. These include: total immersion in which students learn in one non-native language, partial immersion in which half of class time is spent in the student's native language and half in another language, and two-way immersion in which native speakers of two different languages learn together with the goal of all students becoming bilingual. Due to these unique offerings within the mold of language immersion schools, each school's curriculum and philosophies differ greatly (Konen, 2023).

HighScope

HighScope is a model of education that helps children to develop a broad range of skills. These skills may include problem-solving, interpersonal relationships, and communication. This helps to promote active learners and classrooms that are centered around the interests of the students. HighScope is specifically targeted to preschool students. The philosophy of a HighScope school is based on three core principles. Number one is that children should have an active part of choosing, organizing, and evaluating learning activities. Number two is that

teachers should plan activities based on developmental milestones and observation of students. Finally, number three is that the goals should be based on key experiences within the children's academic process (Konen, 2023).

Bank Street

This is a preschool educational approach that focuses on providing diverse educational opportunities. This is achieved by providing hands-on opportunities and play-based learning. Students interact with the environment around them and are active participants in their learning. At its core, Bank Street highlights play-based learning. A promotion of the love of learning is attained through play and field trips. A specific example would be that a teacher might utilize the concept of a grocery store to incorporate ideas such as where food comes from, shopping lists, and how food grows (Konen, 2023).

Parent Co-ops

Parent Co-ops are typically utilized by families who homeschool their children. Parent Co-op preschools act as organized families that share similar philosophies that then in turn hire a teacher to provide high-quality preschool education. Most co-ops are focused on play and nature-based education, uniquely paired with parent participation (Konen, 2023).

Forest Schools

Forest schools (often also referred to as nature schools) are preschools in which students learn valuable and critical skills entirely in a nature-based environment. Each program varies slightly, but they may involve students exploring on-site nature areas or visiting natural preserves, lakes, and parks. Although growing in popularity, forest schools do not have a single overarching philosophy. This educational model is based on delivering a largely typical preschool experience, yet only in an outdoor environment. Students work on skills such as

empathy, communication, creative play, and motor skills all the while interacting with the natural world. Ali Foulk (as cited in Konen, 2023, p. 69), who has a son in a forest school, spoke highly of her experience. She stated, “My second son is very active and needs outdoor time to be his best self. He is a kinesthetic learner and thrives in an uninhibited environment climbing, digging, and running with abandon” (Konen, 2023, para. 69).

International Baccalaureate Primary Years Programme

Growing in availability are Primary Years Programme (PYP) schools within the International Baccalaureate (IB) framework. Primary Years Programme schools educate students aged three through twelve. Worldwide there are over 5,000 IB schools in 160 countries, developing more than 1.95 million students. The IB philosophy is a student-centered approach to education in which the students are empowered to take agentic ownership of their individual learning, including at the PYP preschool level. In the state of Minnesota, as of 2024, there is only one school district that spans the continuum of IB. Fridley Public Schools has an authorized Primary Years Programme (PYP), Middle Years Programme (MYP), Diploma Programme (DP), and the Career-Related Programme (CP) that spans from preschool through grade 12 (International Baccalaureate Organization, 2024).

Each model of schooling is unique. Each model has inherent pros and cons that are uniquely enticing or worrisome to each individual family, student, and teacher. Disseminating the useful information of each school allows each family, student, and teacher to thoughtfully consider and decide upon the most natural fit of preschool education unique to their own needs and desires. In an International Baccalaureate (IB) classroom students take ownership of their learning by wondering, exploring, learning, sharing, reflecting, and taking action both in the community of the school and beyond.

Despite free play being described as being led by the child, parents have the means to support their child's inquiry through play. In agreement with Borst (2021), PYP learning values the role of parents in their child's play experiences. Parents joining in on their child's play also provides rich opportunities to help one's own child to develop the IB approaches to learning as well (UNICEF and The Lego Foundation, 2017).

Play in the PYP

The Copenhagen International School (2023) stated that play is essential to development and growth and is a huge contributor to a child's social, emotional, cognitive, and physical well-being and development. The International Baccalaureate (IB) is clear that play-based learning is integral to the Primary Years Program (PYP) curriculum framework. This framework revolves around the idea that the students are active partners in their own learning and progress, as opposed to passive bystanders. Play and learning have a complex relationship. Purposeful play promotes natural inquisitiveness of children and also requires educators with experience to facilitate play unique to each child's interests, development, and emerging skills.

The Copenhagen International School noted five characteristics of play within a play-based learning model. The play should be joyful, meaningful, actively engaging, socially interactive, and iterative. Play also has many benefits, which include increased self-confidence, reduced stress and anxiety levels, expansion of comfort zones, and the development of real-world skills. In the IB school, play is integral. In the context of play in a PYP classroom, teachers are the facilitators who encourage play and step in to ask questions that further encourage and develop thinking skills, personal understanding, and strategies. Through play-based learning, children are encouraged to become problem solvers and are therefore given numerous opportunities to wonder, question, play, and experiment both individually and

collaboratively. International Baccalaureate PYP provides play experiences that include: free play, guided play, games (scaffolded with rules and constraints), and direct play (controlled, set constraints). The physical classroom and play spaces are carefully planned and organized by the educator. These environments are equipped with open-ended materials along with unstructured activities that are provided to engage the students in sustained, rich, inclusionary, and complex play daily. Play within the context of an IB PYP classroom is a powerful tool for helping to develop confident and inquisitive lifelong learners.

As noted in Shinagawa (2023), within the context of the Primary Years Programme (PYP) the students are self-directed in their own learning. The students also see themselves as both inquirers and problem-solvers. Therefore, they are learners equipped with the ability to identify problems and then use their skills and knowledge in order to solve the problems. The PYP is structured in a flexible nature, equipped with room to help students to inquire into the topics they are learning. Teachers in the PYP should best acknowledge their own students' interests. In turn, students will then feel more a part of the learning community being fostered. The IB also encourages as much host country culture being infused into the program as possible. Additionally, the environment acts as the third teacher in a well-designed IB classroom to encourage students' thinking skills (especially out-of-the-box thinking skills) and inspire their inquiry. It is critical within the IB early years to give the students plenty of opportunities to explore, touch, feel, and see. The responsibility of educators is to encourage learners to see themselves as capable persons. "When you believe and trust them, they will bring more out of themselves" (Shinagawa International School, 2023, 2:32 - 2:37).

"Play transcends cultural, socio-economic and political boundaries and is universal in impacting children positively" (UNICEF and The Lego Foundation, 2018, p. 3). Children, from

birth, learn through playful interactions with their environment and people around them. They are often described as natural inquirers, who excel at hands-on learning. A child's healthy development is dependent on the essential routine of play. Play-based learning allows for children to develop and nurture certain fundamental skills and knowledge.

A student's learning in the IB Primary Years Programme (PYP) is based on the 'approaches to learning' skills (ATLs). The IB's ATL skills consist of thinking, research, communication, social, and self-management. The thinking skill equips students to be creative and critical thinkers, who problem-solve using skills and knowledge in multiple contexts. The research skill allows students to record their observations through charting and drawing. The communication skills consist of students listening, interpreting, and speaking with peers and adults alike, using language acquired through play to appropriately communicate with others. The social skills are all about navigating relationships, including connecting with others, and the ability to make and retain friendships, and also negotiating and sharing. Lastly, self-management deals with various social challenges, taking responsibility for oneself and conquering any known fears or challenges. The ATLs aim to best support children of all ages to become lifelong learners who understand how to ask good questions, pursue their own aspirations, and set effective personal goals, all with the determination to achieve them.

In addition to developing ATL skills in a healthy manner, play is also of great importance for one's physical, social, emotional, and mental wellbeing. Children inquire through play. Play allows children to actively create meaning from their personal interactions with people and their environments. Specifically, inquiry through play takes on a unique form. Play is meaningful in that a primary consequence of play is that children play to make sense of the world around them, connecting their experiences with their own prior knowledge. Thus, through play, children better

express and understand their own experiences. Secondly, despite play at times being frustrating or challenging, it should ultimately be joyful. The overall feeling of motivation, enjoyment, pleasure, and thrill should outweigh any known stressors that accompany play. Thirdly, play actively engages children and they become deeply involved through the acts of mental, physical, and verbal engagement. Next, play is iterative, not static. Play evolves. While playing, children practice skills, test and revisit hypotheses, discover new challenges, and pursue deeper learning. Lastly, play is socially interactive in that it allows children to communicate ideas important to them, better understand others through social interactions, which all further leads to deeper understanding and more meaningful and powerful relationships (UNICEF and The Lego Foundation, 2018).

Research Question

In IB schools, the values of thinking, communication, research, self-management, and social skills are the focus of growth and development. In an IB PYP preschool, these values are taught through play. An analysis of the research on the benefits of play and the social emotional development through play reveals a gap specifically connecting play with the principles of an IB preschool. This research aims to close that gap.

CHAPTER II: LITERATURE REVIEW

Although not easily defined, play continues to prove its immense worth and value in the classrooms and lives of today's preschool students. The following includes thorough research and analysis of the countless benefits of play, mounting evidence of social emotional growth derived exclusively from play, the value of the International Baccalaureate and its PYP offering, along with many more pertinent factors.

Play Benefits

To answer the questions about why play is important for children, Li (2023) studied peer-reviewed research largely from 1975 to 2013. Study locations included areas such as Arkansas, Georgia, and New Zealand. The findings noted nine benefits of play. A common misconception is that play is only for fun and does not actually involve learning. Rather, playing is learning. Children learn best through play experiences. Learning through play is essential to a child's development and growth.

Play Stimulates Brain Development

The first benefit of play is that it stimulates and promotes early brain development. This includes providing the child with a better understanding of the world, which helps to set the framework for future brain development and growth. At birth, an infant's brain has an overabundance of brain cell connections called synapses, which allow information stored during the early years to build a necessary foundation for the brain. An environment rich with play and play-like experiences provides crucial building blocks for children's life experiences. Coincidentally, a lack of play causes the brain's neuron connection related to play to be lost (Rosenzweig & Bennett, 1996, as cited in Li, 2023).

Play Improves Intelligence

Drawing from the work of Bergen (2002, as cited in Li, 2023) and Fisher (1992), Li noted that play improves intelligence. Infant play leads to higher IQ by age three. Fisher's (1992) meta analysis of 46 studies indicated that play helps to enhance a child's cognitive, social, and linguistic development. Half of the studies looked at cognitive development, and the rest studied the effects of play on language development or reading readiness and how play helped with social roles and empathy through make-believe play. Their findings indicated that play improves the cognitive, linguistic, and social skills of children.

Play Improves Creative Thinking

Play also invites creative thinking, which is tied closely to divergent thinking. Divergent thinking is the thought process that explores many possible solutions and generates new ideas. Children's play, especially imaginative and creative play, leads to greater creative qualities and output among the children. Howard-Jones et al. (2010) sought to discover if the value of previous activities affected children's creativity in new activities. They divided 52 children ages six and seven into two groups. One group copied text, and the other group played with salt dough for 25 minutes. Both groups were then asked to create a collage of a creature with given materials. This process was repeated ten days later. Both times, the projects were judged by ten judges. These judges looked at the colors and number of pieces used by the children. Their findings revealed that the aforementioned project based tasks had a significant and positive effect on the creativity of the children.

Play Improves Communication

Play also improves communication, vocabulary, and language. The links between early childhood play and later communication skills are valid. Newland et al.'s (2001) longitudinal

study observed infants as they began playing with a toy. Newland et al.'s (2001) research found that if the mother responded by manipulating and naming the toys, the baby (when tested three months later) would have better language skills. Additionally, Pellegrini (1980, as cited in Li, 2023) conducted a study in which 65 kindergartners were observed in their classrooms over four weeks. Those who were given opportunities to engage in the presence of play (especially dramatic play) were found to positively predict performance in pre-reading, language, and writing. Pretend play also allows young children to practice new vocabulary when they speak and try to understand one another.

