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Supporting Play in the Preschool Classroom with Visuals

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Capstone Project: A School Improvement Plan

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Abstract

Early childhood classrooms in the United States look very different today than they did a decade ago. There are a number of reasons why this changing portrait is the case; however, students entering preschool classrooms today are coming to school with less social and academic skills than in the past. Preschool teachers are feeling the pressure to have students "school ready" while also implementing developmentally appropriate practices. After surveying the research around challenges incorporating play in preschool classroom's today, this school improvement plan suggests how to justify and support play in the preschool classroom using visuals, such as play scripts.

Keywords: play, visuals, play scripts, skills learned through play, factors affecting play

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Anyone who has spent time in an early childhood classroom, especially preschool, over the last decade can see that the classroom and the activities look very different than in the past. Why the change? The beginning of the academic shift occurred in 2001when President Bush signed into law No Child Left Behind. Next came the adaptation of the Common Core in 2010. These two legislative changes led to greater demand on upper-grade teachers as well as pressure for preschool teachers to have their students "school ready."

During this same time frame, the use of personal electronic devices and access to the internet has exploded. Today the average household in America has 22 connected electronic devices (Harrison, 2022). While the American Pediatric Association (2016) continues to recommend less than an hour of technology usage per day across all settings for preschool-aged kids, Common Sense Media (2020) reports that the average time preschoolers are spending on screens is closer to two and a half to three hours a day. Also, for the last three years, the world has been going through the COVID-19 global pandemic. Increased amounts of time at home for many toddlers and preschool-aged students led to less opportunity for social interactions and an increase in technology usage for both educational and leisure purposes.

These above-mentioned factors (changes in legislation, increased technology usage, as well as the COVID-19 pandemic) have resulted in preschool-aged children coming to school with not only fewer academic skills but also fewer play skills than they had in the previous twenty years. However, despite these deficits, preschool students can have time to play while developing the necessary skills needed for academic success later.

The purpose of this school improvement plan is to provide preschool teachers with the knowledge, background, and research they need to feel confident and comfortable in their

reasoning behind including play within the preschool day. This school improvement plan will also provide teachers with information on possible ways to support student learning and engagement in play using visuals, such as play scripts and peer mentors.

Research articles for this school improvement plan were found through the WorldCat discovery tool through DeWitt Library at Northwestern College as well as Google Scholar. Included research in the literature review are articles that have been peer-reviewed and published recently (most of which were published within the last ten years). Focus was given to topics that related to the effects of legislative changes to the preschool classroom, technology usage by preschoolers, and the effects of the COVID-19 on preschoolers. Other topics included research about play and supporting play in the preschool classroom, academic skills that are gained while children play, as well as teacher perceptions of play. This scope of research allowed for an in-depth look into the factors that are currently affecting the preschool classroom, especially regarding incorporating and supporting engagement during play within the preschool day.

Preschool teachers can support academic development while providing age-appropriate play-based experiences within the preschool classroom. These experiences, when supported with visuals and other supports, will help develop the necessary skills and lay the foundation for current and future academic success. Play is a necessary and important part of the preschool classroom that allows students the chance to explore, engage, and learn.

Review of the Literature

This literature review summarizes the research around four themes surrounding play in the preschool classroom. These themes are teachers' perceptions of play and challenge incorporating play, the importance of play, outside factors affecting play, as well as supporting play with visuals.

Teacher Perception around Play and Challenges Incorporating Play

Perceptions are powerful. When teachers perceive that they hold the knowledge, capabilities, and resources to facilitate various strategies within the classroom, magic happens. However, when a teacher perceives that even one of these elements isn't solid, they may find themselves less willing and even refusing to try something new or different. When examining research around teachers' perceptions of play, multiple studies found that many teachers find play to be an important part of the early childhood classroom (Louge & Harvey, 2010; Pyle & DeLuca, 2017, Brown, et al, 2020). However, the perceptions behind why it is important were different. Pyle & DeLuca (2017) found that 42% of 101 kindergarten teachers in Ontario, Canada perceived the primary purpose of play was the development of personal and social skills that later supported academic learning. Another 50% of these teachers perceived that **both** personal and social skills *and* academic skills were developed during play (Pyle & DeLuca, 2017).