Play Improves Emotional Regulation

Play that promotes impulse control and emotion regulation is another benefit of play. Self-regulation skills are critically important for school readiness. Children who are well-regulated appropriately resist temptations, control negative emotions, wait for their turn, and persist through challenging activities. Galyer and Evans (2001) examined how children handle negative events during pretend play. They hypothesized that if children could adjust their emotions during play, that skill would carry over into other contexts. They studied 47 children ages four and five, with parental participation, observing their emotional regulation during a negative event which could evoke a charged reaction. Their study revealed that children who had more pretend play opportunities with their caregivers were better at regulating their emotions to then continue playing. Emotional regulation is essential not only for a student's academic success but also for the psychological aspects of child development in that it is a strong predictor of a child's social success. Generally, children who exhibit better emotional control are more socially competent.

Play Develops Social Competence

Play helps to grow social competence and empathy and is crucial for enhancing social development in children. Unstructured play, especially with other peers, siblings, or parents, provides significant opportunities for cultivating social skills in children as they pretend and negotiate with peers, all of which enhances children's social skills. Play helps children learn about social interaction. While playing together, children learn to cooperate, develop self-control, and follow the rules. Connolly and Doyle (1984) sought to connect pretend play with improved social cognitive skills in children. They observed 91 children ages 35-69 months old in three day care centers, noting the complexity and frequency of their fantasy play, and found that fantastical play by preschoolers significantly predicted their social skills, popularity, and positive social activity later in life. Their fantasy play was more positive, long-lasting, and group-orientated than the non-fantasy play. Lastly, children who play more also develop more empathy. These children grow to have a better understanding of other people's beliefs and feelings.

Play Improves Physical and Mental Health

Li (2023) noted that play leads to better physical and mental health. Emotional intelligence is vital for a child's resilience and mental health, and play promotes a child's emotional development. It also involves physical activities, which promote gross motor skills, endurance, strength, and overall physical health.

Play Develops Problem Solving Skills

Play teaches life lessons to children and helps them develop problem solving skills. Pretend play leads to children acting out life's problems from their own lens and provides safe opportunities for children to rehearse skills and future roles, too. Youngblade and Dunn (1995) sought to prove this by observing 50 children aged 33 months engaging in pretend play in their

homes with siblings and parents. They were observed again at age 40 months. Individual differences were noted and attributed to the relationships between the children and their mothers and siblings. The results also noted that pretend play helped children better understand other people's feelings and improved their connection between mental life and real life.

Play Strengthens Relationships

The final benefit of play noted by Li (2023) is that it strengthens relationships with one's caretakers and peers. Parents and children who play together form a stronger bond with one another. These moments of play and interaction provide positive life experiences that stimulate children's brain development. Happy, joyful, and playful moments are precious gifts to share with children (Li, 2023).

The Value of Free Play, Guided Play, and Games in Early Childhood

The work of Zosh et al. (2022) looked at the value of play, noting that play is a vehicle for children to explore and make sense of their world, while developing imaginative and symbolic thinking skills, along with physical competence. Zosh et al. (2022) discussed a spectrum of types of play, from free play or self-directed play, guided play, games, playful instruction, and direct instruction. Along with this continuum, Zosh et al. (2022) noted three important variables to enhance playful learning: the level of involvement of the adult, including their knowledge of child development and learning, their knowledge of each individual child, and social and cultural variables; how much the child is directing the learning; and the presence of a learning goal. This intentionality will support more engaged and meaningful learning. Their research focused on three types of play: free play, guided play, and games, and their impact on children in the early years.

Free Play

Free play is when children have the freedom to play as they want, where they want, and with the materials they want. When children's skill development during free play was compared to guided play, it was discovered that children learned more vocabulary (Spiewak Toub et al., 2018) and spatial skills (Fisher et al., 2013) in guided play than in free play. Spiewak Toub et al.'s (2018) work is noted in the section on literacy in this review. Fisher et al. (2013) sought to connect exposure to shapes and playful learning. They taught four geometric shapes (triangles, rectangles, pentagons, and hexagons) using guided play, free play, or intentional teaching to 70 four-to five-year-olds from the suburbs of Philadelphia. All children started by sorting the shapes, then spent 15 minutes working one-on-one with the researcher on shape training. One week later, they were assessed again. Those taught through guided play exhibited improved shape information compared to the other groups. They concluded that guided play strengthened the shape learning for these students. Zosh et al. (2022) noted that early educators were adept at creating learning environments to achieve social goals, such as taking turns and solving conflicts, and this same skill is needed when creating content-based goals. However, while free play certainly adds value for children, empirical evidence suggests that when pedagogical goals are in focus that guided play provides superior value to the children's development (Zosh et al., 2022).

Guided Play

Teachers can use guided play to focus the learning on specific objectives, often using probing questions to direct the child's play to the next level of exploration. In this way, the child is still in charge of their own learning but in the direction needed by the teacher. Teachers also use this method to match the level of learning to the individual child. Guided play is successful because it encompasses the child's joy of learning and creativity (Resnick, 2007); it allows the

child to control their thinking and actions but within a limited possible outcome, allowing them to discover the learning goal. Guided play also intentionally provides the opportunity for new information to be integrated with existing knowledge while being constantly updated as children continue to explore. Additionally, the teacher helps create a balance between only one correct answer and too many answers. Guided play proves most sufficient when a pedagogical goal is at stake. Finally, guided play helps the child incorporate the new learning with their previous knowledge base (Zosh et al., 2022).

Games

According to Hassinger-Das et al. (2017), games support learning goals, often through external scaffolding. Several types of games are useful for this purpose, including board games, games on apps, or other digital games. However, the educational value of games must be overseen by the educator for the adherence to the learning goals of the teacher.

Preschool classrooms nationwide have suffered greatly due to the curriculum rigidity that has trickled down into the preschool and kindergarten classrooms, which largely replaced play and child-initiated activities with more pencil-and-paper tasks and desk time, resulting in kindergarten looking more like “the new first grade” and preschool looking like “the new kindergarten” (Bassok et al., 2016; Miller & Almon, 2009). This rigidity was counter to the needed promotion of happy lifelong learners in which children should be regularly immersed in developmentally appropriate practices and curricula and playful learning (NAEYC, 2020). “Although play has traditionally been positioned as a privilege, it must be (re)positioned as a right, as outlined by the *United Nations Convention on the Rights of the Child,* Article 31” (Souto-Manning, 2017, p. 785). Importantly, playful learning encompasses all three styles of play: free play, guided play, and games.

Guided Play and a Playful Pedagogy

Guided play lies at the midway point between direct instruction and free play. In doing so, it presents a learning goal and structures the environment, allowing children to retain much of the control over their learning. With this in mind, Skolnick Weisberg et al. (2013) analyzed research to support their position that guided play delivers effective content in a developmentally appropriate, child focused way. "Although many best practices remain to be elaborated, research demonstrates that [the preschool] years lay a powerful foundation for subsequent learning, and that they should be taken at least as seriously as schooling in later years" (Hines et al., 2011, p. 951).

Skolnick Weisberg et al. (2013) noted that ideally, early childhood education should equip children with the tools needed for academic success in later grades, but a distinction must be made between curriculum and pedagogy. In short, curriculum is what is taught, and pedagogy is how it is taught. Effective teachers recognize that the same content can be presented in a variety of different ways and that children may respond differently to a particular teaching topic, method, or strategy while also noting that the combination of teaching strategies and techniques that may have been effective with one group of students may not be as effective with another group of students. This information is used to construct guided play opportunities. Despite this, there is a recent trend where preschool curricula/testing materials are solely oriented towards content-focused education. This is especially true for math and reading. This curricula-based pedagogical approach often comes at the expense of other types of educational pedagogical methods. Often, the choice seems to be between the two extremes: the preschool classroom should either present content directly to the students or allow the children to engage in free play (Chien et al., 2010).

Chien et al. (2010) examined engagement in children's classrooms looking for connections with academic gains. Data came in two waves. First, in the fall of 2001, they studied the play of 2,751 children with a mean age of 4.62 years from six states (California, Illinois, Georgia, Kentucky, New York, and Ohio). Forty programs from each state were chosen. The second wave included 100 programs from each of the following states, Massachusetts, New Jersey, Texas, Washington, and Wisconsin, and began in the fall of 2003. In time, 701 programs participated. In the first wave, each child was observed for 20 seconds, then the observer continued with each child, returning to each child until the end of the day for two days. This pattern continued in the second wave for one day. Observations included six activities: basics, free choice, individual time, meals, small group, and whole group, and one or more pre-academic activities: esthetics, fine motor skills, gross motor skills, letter and sound, mathematics, oral language development, pre-reading, read to, science, social studies, and writing. Also noted were the types of teacher-child interactions. Classrooms were rated on nine dimensions, such as climate, teacher sensitivity, and development of concepts. Academic testing in the areas of language, pre-literacy, and mathematics was administered by a different assessor but was also looked at by Chien et al. (2010). Results showed that children spent most of their time in free-choice (30%) and whole-group activities (27%), yet the free play profile showed less growth across indicators of language/literacy and mathematics compared to fine and gross motor skills, science, and social studies.

Pagani et al. (2010) also sought to connect engagement with academic gains. Pagani et al. extended an earlier study by Duncan et al. (2007, as cited in Pagani et al., 2010), which connected cognitive, attention, and socioemotional skills with achievement outcomes, adding additional motor skills. Duncan's work examined French-speaking children ages four and five

from an experimental preschool in Quebec. Pagani et al.'s (2010) study followed those students from kindergarten through second grade. Cognitive assessments were administered by teachers, and the attention and socioemotional component was a questionnaire completed by teachers. This specifically addressed attention skills, attention problems, anxiety, physical aggression, and prosocial behavior. Gross motor skills (coordination, ability to climb stairs, and general physical development) and fine motor skills (holding a pen, crayons, or brush and manipulating objects) were also assessed. Results showed that kindergarten math and attention skills were strongly correlated, followed by math and motor or psychosocial skills, and weaker still was the connection between receptive language and motor skills. Overall classroom engagement was strongly connected to early kindergarten math, receptive language, and motor skills. Preschoolers who engage in playful, guided learning either match or outperform their preschool counterparts who learn through direct instruction (Hirsh-Pasek et al., 2009, as cited in Skolnick Weisberg et al., 2013). For example, playful learning has been found to enhance vocabulary development in low-income preschoolers relative to more intentional teaching (Han et al., 2010). Ultimately, guided play allows for teaching rich content in such a way that also incorporates free play elements, discovery learning, and traditional pedagogy.

Skolnick Weisberg et al. (2013) noted that while free play tends to assume qualities such as being fun, flexible, voluntary, no real attached extrinsic goals, active engagement of the child, and elements of make-believe, guided play involves the active and intentional role of adults. For example, the adult may initiate the play, but does not direct it, rather, they follow the lead of the child, allowing the child to engage in discovery while being subtly assisted by teacher scaffolding. Even as the child guides their own discovery, the adults initiate the learning process

and focus on specific learning goals. Guided play sees the child as an active collaborator in the learning process, rather than merely a recipient of information.

With both free and guided play, the locus of control is placed almost entirely with the child. Chi (2009) posited that the learning concepts are likely to be more meaningful to the children during guided play sessions rather than direct instruction because they are participating in the discovery process rather than having it be dictated by an adult. Children who learn through guided play are therefore more actively engaged with a meaningful learning goal. Of note, in direct instruction, the teacher is the main authority in charge, but in guided play, the child and teacher collaborate with the child's interests in the foreground of the engagement.

The research of Skolnick Weisberg et al. (2013) found studies showing that pedagogical techniques involving child-centered playful learning have shown an increased boost in early academic development. These include improvements in reading and math scores (Marcon, 2002), increased motivation for school (Stipek et al., 1995), and better executive functioning skills, such as inhibitory control, working memory, and cognitive flexibility (Diamond et al., 2007). Additionally, guided play has been shown to have positive impacts on socio-emotional development, which leads to less stress and better emotion regulation (Burts et al., 1992), as well as decreases in problem behaviors (Marcon, 2002). Guided play encourages children to have creative and flexible interactions with objects; however, occasionally, the use of direct instruction when faced with a new and novel problem or toy can limit exploration and learning (Bonawitz et al., 2011).

Some studies and evidence reviewed by Skolnick Weisberg et al. (2013) suggested that children participating primarily in direct instruction show more stress and inattention behaviors, less enjoyment of challenging tasks, less confidence in their own abilities, and less end-of-year

progress in language, motor, and social skills when compared to their peer counterparts in playful-learning classrooms. Additionally, these apparent disadvantages last through the duration of elementary school, which leads to these children to have poorer study habits, greater levels of distractibility, lower degrees of academic achievement, peer aggression, and hyperactivity (Burts et al., 1992; Hirsh-Pasek & Golinkoff, 2008). Results of this magnitude do not posit that there is never a time or place for direct instruction. Rather, it should encourage educators to further consider why guided play is such an effective pedagogical method for preschool children.

Chi (2009) reminded us that children learn best when engaged in active, constructive, and interactive environments. It is also beneficial when the learning is meaningful to them (Hirsh-Pasek et al., 2009) and when consequential feedback and probing questions are received (Honomichl & Chen, 2012). Guided play keeps children engaged in that it puts their needs and interests first in the learning process. This is done by giving some relevant feedback and direction and by allowing children to be active partners in the learning process. Unlike direct instruction in which the children's attention is regularly manipulated by the teacher and therefore does not emerge from their own interests, guided play contributes positively to children's self-efficacy as learners by allowing them to direct the learning within the confines and context of play and by presenting opportunities that continually invite active participation and engagement. It also differs from free play in that the learning goals may or may not be clear enough to the child to limit their own exploratory behavior effectively. "Essentially, learning is a case of narrowing the parameters to which one should pay attention" (Skolnick Weisberg et al., 2018, p. 108).

Guided play is a format that melds into the best practices of the science of learning and offers a context in which engaged, interactive, active, and meaningful experiences exist.

Skolnick Weisberg et al. (2013) acknowledged that it is not committed to guided play being the only way to incorporate these meaningful principles and elements into classrooms. Guided play, with its focus on the children's efficacy and exploration, provides the appropriate model uniquely well suited to conferring academic benefits to preschool children. Kagan and Lowenstein (2004) stated, "the literature is clear: diverse strategies that combine play and more structured efforts are effective accelerators of children's readiness for school and long term development" (p. 109).

Skene et al. (2020) also sought to determine the value of guided play compared to direct instruction. Using a systematic review and meta-analysis, Skene et al. (2020) looked for evidence comparing guided play to direct instruction or free play as ways to develop the learning of children. They reviewed 39 studies published between 1977 and 2020, including 17 of these studies in this review. They included studies that compared curricula, interventions or activities of guided play, and used at least one control group. They defined guided play as giving the child autonomy, involved some adult guidance, and included a learning goal. Outcome measures needed to include one of the following: cognitive and academic learning, socio-emotional development, or physical development. Most reviewed studies looked at students in early childhood classroom settings, but Skene et al. (2020) also included studies involving lab-based schools, museums, or in-home settings. Their review included 3,893 children aged one-to eight-years-old, with girls accounting for 49.8% and boys 50.2%, with ethnicities of White (41%), Black (28%), and Hispanic (19%) represented. Through their findings, they discovered that guided play had a greater impact on children than direct instruction in the area of early math skills, shape knowledge, and task switching but that free play produces better results in the area of spatial vocabulary. Other differences were not noted.

Literacy Development and Guided Play

Strauss and Bipath (2020) went further with guided play and produced action research looking at the relationship and integration of play paired with literacy teaching and learning in Chinese based pre-primary educators' classrooms. They aimed to understand how guided play benefits incidental reading while also expanding vocabulary growth. Data was collected from a Chinese kindergarten classroom using observations, documents, informal and focus group discussions, recordings of lessons, and field notes. Participants were pre-primary and pre-kindergarten teachers selected through sampling and who were able to articulate their own classroom experiences. They found that guided play encouraged learners to discover the features of letters, and explore the use of cueing and decoding, skills needed in future literacy development. Strauss and Bipath stressed that, “play is a platform through which young learners acquire language” (Strauss & Bipath, 2020, p. 7).

Strauss and Bipath (2020) used a play-based strategy for teaching sight words. This often occurred during Second Language (ESL) lessons in a Chinese Kindergarten classroom, in an effort to expand the students vocabulary. Play is a vehicle for the promotion of language learning during early childhood. It is also a developmentally appropriate manner of teaching a variety of skills and knowledge (NAEYC, 2013). This study differentiated play learning (free play) versus guided play, which is child-directed. Play helps to develop self-regulation, promotion of language, promotion of cognition, and social competence. If children struggle to gain understanding and knowledge of the alphabet and its sound structure, the child will in turn struggle to make connections to reading, writing, or speaking. These early reading skills are typically grouped into the following categories: phonemic awareness, knowledge of high-frequency sight words, and ability to decode words.

Strauss and Bipath's (2020) research noted that deprivation of play opportunities for children denies vital opportunities to practice important social and cognitive skills that develop their imagination and creativity (Christie & Roskos, 2000; Hirsh-Pasek et al., 2008; Pellegrini, 2009). Early childhood classrooms that are overcrowded and highly structured and are didactic in nature in the role of play can put language learning at risk. Pre-primary classrooms that are overcrowded, lack resources, and feature untrained teachers hamper the possibilities that children have to benefit from language learning. Danniels and Pyle (2018) defined play as enjoyable, intrinsically motivated behavior that is non-rule-governed, non-goal oriented, and also, 'just pretend'. Play allows children to create new worlds. Goodman (1994) stated that it is at the midpoint between play and work that the best teaching occurs. It is the role of the educator to put forth an appropriate learning target while designing a safe setting that ensures the children have the autonomy to freely explore. Giving children autonomy in the classroom allows them the freedom to take initiative, be persistent, and be creative while gaining language skills during the guided play time.

The Teacher's Role in Guided Play and Literacy

Strauss and Bipath's (2020) research found that the teacher has seven main roles in regards to facilitating children's play, which also serve to facilitate language and literacy growth (Jones & Reynolds, 2011). These include: stage manager, mediator, player, scribe, assessor, communicator and planner, observer and recorder. The stage manager's role is to set up the classroom environment, including the purposeful inclusion of toys, props, and materials. The mediator role is when the teacher works with children to help them solve various conflicts, while concurrently teaching problem-solving skills. As a player, the teacher helps to sustain play while joining in on and participating in the student's play. As an observer, recorder, and scribe the

teacher tries to identify the student's experiences as they play and to help find ways to both support and enhance the children's play as well. As a communicator, planner, and assessor, the teacher identifies what can be done to help support children in the learning process. Finally, play-based learning is an approach that views play as both peripheral to the student's learning, and play as a vehicle for social and emotional development. The perceived negative consequence of considering play as peripheral to learning is that the overall focus is then on the teaching of academic skills.

The evidence discovered after observing Chinese prekindergarten and kindergarten classrooms is that guided play does indeed promote learners' discovery of letter properties, while also exploring cueing letters, and lastly decoding words. Efficient decoding of words is entirely necessary for reading comprehension in all grades. One anonymous teacher associated with the study spoke to the need for primary-aged children to hear new vocabulary and then experiment with the language in order to build their own understanding of the ways language works. This happens organically through play, either play learning or guided play (Strauss & Bipath, 2020).

Taking play-based instruction further, Sjoerdsma (2016) created an action research study on the attitudes and beliefs of play-based instruction. Surveys were conducted with preschool, transitional, and conventional kindergarten teachers and their administrators. Questions were directed to the play approaches of teacher-directed, student-centered, and play-based instruction. The findings indicated that preschool teachers and administrators strongly agreed with play-based statements, but kindergarten teachers and administrators showed mixed results.

Feesha and Pyle (2016) sought to discover how Ontario kindergarten teachers defined play-based learning and in what way their perspectives on it impacted their kindergarten classrooms. Anonymous surveys were completed by 101 teachers. Based on their responses to

the six open-ended questions, 69 participants were identified. These teachers averaged 13 years of teaching experience with an average of seven years in kindergarten classrooms. Questions included the role of play in their classrooms, the role of teachers during play, and the challenges experienced by the teachers. Results noted that 91% of the teachers used play in their classrooms, but only 19% noted that play-based learning was a part of their teaching. All teachers found positive features from play-based learning, but results were mixed on how to integrate play-based learning with the Ontario curriculum. From survey data of these teachers, they developed two definitions of play: one focused on the social aspect of play and the other on both academic and social areas. One perspective of note was that teachers used play time as a chance to gather students in small groups for teacher-directed activities. Feesha and Pyle (2016) posited that the purpose of play when used this way was for recreation only.

When play was used for social development only, the most noted challenge was parents and administrators. Parents misunderstood the learning benefits of play and administrators expected a more academic focus. When play was used for both social and academic development, challenges were focused on the learning environment, such as class size, materials, and equipment. Feesha and Pyle's (2016) findings noted that without a clear definition of play-based learning, more than half of the teachers surveyed did not implement play-based learning in their classrooms.

Even with the options of free play, guided play, and games, all children do not engage readily in play. Storli et al. (2022) looked at students who do not become involved in play and aimed to explore what children do when they are not playing during free play periods in early childhood settings. Between 2017 and 2021, they gathered data in Norway from children in eight Early Childhood Education and Care (ECEC) institutions. Ten children (five boys and five girls)

were selected for observation from each of the eight ECEC institutions for a total of 39 girls and 41 boys between the ages of three and four. Observational data was collected through systematic and randomized video observations of children in indoor and outdoor environments during free play, where they could choose who they wanted to play with, where to play, and what to play. They were videotaped during times of two-hour sections of outdoor play on two different days, obtaining 1,900 minutes of video, which was later reviewed, condensed into 950 minutes of video, and coded into the following areas: functional play, constructive play, symbolic play, being self-focused, and talking but not engaged in play. The nonplay observations were then further studied and ultimately were sorted into five groups. The five categories of nonplay options were conversations, practical tasks, passive observation, wandering, and conflicts. These categories help teachers create the physical environment where children can play and also better find children who are avoiding these areas. Recommendations included more passive teacher involvement to include children in play, more access to equipment, and an understanding that wandering is a type of exploration.

Lillard et al. (2013) reviewed the evidence in an effort to prove that pretend play is crucial to children's healthy development involving one of two alternatives: pretend play is one of many routes to how different early experiences in life can lead to similar end results or pretend play is a secondary experience that occurs in step with a primary experience. Lillard et al. (2013) looked at language, narrative, emotion regulation, executive function, social skills, reasoning, problem solving, creativity, intelligence, conservation, and theory of mind as possible factors that forward development. These topics are critical to the value of pretend play in a child's development. Problems with methodology were noted: some studies were conducted when research standards were lower, thus the research needed to be updated. Another issue found was

that studies were not replicated, leaving contradictory data. Researcher bias was also an issue. Ultimately, eleven domains were used. The number following each domain indicates the number of studies examined for their effect on play: creativity (24), intelligence (14), problem-solving (12), reasoning (6), conservation (9), theory of mind (33), social skills (16), language, narrative (12), and executive function and emotion regulation (14). Each domain was looked at in three ways, causal; in that pretend play is crucial to optimal development, equifinal; where pretending helps some developments, but it is only one possible route, and epiphenomenal; where play coincides with some other causal circumstance. However, while their findings in each domain varied, their overall research determined that even though pretend play is important for children's development, much more research is needed to determine which method is most effective.