There is also a difference in perception amongst teachers about the types of play that are acceptable and relevant to the early childhood classroom. Louge & Harvey (2008) surveyed 98 preschool teachers' perceptions of active play in the preschool classroom. They found that most teachers found active, dramatic play to be important to incorporate into the preschool classroom; however, perceptions towards active and dramatic play that can be described as rough and tumble play varied. Rough and tumble play was defined to include superhero play, pretend

fighting, protect/rescue, and chase games (Logue & Harvey, 2009). Eighty-five percent of participants said they allow or always allow protect/rescue style play, while 60% said they allow or always allow chase games. However, when it comes to the more physical components of rough and tumble play, only 52% said they allow or always allow superhero play, and only 10% said they allow or always allow pretend fighting (Logue & Harvey, 2009). Other types of active, dramatic play that were observed includes house/family play as well as nurture/care play. Boys were more often found to partake in the rough and tumble type of play whereas girls were more often found to participate in the house/family play and nurture/care play forms of active play (Logue, & Harvey, 2009).

While many teachers perceive play as important, they all face obstacles and hurdles that make incorporating play into the classroom more difficult. When examining the research, three main components are seen as the biggest hurdles to incorporating play: policies, lack of knowledge or support, and safety. Policies are seen as one of the biggest hurdles in incorporating play into the early childhood classroom. Sometimes the policy is due to politics and reforms (Khali, et al, 2022; Pyle, & DeLuca, 2017) while other times it's more local and due to school policy (Louge & Harvey, 2010). Whereas policy affects some teachers' abilities to implement play, others fear a lack of knowledge and support (Mourlam et al., 2019; Khali, et al., 2022, Logue & Harvey, 2009). This lack of knowledge may be due to inadequate educational opportunities (Brown et al., 2020) while others lack the knowledge due to inopportunity (Khali, et al., 2022). The final hurdle observed was around safety in regards to play, especially rough and tumble play. In the above-mentioned study (Logue and Harvey, 2009), many teachers reported that their schools had policies that limited play due to protection and safety concerns. These policies include hands-off policies that allow no physical contact while others had no-

tolerance policies. However, there were teachers in this study that could and did allow for play fighting and found it acceptable as long as all parties appeared to be actively engaged and no one was getting hurt (Logue & Harvey, 2010).

Due to these hurdles and the pressure being placed on early childhood classrooms, many teachers also perceived assessing learning through play as extremely difficult. Pyle and DeLuca (2017) argue that teachers may be trying to justify the incorporation of play by pairing it with assessments. In their study, 83% of teachers felt that academic skills could be assessed during the context of play (Pyle & DeLuca, 2017). Although 83% of teachers stated assessment could be conducted through play, Pyle and DeLuca noted through their interviews and observations that teachers found assessment of learning through play to be difficult, time consuming, and challenging (2017). Since play is moving and active, documenting, analyzing, and interpreting the data takes time not only while with students but also away from students. Many teachers reported using video and photographs (Pyle & DeLuca, 2017) to assess learning; those methods took time later to review and analyze.

Importance of Play

Jean Piaget is credited to having said, “Play is the work of children” in 1951, supporting what Vygotsky had stated in an earlier lecture in 1933 on the importance of play for development in the preschool years (Vygotsky et al., 2016). Though Vygotsky’s lecture wasn’t given in English and not translated for nearly thirty years, his constructivist theory and views on development and play continue to be a major foundation for play-based learning, even today (Taylor & Boyer, 2019). Vygotsky argues that play is an important part of childhood that promotes development in skills related to cognitive, social, and emotional abilities. While children ages three to six benefit from other experiences and activities, Vygotsky’s students

Leont'ev and Elkonin argued that play provides a meaningful means for development that couldn't easily be achieved through other activities (Vygotsky et al., 2016). Play helps promote development in cognitive or social-emotional skills, communication and language skills, as well as academic skills.