Ultimately Lillard et al. (2013) claimed to not support strong causal claims about the importance of pretend play for children's development, claiming there is "little evidence that it has a crucial role" (p. 27).

Pyle et al. (2020) examined the perceptions of the purpose of play and how it is implemented in kindergarten classrooms. They also looked at the media representations of play and how they affect the parents and the public because there was a continued discrepancy between the policies of play-based learning and the practice of it. This was a qualitative study that reviewed articles on the pedagogy of play. Articles were curated from 2010-2020 and mainly described the traditional play-based learning, focusing on the child-directed learning through play. They also surveyed and interviewed kindergarten teachers on their perspectives of play. Survey questions included the aspects of student learning enhanced by engaging in play and describing what play in their classrooms. Interviews were conducted on 32 kindergarten teachers from Ontario, Canada asking questions such as the types of play to include in a kindergarten

classroom, describing approaches and giving examples of play based learning from their classrooms, describing the change towards play-based learning in kindergarten, and supporting student learning during their play time. Ontario was the selected location for this study as Ontario has long required play-based pedagogy and the media has been reporting on it, mainly through news articles available online. Using the surveys and interviews, the findings revealed two perspectives. One was the child directed view of play as seen in the media where play is critical in the classroom and the teachers follow the child's lead in play and provide needed materials. The second finding was more broad, noting that play is child-driven, focused, purposeful, and open-ended where teachers interact with their students, providing individual scaffolding as the student progresses through play (Pyle et al., 2020).

Growing Literacy in Preschool Classrooms

Classrooms operating efficiently should be language-rich environments, which will lead to literacy growth. Barnett et al. (2005) asserted that children who attend quality pre-kindergarten and pre-primary facilities know more letters, more letter-sound associations, and are even more familiar with words and book concepts than their counterpart peers who did not attend such a preschool classroom experience. They sought to determine the effectiveness of state-run preschool programs on children's learning and development. In the fall of the 2004-2005 school year, Barnett et al. (2005) assessed 5,278 preschool and kindergarten students, 48 percent were boys and 52 percent were girls. The students were 47 percent White, 25 percent African-American, 21 percent Hispanic, three percent Native American, and two percent Asian. Students were from Michigan, New Jersey, Oklahoma, South Carolina, and West Virginia. Assessments included a receptive vocabulary test (Peabody Picture Vocabulary Test), a math assessment (Woodcock-Johnson Tests of Achievement), a phonological blending test, and a print

awareness test (both part of the Preschool Comprehensive Test of Phonological and Print Processing). Their study found strong evidence that children will show evidence of broad gains in learning and development when enrolled in quality preschool programs.

Head Start programs fit the description of a quality preschool program so with that in mind, Spiewak Toub et al. (2018) purposed to teach low-income preschoolers new vocabulary with a combination of book-reading and play in several Head Start programs. They sought to discover if the intervention improved vocabulary over time and which approach to play was the most effective in this area. They created two studies with participants from 10 Head Start preschool classrooms in Eastern Pennsylvania and 18 Pre-K classrooms in Central Tennessee. Each classroom had approximately 12 consented children, and all the teachers were female. Children's ages ranged from 40-67 months old. In their first study, children participated in a shared-book reading followed by free, guided, or directed play. The second study taught the children vocabulary through book-reading and a picture card activity. Their findings looked at pre to post test gains. Spiewak Toub et al. (2018) found gains in the receptive and expressive knowledge of the words and that the gains were greater in expressive vocabulary when the words were learned through play. Results noted that the adult-supported play-based activities also showed vocabulary gains.

Gopnik (2011) sought to see how direct instruction affected the curiosity of children as they discovered new information about toys. Gopnik (2011) looked at two studies using four-year-olds. The Massachusetts Institute of Technology study introduced a new toy with four tubes to two groups of four-year-old children. The first group was introduced to the new toy by the teacher pretending to novelly explore it and excitedly exclaiming how it worked. With the second group of children, the experimenter acted more like a teacher when introducing this new

toy and explicitly showed the children the toy's primary function. Once both groups had been introduced to this new tube toy in the two different ways, the experimenter left both groups of children alone to play with the new toy. The experimenters found that direct instruction (of the new toy) made the children less curious and, therefore, less likely to discover new information. A second study from the University of California Berkeley by Buchsbaum et al. (2011, as cited in Gopnik, 2011) demonstrated to four-year-olds a three-step sequence of a toy to get it to play music. After showing the students nine different sequences, the students were instructed to try it on their own to produce music. They found that ultimately, the children who were a part of the first group actively played with the toy longer while also discovering more of the toy's hidden features than those of the second group. However, the two studies from different labs, using different techniques, simultaneously produced similar results.

Play and Safety

Bown and Sumsion (2007) sought to discover the experiences and perceptions of early childhood teachers regarding regulatory requirements for their teaching and their views of their professional perceptions. Three teachers from Sydney, Australia, participated in research conversations and an inquiry process, which included finding photography, artifacts, and various forms of media to determine their feeling of belonging in their work environment due to mandatory regulations regarding children in Australia. In a small study, findings discovered several themes, including regulatory tension, mistrust, surveillance, relationships, and the muffling of an educational focus. These themes affected their safety perceptions as well as their professionalism, integrity, and passion for teaching.

Wyver et al. (2010) posited that playgrounds and the associated play are essential in providing experiences for young children’s growth and development. However, many play

experiences in playground settings are often limited due to excessive (adult) risk of fear, a stance often shrouded in the blanket of 'surplus of safety.' This excessive concern surrounding certain types of safety is contributing to the reduction of children's freedom to play, and that many longer term consequences of this are arising. Specific concerns include, but are not limited to, children being injured while playing, traffic danger, and stranger danger. Wyver et al. (2010) suggested that children miss out on critically important developmental experiences without access to play opportunities that include physical, intellectual, social, and emotional development.

All activities that involve risk-taking actions can lead to adverse outcomes, but risk-taking in play is part of normal development among essential growth and development of infants and young children. Wyver et al. (2010) laid out 10 ways to restrict children's freedom to play, with the intention of showing some of the implicit and explicit assumptions commonly made about children's outdoor play.

The first assumption was that adults are the best people to manage children's risk-taking. Does additional strict management of environments by adults underestimate the abilities of infants and children, therefore, in turn, further diminishing their opportunities for learning? For example, infants learn to problem solve as they are exposed to different terrains. These different terrains may lead to an increase in tumbles, but it also leads to an increase in the child's ability to cue-associate to prevent future falls. This is also a sign that the child is 'learning to learn' and continually adapting to their surroundings. Healthy play can lead to painful injuries. However, that is simply something that should be considered part of normal development for children of all abilities. Franklin and Cromby (2009) stipulated that the 'better safe than sorry mantra' used by caring adults often is an over-evaluation of hypothetical (albeit unlikely) adverse outcomes.

Although these attitudes are based on fear and genuine concern for children, they, in turn, lead to a surplus of safety.

The second was to assume there are good and bad playground surfaces. Children whose history of major play experiences are on consistent, predictable surfaces are likely to miss many valuable learning experiences related to locomotion, physics, and aesthetics. A look at playground surfaces revealed that injury rates overall were reduced when safer surfaces were used. However, it should be noted that for more serious injuries (arm fractures, for example), there were no differences between surfaces (Norton et al., 2004).

Nixon et al.'s (2003) study also addressed safety and playground equipment. They conducted a study in Brisbane, Australia, that examined the statistics related to playground injuries, both at school playgrounds and community parks, between 1996 and 1997. They observed children playing on five pieces of playground equipment at 16 parks and 16 schools and noted injuries as they occurred. Equipment used included climbing equipment, used 3,762 times; horizontal ladders, used 2,309 times; and slides, used 856 times. The researchers were able to estimate an injury rate as a proportion of average equipment used. The playground equipment use injury rate was 0.59/100,000 uses of equipment and 0.26/100,000 for community parks. The findings of Nixon et al. (2003) noted the low overall rate of injuries and cautioned adults and caregivers that attempts to reduce injury rates may have negligible impact on the target injuries. However, this would naturally come at the expense of activities that are, in fact, developmentally appropriate, challenging, and enjoyable for children.

Wyver et al.'s (2010) third assumption was to prioritize regulation over pedagogy in early childhood centers. A primary pedagogical goal for all children should be to give children adequate challenges for development and learning, which certainly includes the possibility of

learning risk mastery. Concern has been raised over the impact of the regulatory environment on the experiences available to young children in early childhood centers, especially with experiences deemed risky. The Department of Education, Employment and Workplace Relations (DeEEWR, 2009) suggested that healthy levels of positive risk-taking play a vital role in fostering children's autonomy, self-esteem, and resilience. In childcare settings, it is not uncommon for children to spend the entirety of their days within the walls/fence. This impact of surplus safety in childcare centers is a loss of freedom to explore the world beyond their child care center and disconnection from their communities.

Assumption number four was to assume that restrictions on play freedom are necessary in a modern western environment. In many Scandinavian countries, children benefit from learning how to master risks, various weather conditions and the ability to explore the national landscape (New et al., 2005). Coincidentally, the concept of 'toughening' children has been a strong notion. Often, physical play, otherwise known as locomotor or sensory play, can inspire children to seek out physical challenges and try out their physical potential.

Assuming some children are injury prone was the next common assumption. In a small study, Ordoñana et al. (2008) analyzed genetic and environmental factors on injuries in twins, also looking at socio-economic, family, and behavior variables, all data was gathered through the mothers. Results noted that the greatest risk was environmental (86.4%). However, support for the idea of injury proneness having any type of genetic basis was limited (Ordoñana et al., 2008). Bijur et al. (1988) suggested that some children, mostly boys with high scores on measures of externalizing behaviors, are, in fact, more injury-prone. Their research studied 10,394 British children ages five to ten. They gathered data through parent completed questionnaires and aimed

to connect aggressive behaviors with injuries. Their findings noted that boys with high aggression scores were 2.4 times more likely to experience injuries requiring hospitalization.

Number six was to assume long periods of walking as too stressful for toddlers. Allowing young children opportunities to walk or pedal/push scooters or tricycles is valuable, but it also requires risk management strategies to be in place. Children are encouraged to walk versus being transported in a stroller or wagon, as walking adds to daily physical activity. Children who are given these opportunities to actively participate, rather than being regularly pushed in a stroller, will improve movement independence, endurance, confidence, and large motor skills.

Assumption number seven was to think that all hazards in the playground must be avoided. These included concerns surrounding stranger danger and garbage such as syringes. Although the statistics are unconfirmed, likely due to such relatively low frequency, playground injuries related to stranger danger and rubbish do exist. Additionally, the media's coverage of safety and crime reports within neighborhoods and communities also plays a role in parental fear about safety or crime.

The eighth assumption was to assume that parental guilt leads to good outcomes for children. Many parents turn away from the community for support and instead consult the media. "Parents were aware that the strategies they were using to protect their children were also imposing limitations on the freedom to play" (Wyver et al., 2010, p. 270).

Assumption number nine is to design neighborhoods without considering children's right to play. Tandy (1999), using two questionnaires (one for children and one for parents), studied 5 to 12-year-olds in Australia and found that many children chose indoor activities to work within parental constraints. However, when asked to draw or write about their preferences on a sunny day, most of the children chose outdoor activities. Trantor and Sharpe (2008) stipulated that

children's access to spontaneous play opportunities within their very own neighborhoods has significantly declined over recent decades in Australia and other Western societies, including the USA and UK. This is due to several factors, including changes in children's ability to move around their neighborhoods independently without an adult, smaller backyards, and changes in attitudes toward children in public spaces (Wyver et al., 2010). Palmer et al. (2005) argued that design changes in the neighborhoods of housing developments have effectively reduced social exchanges between residents.

The final assumption is to assume that children can get ahead by stimulating them with extra activities. It is thought that the abundance of extra-curricular activities (such as sports and lessons) leads to further stimulated children's development, which gives them the best chance of being successful adults in a consumerist world.

Nature Based Preschools

Another aspect of play involves outdoor play. Key benefits of outdoor play include children's physical, social, and psychological development. Nature based schools act as a means of increasing children's connection with nature's educational powers. The nature-based school initiative originated in Scandinavia and Germany, respectively. It is also popular across England and Wales and has recently begun to gain popularity in the United States. These schools are known by many different names: nature-based preschool, nature preschool, forest kindergarten, nature kindergarten, forest school, and Waldkindergarten. Thematically, the most common thread is that all these programs allow nature to shape their philosophies and methodologies. Cordiano et al. (2019) aimed to better understand the relationships between the learning environments of a nature preschool versus a traditional preschool classroom. Along with reviewing current literature, their multi-method approach sought to find relationships between the learning

environment and developmental variables, such as social interactions, play, behavior, and enjoyment of school and nature. Their study included 26 pre-primary students from an independent all-girls school (with a coeducational pre-primary division) from suburbs in Cleveland, Ohio. Twelve students were in the outdoor pre-primary program, and 14 were in the traditional pre-kindergarten program. The students were racially diverse, with 46 percent receiving financial assistance. Methods used included parent completion of rating forms twice and teacher completion of the same forms three times during the year. Six rating forms were used: the 32-item behavior rating form Penn Interactive Peer Play Scale (PIPPS), Preschool and Kindergarten Behavior Scales, Second Edition, a pretend play rating, a kindergarten readiness measure, Children's Attitudes Toward School, and Children's Attitudes Toward Nature. Initial results indicated that both groups were prepared equally for kindergarten in regard to social emotional, academic, and pretend-play skills.

Natural Start Alliance (2014) noted three criteria for nature preschools to guide program design and development of professional principles. One, nature is the central concept that the program is organized around. Second, nature school educators require both early childhood education and environmental education. The third involves both child development and conservation values.

Cordiano et al.'s (2019) results showed that children in both types of preschool programs (nature-based and traditional) achieved expected developmental gains in their behavior, early academics, and social emotional functioning skills. In most cases, the groups of students ended the school year with equal levels of kindergarten preparedness and did not indicate significant differences between the traditional and nature-based groups. Key domains tracked included social emotional functioning, academic readiness, and pretend play. Both parent and teacher

ratings indicated general improvement over the course of the year in both groups. Teacher ratings showed that students in the classroom showed higher levels of pretend play at the beginning of the school year, but by the end of the school year, the students in the nature-based program showed higher levels of pretend play. Cordiano et al. (2019) concluded that the less structured, exploratory nature of the outdoor setting allowed the students to use their imagination and creativity with significantly fewer limits than their traditional classroom counterparts.

One limitation of this study included that the children represented were predominantly from higher socioeconomic backgrounds, with parents with higher levels of education backgrounds, which led to increased exposure to other enriching activities outside of the school setting. Cordiano et al. (2019) concluded that “all children deserve the opportunity to learn and play in natural settings" (p. 33).

Nature based preschools elicit many benefits for children’s overall development including opportunities for students to develop hands-on reasoning skills, such as scientific inquiry and hypothesis testing (McClain & Vandermaas-Peeler, 2016). McClain and Vandermaas-Peeler, completed a longitudinal study with 11 preschoolers, ages 33-59 months, and their teacher. They sought to gain insight into the children’s understanding of the natural world. They filmed the children for 50 hours during weekly explorations at a state park near a mid-sized city in the Southeast. These explorations included a river walk, giving the children the freedom to explore within safe parameters. Almost 340 incidents were noted of the children being positively aware of the features of the environment. Skills developed included observing, identifying, comparing, classifying, communicating, and utilizing, as well as early scientific reasoning. Teachers expanded on this using “socially constructed inquiry” (p.51). In a small study, findings indicated that the students gained self-awareness in regard to the environment and its features.

Lund et al. (2023) also looked at a facet of outdoor time as they sought to discover how first graders experience their outdoor, physically active play during after-school programs in Norway. Programs included were rural and urban and were small, medium, and large in size. Their study viewed play from the children's perspective. Two students from each of seven different after school programs were observed, and then the researchers interviewed students one at a time about their experiences while they were playing. They used multiple forms of communication, such as speech, body language, facial expression, and play in the interviews, along with observations. In their findings, they observed three themes of active play: "playing with friends," "no one decides," and "I can do it." When "playing with friends", children enjoyed the freedom of playing outside with their friends. In the area of "no one decides", the children made most of the decisions regarding their outdoor play, and the adults were not as actively involved. In "I can do it", the children showed great confidence and enjoyed the challenges in their play. These findings highlighted the importance of child initiation in play and of playing with other children (Lund et al., 2023).

Teachers' Play Perceptions

Zhulamanova and Raisor (2020) sought to better understand the perceptions of pre-service teachers on play. Their study included 241 early childhood undergraduate students (of note, 233 were female) from Midwestern universities. Data was collected through questionnaires and a rating scale in which rating adjectives were used to describe play. Their review of research found that play offers children a multi-faceted educational impact and also educates children intellectually, emotionally, socially, and physically (Bergen, 2009; Prager et al., 2016; Thibodeau et al., 2016). However, despite these findings, Pistorova and Slutsky (2017) noted that play in early childhood education is on a decline. Additionally, Miller and Almon

(2009) stated that as kindergarten has become increasingly and heavily focused on formally teaching literacy and other academic skills, it appears that preschools are rapidly moving in that same direction. However, within the field of early childhood education, there is a maintained belief in the power of play and its advantages. Universities have continued to educate their pre-service teachers about the importance of play during a child's early years. Preservice teachers' perceptions of play may change during their teacher education university program. In fact, upon entering the formal classrooms, many pre-service teachers align their perceptions about play with their observed reality, in which play is continually devalued (Jung & Jin, 2015).

In Part A of the study, the participants were asked to agree, offer a neutral response, or disagree to 20 unique statements to complete the phrase, "play is …". They were asked to assess the following areas: something children choose to do, creative, imaginative, enjoyable, serious, concentrated on a specific outcome, involves physical activity, socially interactive, having an academic purpose, beneficial, passive (not directed by the teacher) learning, rule-bound, relaxing for the child to do, difficult for the teacher to schedule, important for learning, teacher-directed, educational, challenging, the job of the teacher, and something that can be done independently (Zhulamanova & Raisor, 2020). Referencing a list of 25 activities, Part B of the study asked the participants to rate the extent to which they believed each given activity constituted play. Their response options included never play, seldom play, often play, or always play. The 25 activities included:

> …dancing, arts and crafts, reading a book, P.E. (physical education), show-and-tell, asking for a turn on the swings, singing the ABC's, looking around while in the hallway, pretending to be a teacher and calling a student "stupid," counting to 100, being read to, centers, talking to a friend, working on a puzzle, doing a science experiment, listening to

> music, feeding a classroom pet, cutting out pictures that begin with the letter B, listening to a book on tape, figuring out how to join a group already in an activity, getting one's feelings hurt, learning about other cultures, pretending to be a character from a violent movie, eating lunch, telling another child that s/he cannot join a board game.
>
> (Zhulamanova & Raisor, 2020, p. 132-133)

The data for Part A of the study was classified into five main groups: Developmental Adjectives, Independence Adjectives, Structure Adjectives, Pleasure Adjectives, and Teacher's Role Adjectives. Meanwhile, for analysis purposes, the 25 items apart from Part B were organized into four main groups: Cognitive Activities, Negative Activities, Socio-Emotional Activities, and Hands-On Activities (Zhulamanova & Raisor, 2020).

The results of the data showed that there was not a single play adjective that was agreed upon wholly by the participants. Of the 20 adjectives provided, there were only two that indicated the highest level of agreement: "Play is imaginative" and "Play is something children do because they want to." Overall, the data represented that preservice teachers view play as an imaginative, independent, pleasurable, self-chosen activity that ultimately belongs to children. The data also showed that most participants indicated that they rejected the idea of play being goal-oriented, structured, or teacher-directed (Zhulamanova & Raisor, 2020). This perception of play is in congruence with the widely accepted definition of play as an intrinsically motivated, enjoyable, process-oriented, non-realistic, and self-chosen activity (Hirsh-Pasek et al., 2009). Additionally, this study seemingly confirmed that play is difficult to define, as not one item in this survey was entirely agreed upon by all participants. The results also indicated that there is a tendency for preservice teachers to perceive play as physical, social, hands-on, and emotional activities, but therefore less cognitive and educational.

Additionally, since so many items in the study had at least one participant believe the activity was never played and at least one participant believed the activity was always played again, it indicated that there truly is no real universal agreement as to what exactly constitutes play, further proving the original notion that the construct of play is difficult to define. The experiences of the participants' coursework and field placements, along with personal, educational experiences, may have impacted their reasonings and results within the context of the results of this study. This proved to be a limitation of this study. "The study findings illustrate the absence of uniformity in perceiving play in early childhood education" (Zhulamanova & Raisor, 2020, p. 139). Therefore, the stark absence of a shared definition of play makes it all the more challenging to incorporate it into the teacher education program to ultimately establish a critical link between play and learning.

In another look at the perceptions of play from preservice teachers, Shinagawa International School (2023) in Tokyo, which has a strong commitment to IB learning, referred to the Klugman (1996) study, which surveyed 196 freshman students from Wheelock College. Klugman looked for generational shifts in play, noting the differences in play of the freshmen students and the play they observed in their budding professional careers. Survey respondents were mainly females aged 17-19. The survey questions were open-ended and questioned the students' recollections of their own play experiences at home and in school, as well as the role of play in learning overall. Specifically, Klugman found that the participant associated play with learning and development, especially that of social development, which aligns with the Approaches to Learning of social growth. However, a minority of the respondents (48/168) in Klugman's study believed that children can learn more through play. Klugman's findings noted that the freshmen's own experiences with play involved playing in the neighborhood, usually

outdoors. They also recalled recess play. Their findings also noted the need for improved language and practice with play for future teachers so they can better connect play with learning. There was also a suggestion that colleges need to provide connections between cultural differences and play.

Sandberg and Samuelsson (2003) took this one step further, looking at teachers' conceptions of play. They interviewed 20 preschool teachers who had varying views of play. Questions included recollections of the teacher's own play experience as a child, current understandings of play in today's preschools and homes, and their personal approach to using play in their classrooms. Their findings noted that when teachers remembered their play experiences as children, most recollections were stereotypically gender oriented. Overall, the findings showed a wide range between their own youthful memories and the play in their classrooms. Some perceptions were more pragmatic, and others were more idealized. With this in mind, teachers noted that there is less time for children to play in today's world due to being involved in more organized activities. Teachers also mentioned that there is more parental stress in today's world, which affects children's play opportunities. Other factors included children having less screen time and more personal responsibility when the teachers were children, thus allowing them more time for playing freely and playing outdoors.