The connection between play and cognitive or social-emotional skills as well as language and communication has a long, documented history. The study conducted by Logue and Harvey (2009) on teacher's views of active play notes that rough and tumble play is important to social and cognitive development and may even increase bonds as 85% of the time children in engaged in this form of play are considered friends and 50% of the time they are considered best friends (Louge & Harvey, 2010). Other studies supporting play leading to increased cognitive or social-emotional skills can be seen from Hirsh-Pasek and Golinkoff (2008) as well as one by Myck-Wayne (2010). In these studies, play was found to enhance cognitive skills, such as attention, and brain development when active play and dramatic or make-believe play was incorporated into the classroom (Hirsh-Pasek & Golinkoff, 2008; Myck-Wayne, 2010). Myck-Wayne (2010) also found that other social skills such as cooperation and following directions were increased through the use of dramatic play centers. Besides language development skills, other social-emotional or cognitive skills documented to have increased with play are socio-psychological skills, concept of self, as well as self-regulation skills, and social norms and rules of play (Khalil et al., 2022; Taylor & Boyer, 2019).

There has often been a missing research link between play and academic learning. However, a study conducted by Blanco and Ray (2011) helped to bridge this missing research link between play and academic skills. Blanco and Ray (2011) worked with 41 at-risk first-grade students from four elementary schools in the southwestern United States. They observed how

play therapy with academically at-risk students increased academic skills. To conduct the research, they placed 26 boys and 15 girls into one of two groups: child-centered play therapy (CCPT) treatment or wait-list control (WC) group. All students were given the Young Children's Achievement Test prior to and after the eight-week treatment. Blanco and Ray (2011) found that the students from the CCPT group scored significantly higher on the Early Achievement Composite due to higher scores on four subscales of academic achievement. Hirsh-Pasek and Golinkoff (2008) found that play is also linked to reading and math skill development. They noted that when four-year-olds are observed playing and using rhyme, creating lists, or "reading," reading readiness skills are being built (Hirsh-Pasek & Golinkoff, 2008). It was also noted that mathematical roots could be observed 46% of the time during children's free play (Hirsh-Pasek & Golinkoff, 2008).

Outside Factors Affecting Play

There are many factors beyond the preschool classroom that affect the ability for teachers to incorporate play into their classrooms; legislature changes, technology, and the COVID-19 pandemic are some of the most common challenges preschool teachers have been facing for the last few years. To examine the effects of legislature changes on the preschool classroom, Brown (2013) conducted a case study within the Homestead School District in Texas. His study included many different stakeholders such as preschool teachers, the director of Head Start, the elementary principal, the superintendent, and a Texas early education model mentor. Brown found that the degree to which the teachers felt policy changes affected the day-to-day operations of their classroom and their ability to incorporate enough play was dependent on their classroom setting: Head Start vs. public school (2013). However, all of the teachers felt that policy changes

did affect their day-to-day life even if the policy didn't represent what is known to be developmentally appropriate for preschool-aged children (Brown, 2013).

Brown et al. (2019) conducted a larger study on perceptions of policy changes by stakeholders, including Texas, West Virginia, and national stakeholders (2019). It was found that community members, regardless of their location, realized that policy changes had shifted the structure of the kindergarten classroom, but that they perceived that changes were necessary to combat later academic issues such as low reading scores in the fifth grade. All stakeholders interviewed also realized that these policies left them all stuck between a rock and a hard place. Members from each group believed in the importance of play and other soft skills in the kindergarten classroom but also felt the pressure from implemented policy changes (Brown et al., 2019).

While policy changes have undeniably changed the early childhood classroom, so has technology. Technology usage, both at school and at home, has changed rapidly over the last decade. This increased use of technology has led to students coming to school without skills they previously had as well as an increase in social-emotional problems. A study conducted in Japan by Hosokawa and Katsura (2018) examined how the amount of time spent on mobile technology affected both internal and external behaviors of 1,642 six-year-old, first grade students. Hosokawa and Katsura found that families who reported students using devices for 60 or more minutes per day had significantly more behavior problems than those who spent less than 60 minutes per day on devices (Hosokawa & Katsura, 2018). They also found that parental income played a significant part on device usage for both parents and children: lower income families reported higher amounts of daily device usage (Hosokawa & Katsura, 2018). Families that reported their child had frequent device usage *without* the engagement of educational content

also reported higher rates of behavioral problems, both at home and at school (Hosokawa & Katsura, 2018).