Puteh and Ali (2013) also looked at the perceptions of inservice teachers in play-based learning for language and literacy development of preschool children. Ali utilized a survey with 61 randomly selected teachers (achieving 51 responses) from four preschool centers in Malaysia. An additional 12 participants of this group were purposely selected for interviews. Results indicated that teachers have positive feelings towards play-based learning, and they felt the children enjoyed playing and were indeed active play participants. They expressed reluctance to

play-based learning due to time, space, knowledge, and skill limitations. These findings indicate the need to give teachers the knowledge and skills to use play-based learning in their classrooms.

Additional Factors

Other factors that influence young children's play include both video games and the income level of their families. Markey et al. (2022) completed a review of scientific evidence, noting that societal concerns regarding potential negative correlation between time spent playing video games (particularly violent video games) leads to real-world aggression, desensitization, violence, obesity, decreased cognitive abilities, and poorer mood management skills, and explored the myths and benefits of video games. This meta-analysis study from 2020 further analyzed the relationships between video games and the following: social skills, obesity, mood management, visuospatial cognition abilities, desensitization, real-world violence, and aggression.

They found growing research suggesting that video games do not contribute to poor social skills, desensitize players from real-world violence, contribute to mood issues, cause obesity, insight severe acts of aggression, or influence real-world violence. Empirical research ascertained that video games do not contribute to any of the following: poor social skills, desensitization of players from real-world violence, mood issues, consequences of obesity, insighting of severe aggression, and/or being an influence of real-world violent acts.

Han et al. (2023) looked at the relationship between home teaching and reading practices and play among low-income families. They examined the relationship between learning practices and play, specifically among caregivers with and without mental health concerns. Data involved children (512 female, 384 male) and primary caregivers (857 female, 39 male) from low-income families in Arkansas, Arizona, Texas, Delaware, and Maryland during 2019. Hour long home

interviews were conducted by trained family service program staff, which used a Family Map Inventory (FMI) in an effort to find the needs of each family to therefore set family goals so as to best support a safe, nurturing, and enriched home life environment. This study found that caregivers who play with children are more likely to involve them in reading and academics in the home and support age appropriate learning. These experiences can provide the background knowledge and experiences needed for academic learning at school. Finally, this work identified opportunities for caregivers to interact with their children to support their learning.

Germeroth et al. (2019) noted that while studies on the theory of play emphasize the importance of make-believe play for children in social and academic areas, there is a lack of reliable and valid measures of children's mature make-believe play. They sought to research this by reviewing the characteristics of existing assessments and form a new assessment, the Mature Play Observation Tool (MPOT). MPOT was developed to evaluate the quality of mature make-believe play occurring in preschool classrooms. They observed 26 early childhood classrooms, involving 286 children, 94 percent of whom were ages four or five, in a two-year longitudinal study. Teachers were divided into two groups and then trained and coached on the use of the Building Blocks curriculum for math concepts and Building Blocks Scaffolding Executive Function, a self-regulation curriculum, over the two years of the research. Independent consultants then conducted assessments of children's executive functioning, mathematical achievement, vocabulary, and spoken language comprehension and production. These scales align with the International Baccalaureate's Approaches to Teaching and Learning skill of self-management.

PYP Play in the Early Years

The International Baccalaureate (IB) Primary Years Programme (PYP) presents students with opportunities to play and explore in the classroom in a transdisciplinary model. Through this play-based model, students will develop their language skills, motor skills, social skills, and academic skills. Teachers are responsible for best equipping the students in the inquiry based learning model by preparing students to take ownership of their learning through the means of wondering, exploring, learning, sharing, and taking action in and beyond the school community.

The IB's Approaches to Learning skills (ATL's) are also developed informally and can be achieved through play. These ATL skills are Thinking, Communication, Social, Self-Management, and Research skills. Shinagawa International School (2023) stated:

> The needs of all students are catered for and more formal elements of schooling, such as letter formation, letter recognition, and the formative stages of Language and Mathematics are introduced when students demonstrate understanding or a readiness to learn more. Students will also develop their personal knowledge and understanding of the essential elements of the PYP, deepen their understanding of international-mindedness and develop the attributes of the IB Learner Profile. (para. 1)

In support of the IB approach to thinking and learning, communicating, and social growth, Hirsh-Pasek and Golinkoff (2008) used a meta-analysis approach, gathering 32 sources from 1981-2008 and looked at whether free play and guided play promoted learning. Through the research of Christie and Rokos (2000) and Barnett and Storm (1981, as cited in Hirsh-Pasek & Golinkoff, 2008), a strong connection was found between play and guided play with academic and social learning. Using Piaget's belief that "play is the work of childhood" (1962, as cited in Hirsh-Pasek & Golinkoff, 2008, p.1), Hirsh-Pasek and Golinkoff suggested that play is learning

for children. While playing, children incorporate imitative behaviors, motor skills, and processing emotional situations as they learn about their environment. Literacy development during play is achieved through opportunities such as pretend reading to toys and rhyming activities. Math development happens when children play games such as Chutes and Ladders that involve counting and pattern and shape activities. Preschoolers played the game four times for 15 to 20 minute sessions over two weeks. These students improved their numerical aptitude (Ramani & Seigler, 2008, as cited in Hirsh-Pasek & Golinkoff, 2008). Social and emotional development is enhanced through taking turns, negotiating with playmates, and regulating their emotions. Hirsh-Pasek and Golinkoff (2008) noted that the literacy, math, and social emotional developments are critical for both school readiness and academic learning. "One thing play is not, is frivolous" (Hirsh-Pasek & Golinkoff, 2008, p. 1). Both learning and play are intimately entwined. "When children play they are learning" (Hirsh-Pasek & Golinkoff, 2008, p. 4).

They also discovered that opportunities to play in schools have decreased, often through declining recess time, giving children less time in free play and playful learning situations. Hirsh-Pasek and Golinkoff (2008) noted the decline in recess time and more recent data shows that only 16 percent of states require recess (Reilly, 2016).

Play and its Relation to Social Development in Preschool Students

Focusing on the social emotional growth of young children, research supports the IB's PYP social emotional development through play. One of the prominent findings in the research regarding the value of play is the social emotional component and its impact on young children.

Ramani and Brownell (2014) conducted a review of the research on one feature of social emotional learning, cooperative problem solving play in preschool-age children in experimental settings and social play contexts. Because cooperative problem solving with peers is critical in

promoting children's cognitive and social development, Ramani and Brownell (2014) gathered research to determine if integrating social play with cooperative problem solving can clarify the cooperative skills of preschoolers as well as understanding their cooperative interactions in their classrooms. Their findings provided insight into how children define, negotiate, and sustain shared goals. They noted that cooperative play included things such as children working together on shared goals and children using imitation and observation in play, and that play gives children opportunities to practice problem solving. They noted that, "because social play is characterized by joint goal formation, it can be a unique opportunity for promoting numerous competencies, including problem solving skills, communication skills, and reasoning skills" (Ramani & Brownell, 2014, p. 12).

There has been a high interest in social emotional learning in recent years as the need for these skills later in life is needed for success (Luke et al., 2022). Luke et al. (2022) observed the preschool children's social emotional behaviors in children's museums and community playgrounds. Luke et al. (2022) observed 606 four to five year olds in two informal education settings: 468 in children's museums and 138 in community playgrounds using the Revised/Shortened Minnesota Preschool Affect Checklist (MPAC-R/S). Thirteen museums across the United States, one from Canada and twelve community playgrounds, mainly from Washington state, were the sites used. With the goal of bringing researchers and educators together, the Children's Museum Research Network hypothesized that children's museum exhibits would develop more social and emotional behaviors among preschoolers than community-based play areas such as playgrounds or shopping malls. The MPAC-R/S was used to look at emotional expression, emotional regulation, behavior regulation, and peer relationship skills, such as leading, sharing, and social isolation. Luke et al. (2022) found that children engage

in SEL in both settings. Children demonstrated various levels of SEL, with more positive social effects in community playgrounds and more negative social effects in children's museums. Children were also observed engaging in SEL in situations that did not involve adult interventions.

While schools were locked down in April and May, 2020, Gray (2020) used that time to investigate how parents and children were coping with the lockdown, particularly in the areas of daily routines, after school activities, and time spent at home. They sought to determine the positive and negative effects that this time period had on children and parents. They conducted online surveys in April and May 2020 across the United States with families with children ages 8-13 who were old enough to answer questions but still in childhood and early adolescence and were willing to complete surveys for a small monetary reward. Survey questions for children included adjectives that describe how children felt during the most recent week of the shutdown and 12 categories of activities children were able to do more often that week. Parent questions included statements about their children's moods and coping that week and questions about their child's sleep, remote or online schooling, and outdoor play. April results came from 798 parents and 762 children and May results from 752 parents and 817 children. The top findings with children included being happy, bored, and helpful. They also noted they felt calmer, were finding new activities and that their parents were letting them do more things on their own. Increased activities included watching more movies, television, and YouTube and playing video games alone. Seventy percent of students reported they were looking forward to going back to school. Parent surveys noted that the children were happy, more involved in activities, more helpful with chores around the home, and better at solving problems on their own. They also reported that their children were less stressed, and the parents were gaining a better understanding of their

child's abilities. Finally, parents stated they felt proud, grateful, and impressed with the ways their children were coping with the shut down (Gray, 2020).

Despite a working definition of the word wellbeing for the benefit of this study, Svane et al. (2019) sought to add clarity to the meaning of "well-being" through a systematic literature review. They searched four databases to determine the characteristics and outcomes of school based well-being interventions. While much of the research was from Australia, they felt the overall review was international. While much evidence showed the benefits of a whole school method of well-being interventions, most of their articles only discussed the value of targeting small groups of students in well-being approaches. Their recommendations noted that consolidation of the meanings of well-being was needed, as well as more development of whole school practices. They argued that the myriad of definitions of wellbeing are problematic in that there is no real agreed upon consensus as to the understandings of wellbeing. For the purposes of Svane et al.'s (2019) work, there was a general agreement that the literal understanding of wellbeing, being well, was perhaps the most useful umbrella term. Therefore, the overall view of wellbeing can be viewed as a combination of cognitive wellbeing, social wellbeing, emotional wellbeing, and physical wellbeing.

Mental Health Factors of Young Children, Suspension, and Expulsion

Stegelin et al. (2020) reviewed research and current policies and practices of the mental health needs, mainly from adverse childhood experiences (ACEs), the impact of suspensions/expulsions, and the benefits of high quality preschool programs. Three studies stood out in their research. First, the work of Gillam and Shabar (2006, as cited in Stegelin et al., 2020) investigated the expulsion and suspension rates of 199 preschool teachers in Massachusetts. During the 12 months studied, 39 percent of preschool teachers expelled at least one child, and

15 percent reported some suspensions. Their findings indicated these rates were due to larger class sizes, more three-year-olds in preschool, and elevated teacher stress. As evidenced by the increase in suspension and expulsion rates, schools across the nation report an increase in behavioral and developmental challenges specifically within the preschool population of students (Hancock & Carter, 2016). Also, notable adverse effects of early suspension and expulsion often materialize in middle and secondary education settings, future job employment, and even the criminal justice system (Stegelin, 2018).

A second study by Longstreth et al. (2013) sought to look at the discipline policies of early childhood programs. They reviewed the policies of 65 state licensed centers, finding that the policies do not address the features of the behaviors or prosocial behaviors. Finally, Gilliam et al. (2016) looked at the effect of implicit teacher bias on behavioral expectations. Teachers were selected from a conference of early childhood educators. The majority of the 135 selected were females (93%), and worked in a variety of settings: school-based, faith-based, for profit, Head Start, and not-for-profit. The teachers completed two tasks: they viewed a video of children interacting, noting when they observed a perceived problem, followed by viewing pictures of students from the videos. From those pictures, they were asked to select the child who they felt required most of their attention. Results indicated most of their responses involved black boys. In the second task, they were given a situation involving a behavior challenge and asked how they would respond to it. Findings indicated that the teachers found white children's behavior more severe than others, and when the family background was included, teachers found the child's behavior more hopeless than when it was not included. During a child's early years, their brains are developing at a rapid pace. They are influenced greatly by the experiences they share within their microsystems: their families, caregivers, teachers, peers, and communities. Concurrently,

teachers are reporting higher levels of stress and inadequate support to meet the needs of these children (Carolan & Connors-Tadros, 2015). This phenomenon is described as a secondary traumatic stress reaction. Teachers are absorbing and responding to the primary trauma of young children in their classrooms and schools. “Compassion fatigue, or secondary traumatic stress disorder, is a natural but disruptive by-product of working with traumatized individuals” (Lawson et al., 2019, p. 9). This is ultimately a set of observable reactions to working with people who have been traumatized and mirrors the symptoms of post-traumatic stress disorder (PTSD) (Osofsky et al., 2008). Meanwhile schools and administrators are ill-equipped to best address the developmental, behavioral, and emotional needs of their young students, while also appropriately addressing preschool teachers’ fatigue and secondary trauma (Hancock & Carter, 2016; Stegelin 2018).

Since children are developmentally less able to express their emotions and feelings and, therefore, verbalize their wants and needs, there is a critical need for increased awareness that young children also have mental health issues that require support and solutions. Giannakopoulos et al. (2014) sought to understand the skills of early childhood educators regarding mental health. In June 2013, they interviewed 34 educators (all female) from six areas of Athens, Greece, and divided them into five focus groups. The teachers were asked their thoughts on the causes of mental health issues in children, the early signs of these issues, and what they would do if a student exhibited these issues. Three themes emerged in their findings: risk factors for preschoolers' mental health issues, signs indicating their mental health problems, and useful practices to help preschoolers with their mental health problems. The groups noted risks of hereditary factors, significant events such as divorce or death, economic concerns, and limited experiences of children with mental health issues. Signs of mental health issues included

inability to follow directions, sadness, not being understood or respected by their peers, and toileting regression. Helpful practices included observing the child, including the parents, in a discreet and beneficial manner and making connections with local mental health services. Adverse Childhood Experiences (ACEs) provide valuable information on how major trauma can start early in a person's life and can have profound long-lasting impacts on both one's mental and physical well-being (Centers for Disease Control and Prevention, 2019; Giannakopoulos et al., 2014). The ACEs provide evidence to suggest that those with higher trauma levels early on in life are associated with poorer physical and mental health conditions as adults. There is a distinct need for trauma-informed early education in schools nationwide.

The International Baccalaureate Primary Years Programme Approach to Social Emotional Learning

Dix and Sniedze-Gregory (2020) performed a mixed-method study to investigate the impact of the International Baccalaureate (IB) Primary Years Programme (PYP) on student wellbeing and related outcomes. The research aimed to address the following questions: How do PYP students compare to non-IB students on measures of wellbeing and related outcomes? What are the PYP students' levels of wellbeing and related outcomes, and how are these influenced by exposure to the PYP? To what extent is school climate in PYP schools associated with students' wellbeing and related outcomes? What programmatic elements of the PYP are associated with students' wellbeing and other related social emotional learning outcomes? (Dix & Sniedze-Gregory, 2020).

Methods used included reviewing the literature, completing a comparative analysis of PYP and non-PYP schools from an Australian database of 4,282 students, and finally, surveying

114 teachers and 1,630 Year 5 students measuring curriculum and well-being specific outcomes (Dix & Sniedze-Gregory, 2020).

Notable key findings included that the IB learner profile and Approaches to Learning (ATL) are key programmatic elements that encourage wellbeing in PYP schools. Additionally, PYP students consistently demonstrate heightened levels of wellbeing compared to non-PYP students, suggesting a moderate advantage equivalent to three months of further development. Lastly, this study found that there is no significant relationship between years of accreditation as a PYP school and the level of implementation quality in the cohort of schools surveyed (Dix & Sniedze-Gregory, 2020).

Student wellbeing is when the student successfully demonstrates their ability to participate in routines and activities in their school environment, showing both resilience and innovation. This study aimed to provide a snapshot of student wellbeing within PYP schools while also further exploring the relationship between the PYP curriculum and student wellbeing.

The International Baccalaureate Organization (IBO) refers to the well-being in the educational context as a holistic attribute that encompasses a student's social, emotional, and physical well-being in addition to their cognitive development. Dix and Sniedze-Gregory (2020) found that the PYP clearly emphasizes elements of wellbeing in and throughout its documentation. The IB also emphasizes the importance of wellbeing at the all-programme continuum level as well. This emphasis is especially evident in the IB learner profile words and the approaches to learning (ATL), as these are all representative of cross-curricular skills that are threaded through each programme.

The PYP's inclusionary transdisciplinary skills, upon PYP formation (the first 20 years of the programme), also included wellbeing elements such as safety, healthy lifestyle, and codes of

behavior. Therefore, despite its youth, the PYP has been a key influence in pedagogies for wellbeing within the IB. Additionally, school climate has been found to have a level of influence on student wellbeing. Two key factors in relation to the IB's influence on student wellbeing include the IB curriculum itself (for example, the learner profile words), and also IB's professional development factors. Teachers in the IB specifically have begun to alter their mindsets and practices to become more student-centered, inquiry based, interdisciplinary, and further emphasize the IB learner profile words. They have also reduced the emphasis on standardized testing and worksheets while increasing student opportunities for action and creativity.

There are several factors that contribute towards student wellbeing. At the school level, the IB learner profile traits reflect the aims and values that ultimately become part of the school's culture and ethos. In principle, the development of the learner profile attributes and an encouraging call to action help promote whole-school and student wellbeing. Lastly, the PYP's subject curriculum (personal, social, and physical education) states that there is a direct link between a student's well being and a student's experience at school.

Conclusion findings indicated that students in a PYP school equated equivalent to two months additional development compared to the non-IB students. Lastly, data collected from the PYP student wellbeing survey confirmed that the PYP has a positive impact on student wellbeing (Dix & Sniedze-Gregory, 2020).

School Climate and the PYP

School climate is entwined with the social emotional development of its students. Boal and Nakamoto (2020) sought to answer questions about PYP implementation, such as changes and outcomes that could be attributed to PYP, the effects of school climate, leader's philosophies and

practices, teacher development, instruction, assessment, and understanding of the role of PYP in parent and community engagement. They looked at climate outcomes post-authorization. They conducted a study that examined the International Baccalaureate (IB) Primary Years Programme's (PYP) impact on the school climate within California public elementary schools. Their research used both a qualitative approach, selecting eight case study schools in California, and a quantitative approach, using survey data from elementary students between 2003 and 2019. Their findings compared the two approaches in the areas of safety, teaching and learning, interpersonal relationships, staff, and institutional environment. Qualitative findings noted an increased use of consistent language in safety, strong impact on teaching and learning, positive student-student and student-teacher relationships, positive staff collaboration, and improvement in environment due to increased consistent language in this area. Quantitative findings found less stellar results: small but significant improvements in safety, interpersonal relationships, and environment, and no change in teaching and learning. The staff domain was not addressed in these findings.

School climate refers to the ways a school fosters safety, promotes a supportive academic, disciplinary, physical environment, along with encouraging and maintaining respectful, trusting, and caring relationships throughout the school community (National Center on Safe and Supportive Learning Environments, 2019). "A positive school climate promotes cooperative learning, respect, and mutual trust" (Thapa et al., 2013, p. 9), "and there is evidence that such an environment contributes not only to immediate student achievements but long-term benefits" (Hoy et al., 1998, p. 9). The benefits of fostering a positive school climate are critical as they can help to prevent social, academic, and behavioral issues for students along with increasing job satisfaction for staff while also reducing turnover of school staff (Kraft et al., 2016; MacNeil et

al., 2009). While not necessarily designed as a school climate intervention, the PYP's organization and resources work towards learning with student and staff support and building a community climate, using the IB learner profile and agreements and emphasizing student voice (Boal & Nakamoto, 2020).

Key findings from both the quantitative and qualitative studies included, but are not limited to, the following: the qualitative data revealed a number of improvements to school climate that participants at most case study schools directly attributed to the benefits of the PYP. Participants at every included school reported an increased focus on social emotional learning (SEL) and the whole child, as well as both transdisciplinary instruction and teacher collaboration. Nearly three-fourths of schools reported that directly due to the impact of the PYP, they observed an increase in the use of inquiry, student voice, global perspectives, open-mindedness, and individualization in instruction as well as celebration of diverse student accomplishments, students as lifelong learners, student action, service within the community, student agency and ownership over their studies, increased engagement and parent involvement/belief in their child's potential, and purposeful teacher reflection. These findings suggested these may be the common impacts associated with strong PYP implementation. It was noted that participants at all case study sites described the use of the IB learner profile, PYP professional development and the accompanying supports, PYP coordinator, and essential agreements as key contributors to school climate. The studies also found six statistically significant outcomes of special note. These six findings included: Perceived Safety, Caring Relationships, Fairness, Parent Involvement, Bullying, and Victimization. This mixed method approach illustrated practices and outcomes experienced. It was also meant to better identify the necessary changes in school climate across the population of California PYP schools (Boal & Nakamoto, 2020).

This study highlighted the importance of both teacher and leader buy-in to help ensure the strong implementation, allowing those of importance to realize the potential positive impacts on school climate.

Boal and Nakamoto's (2020) findings suggested the theoretical link between school climate and the PYP was valuable enough to further explore. The PYP's use and cultivation of the learner profile words, for example, may indeed help foster things such as a strong sense of safety, supportive interpersonal relationships, and a positive school environment. Utilizing both individualized learning approaches for students along with transdisciplinary learning instructional strategies may help foster the support for learning dimension within each school climate. A healthy school climate should be collaborative in nature.

In finality, participants at every school reported an increased focus on the whole child and largely attributed the following to the PYP: increased use of inquiry, student voice, global perspectives, open-mindedness, individualization in instruction, celebration of diverse student accomplishments, student learning for life, student action and community service, student agency and ownership over learning, student engagement, teacher relationships, teacher creativity and sense of safety to take risks, teacher engagement, teacher reflection, parent involvement, and parent belief that their children are set up for success. The only school climate outcome that did not show a positive trend post-authorization was schoolwork (Boal & Nakamoto, 2020).

Conclusion

Birth through age eight are crucial years of a child's development. The IB curriculum recognizes the importance of a healthy body and mind during these years in the pursuit of fostering healthy growth and development of students, specifically to highlight the value of play in one's social, emotional, cognitive, and physical development and well-being. The IB aims to

foster open-minded and well-rounded students. “From memory to motor skills, visual and spatial processing to executive functions, young learners attain and practice all of these cognitive abilities through the play method of teaching-learning” (Arora, 2023, para. 1). The IB PYP inquiry-through-play model gives students countless opportunities to be challenged and to practice their basic reasoning abilities using critical thinking skills. The IB’s Approaches to Learning (ATL) within the PYP context, stipulated that these ATL skills support children to become learners who ask intelligent questions, set sound goals, and pursue their passions with the determination to achieve. The PYP model requires the facilitation of play according to the child’s interests, development, and skills of the individual children. In the PYP IB classroom, learning through play happens in the areas of thinking, research, self-management, communication, and social abilities. Lastly, when implemented effectively, play in IB schools is a child-centered environment where learners are encouraged to be curious, ask questions, explore, and experiment while the teacher facilitates healthy play and modeling.

CHAPTER III: DISCUSSION AND CONCLUSION

Summary

The core benefits of play primarily include factors surrounding the vivification and improvement of play assisting in developing the brain, enhancing one's intelligence, expanding upon personal creative thinking abilities, improved communication skills, fostering of individual emotional regulation prowess, boosting development of one's own social competence, the improvement of one's physical and mental health, the continued development of problem solving skills, and the strengthening of meaningful relationships (Bergen, 2002, as cited in Li, 2023; Connolly & Doyle, 1984; Fisher, 1992; Galyer & Evans, 2001; Howard-Jones et al., 2010; Li, 2023; Newland et al., 2001; Pellegrini, 1980, as cited in Li, 2023; Rosenzweig & Bennett, 1996, as cited in Li, 2023; Youngblade & Dunn, 1995). Next, discussed was the inherent and timeless value of the varying types of play young children engage in. This included the analysis of free play, guided play, and games, while also discussing the powerful benefits of a pedagogical approach that is playful in nature (Bassok et al., 2016; Bonawitz et al., 2011; Burts et al., 1992; Chi, 2009; Chien et al., 2010; Diamond et al., 2007; Duncan et al., 2007, as cited in Pagani et al., 2010; Fisher et al., 2013; Han et al., 2010; Hassinger-Das et al., 2017; Hines et al., 2011; Hirsh-Pasek & Golinkoff, 2008; Hirsh-Pasek et al., 2009, as cited in Skolnick Weisberg et al., 2013; Honomichl & Chen, 2012; Kagan and Lowenstein, 2004; Marcon, 2002; Miller & Almon, 2009; NAEYC, 2020; Pagani et al., 2010; Resnick, 2007; Skene et al., 2020; Skolnick Weisberg et al., 2013; Skolnick Weisberg et al., 2018; Souto-Manning, 2017; Spiewak Toub et al., 2018; Stipek et al., 1995; Zosh et al., 2022).

One arguable crux in the developmental factoring of play and its impacts on young children's continual growth and development resides in the regular acquisition of early literacy

skills. Importantly, purposeful play regularly acts as a vehicle for the promotion of early language learning and literacy-based foundational skills. These foundational literacy skills include, but are not limited to, the inclusion of sight words, vocabulary, and various other emerging reading skills. The studies and data supported these claims (Barnett et al., 2005; Buchsbaum et al., 2011, as cited in Gopnik, 2011; Christie & Roskos, 2000; Danniels & Pyle, 2018; Feesha & Pyle, 2016; Goodman, 1994; Gopnik, 2011; Hirsh-Pasek et al., 2008; Jones & Reynolds, 2011; Lillard et al., 2013; NAEYC, 2013; Pellegrini, 2009; Pyle et al., 2020; Sjoerdsma, 2016; Spiewak Toub et al., 2018; Storli et al., 2022; Strauss & Bipath, 2020).

Miscellaneous factors of importance in the essential growth and development of young children in today's ever evolving world, analyzed at length, included the following: the relationship between play and safety (Bijur et al., 1988; Bown & Sumsion, 2007; DeEEWR, 2009; Franklin & Cromby, 2009; New et al., 2005; Nixon et al., 2003; Norton et al., 2004; Ordoñana et al., 2008; Palmer et al., 2005; Tandy, 1999; Trantor & Sharpe, 2008; Wyver et al., 2010), the value of nature based preschool education programs (Cordiano et al., 2019; Lund et al., 2023; McClain & Vandermaas-Peeler, 2016; Natural Start Alliance, 2014), and how teachers perceive and value play in the classroom (Bergen, 2009; Hirsh-Pasek et al., 2009; Jung & Jin, 2015; Klugman, 1996; Miller & Almon, 2009; Pistorova & Slutsky, 2017; Prager et al., 2016; Puteh & Ali, 2013; Sandberg & Samuelsson, 2003; Shinagawa International School, 2023; Thibodeau et al., 2016; Zhulamanova & Raisor, 2020). Additional factors included the debunking of societal concerns regarding young children playing video games (Markey et al., 2022), the effects that familial income levels have on the development of young children (Han et al., 2023), and the importance of make-believe play for children both in academic and social settings (Germeroth et al., 2019).

Following, the intrinsic value of a child's social emotional development was analyzed. This was accomplished through the lens of play and its entwined and complicated relationship with social emotional growth in young children. Importantly, researchers also looked at students' mental health levels as well (Carolan & Connors-Tadros, 2015; Centers for Disease Control and Prevention, 2019; Giannakopoulos et al., 2014; Gillam & Shabar, 2006, as cited in Stegelin et al., 2020; Gilliam et al., 2016; Gray, 2020; Hancock & Carter, 2016; Lawson et al., 2019; Longstreth et al., 2013; Luke et al., 2022; Osofsky et al., 2008; Ramani & Brownell, 2014; Stegelin, 2018; Stegelin et al., 2020; Svane et al., 2019).

Finally, offered was the International Baccalaureate (IB) Primary Years Programme (PYP) presenting a best-practice, ever-evolving educational model that is transdisciplinary in nature. Its inclusion was aimed at providing the reader with the necessary context so as to best understand the dense, yet incredible value that IB worldwide schools provide to their students (especially those enrolled in the PYP model) and the overall school climate (Arora, 2023; Barnett & Storm, 1981, as cited in Hirsh-Pasek & Golinkoff, 2008; Boal & Nakamoto, 2020; Christie & Rokos, 2000; Dix & Sniedze-Gregory, 2020; Hirsh-Pasek & Golinkoff, 2008; Hoy et al., 1998; Kraft et al., 2016; MacNeil et al., 2009; National Center on Safe and Supportive Learning Environments, 2019; Piaget, 1962, as cited in Hirsh-Pasek & Golinkoff, 2008; Ramani & Seigler, 2008, as cited in Hirsh-Pasek & Golinkoff, 2008; Reilly, 2016; Shinagawa International School, 2023; Thapa et al., 2013).

Professional Application

This research in full has already proven to be of incredible value to my own preschool classroom. To be clear, as is likely obvious given the context of this thesis work, as an early childhood educator I have forever been a staunch advocate for excess amounts of play in the

classroom and school setting. This is especially valuable at the preschool level for a myriad of reasons, but if for no other reason than by Kindergarten, many of these opportunities for play in the classroom largely cease to exist.

There is such inherent value especially in the acquisition of young children's social emotional skills that so naturally can be developed when organically placed in opportunities in which children can mingle and coexist amongst their peers. As is the nature of young children, when placed in these settings, disagreements or frustrations often arise. These are the exact types of teachable moments and opportunities that I love in the field of early childhood education. Depending on the children and/or situation dictates my personal level of intervention (the immediacy, or lack thereof). It is these natural and organic moments that exist in the ebb and flow of a healthy preschool classroom that can produce such wonderful growth and development among my students. This far surpasses anything I could teach, instruct, or model as an educator or influential figure in the classroom. These organic moments in which students perhaps disagree with one another, struggle to share the toys, or generally just do not seem to coexist well together, are quite literally invaluable. My research findings in regard to young children and the correlation between play and one's social emotional development supported this notion time and again.

Interestingly, I was both encouraged and intrigued with the various studies that advocated for the incorporation of the various types of play in a preschool classroom. These types of play primarily include free play, guided play, and games. The examples alluded to in the paragraph above largely refer to instances that may occur during free play sessions in the classroom. However, I was most intrigued with how to best incorporate stretches of guided play in my classroom as well. Truthfully, as magical as the benefits so clearly are and could be with guided

play, there is a very real staffing constraint. Typically in my classroom structure it is only myself as the classroom teacher and my one classroom assistant. With 20 students in each class, this is inadequate staffing for simply the two of us to provide guided play experiences that are both meaningful and intentional on a consistent basis, while also purposefully including and embedding the Minnesota Early Childhood Indicators of Progress Standards (MN ECIPS) standards and/or Teaching Strategies Gold objectives. Simply by default, due to general staffing constraints, free play is the leading mode of play in my classroom. All of that said, as of late, I have often had a third staff member in my room who is familiar with the unique needs of several of my students. This has been invaluable as it has allowed me to begin to incorporate at least some opportunities for purposeful guided play in the classroom. An added benefit of this has been a reduction in behaviors as well. The research I uncovered made it especially clear to me both the stark differences and commonalities between the various types of play. This newfound knowledge has already proven to be of excellent value for my current roster of students as this extra staff member has freed me up enough to personally provide meaningful guided play experiences. I will lastly add, that in reflection and response to the many benefits of large motor and nature based play, I have begun incorporating a little extra large motor time into my schedule as well. Preferably this happens on beautiful days outside, but in reality sometimes the Minnesota weather dictates this extra large motor time happens in the gym. Having simply added an extra five to fifteen minutes of gross motor activities or play time, I have seen a marked decrease in behaviors among my student population. However, building-wide scheduling paired with occasional weather constraints does not always allow me to incorporate this additional gross motor time. On these days, I absolutely see the consequence of this at the classroom level. I have always also found tremendous opportunities for community building while either outside or in

the gym. An especially pertinent example of this would be when I take my students on nature walks around our school grounds, as a means to primarily build upon our classroom community. Of note, several studies on the value of nature based preschools spoke to this benefit as well. Specifically, additional gross motor time as a general sentiment is something that I hope to convince my coworkers of the value in as we look ahead to the 2024-2025 school year.

Limitations of the Research

The scope of this research was effectively limited by initially using keywords in the search for reputable research studies using the necessary high-quality databases. Keywords primarily used for the initial search parameters included the following: play, early childhood education, International Baccalaureate, social emotional, play as learning, preschool, and prekindergarten. Of note, predominantly excluded was the topic of assessing/assessments in regard to our young preschool aged scholars. Additionally, numerous inspiring works surrounding the notion of revolutionizing education from Sir Ken Robinson (2010, 2019) also had to be excluded due to not meeting the required empirical research standards and/or narrative direction of this work.

Substantially lacking in this field of research was a direct link between the value of play and the Primary Years Programme of the International Baccalaureate. Both credible research and notable studies were virtually non-existent. Simply put, research intimately correlating the role and value of play specifically within the PYP and IB did not exist, outside of a smattering few official IB documents.

Implications for Future Research

Additional research is desperately needed linking the role and value of play in a PYP classroom in an IB school. Furthermore, within the context of the PYP, a more precise working

definition of play would prove valuable. By nature, play is not easily defined, however, the tenets and pillars of the IB, along with future works of empirical study would benefit greatly from a more cohesive working definition of play. The simple complexity of play, and generally a lack of a universal definition, is seen as an initial hurdle in regard to this lack of available research. This likely adversely affects the ability of interested researchers to intimately and purposefully link play with the IB PYP early years. Regardless, the messaging of the IB would be greatly strengthened if such studies existed to further prove the value of the IB as an educational model over that of its varying counterparts. This research is necessary to both show and prove the immense value of play within IB worldwide school classrooms.

Conclusion

In finality, Sir Ken Robinson, a once leading man in the conversation surrounding revolutionizing education, ascertains that in general the problem with education is not the students, nor the learning. Rather, the problem is how school systems have traditionally operated. According to Robinson, a revolution is needed in education. More poignantly, this is our call to action as educators. The International Baccalaureate seemingly is attempting this by effectively redefining the values, purposes, and aims of education. This radicalization begins in the world of pre-primary education classrooms worldwide. The expectation is that the International Baccalaureate continues to pave the way for those educators who wish to follow. This radicalization begins with an intense focus on consistently providing our youngest scholars with purposeful opportunities to play in the classroom and beyond. The value of play is clear. The benefits are immense and cascading. It is time educators reprioritize the importance of play in the classrooms of our youngest learners worldwide.

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