Over the last three years technology usage in children has increased due to the COVID-19 pandemic. Limone and Toto (2021) looked into the psychological and emotional effects digital technology had on children worldwide due to the COVID-19 pandemic. They reported findings on four different areas: prevalence of technology use, neurological changes, brain conditions and diseases associated with smartphone use in children, as well as impact of television and video games. Many alarming findings were found. Due to the pandemic, overall technology usage was up 15% in children as technology was used by children for both recreation and educational purposes as children were using technology for classes, gaming, and to help pass the time (Limone & Toto, 2021). They also noted that neuron connections increase more rapidly during childhood than adulthood, and the effect technology has on these pathways could be transient or permanent (Limone & Toto, 2021). Technology addiction has risen amongst children, and children who regularly used cell phones showed lower concentrations of the beta trace protein, an essential hormone necessary for sleep (Limone & Toto, 2021).

It will be years before we know the total effects that the COVID-19 pandemic had on child growth and development; however, two studies worked to examine possible effects using a life course theory lens as well as a systematic review. When looking at the possible effects the COVID-19 could have on child growth and development, through a life course theory lens, Benner and Mistry (2020) found that there is robust and compelling evidence highlighting the importance of early childhood in regard to rapid brain development that results in cognitive and social growth. These two authors also noted that young children will likely be more vulnerable to developmental shocks since they have a confluence of risk factors. The impact of the pandemic

will likely be seen both immediately and in the future in terms of delayed academic and social emotional development (Benner & Mistry, 2020).

When looking at the effects of the pandemic, with a systematic review, similar findings can be found. Araújo et al. (2021) found that whereas the pandemic did present a number of on-going, daily changes and challenges, children around the world continued to grow and develop. Children who had more stable home environments, where feelings of security and affection were felt regularly, will most likely not have long-lasting impacts due to the pandemic (Araújo et al., 2021). However, the authors noted that several factors, such as isolation, limited contact with others, and long-lasting family stress, associated with the pandemic are recognized as ACEs and therefore could potentially negatively impact brain development amongst children (Araújo et al., 2021). Not only were emotional challenges observed but physical challenges, due to lockdowns, could be attributed to inadequate physical conditioning with growth and well-being having been affected (Araújo et al., 2021). Other possible delays may be seen in cognitive, behavioral, social, and communication skills due to isolation, mask wearing, and social restrictions that limited the brain the necessary exposure and opportunity for development (Araújo et al., 2021).

Supporting Play with Visuals

Whereas the need and benefits of play have been well documented it's not enough to "just" let kids play. Due to the reasons listed above, as well as others, many children today need additional supports that haven't historically been provided for all children during play. When looking at how best to support students, it's important to keep in mind the foundation and driving force behind the teaching framework known as Universal Design for Learning (UDL).

In 2009, a nonprofit education research and development organization, CAST, developed and released the first Universal Design for Learning (UDL) guidelines (2023). The goal of the

UDL framework is to help educators and other educational professionals "design learning environments that are *accessible* and *challenging* for *ALL (learners)"* [emphasis added] (2023). When using the UDL framework a teacher quickly realizes that a support helpful for one student might be helpful for many students. When looking at the research on visuals and peer models, through this lens it is possible to see how these strategies that were developed for students with disabilities or challenges may be beneficial to all students in a preschool class.

A common intervention used with children with autism spectrum disorders (ASD) is play scripts or scripting. This intervention provides guidance on how to verbally respond or initiate in given situations (National Autism Center, 2015). This guidance is provided through pictures or words that help the child with autism see the steps needed to complete a given task, skill, or play sequence. When using play scripts and visuals for students who are struggling to gain social or academic skills, these same visuals may help other students master these skills more quickly. One study that examined the impacts of visual supports on verbal communication was conducted by Ganz et al. (2008). They observed three children with autism or PDD-NOS at a private school for children with ASD serving elementary through high school students. During the intervention period all three students had increased verbal communication outputs (both scripted and unscripted), but for two out of three students, scripted statements returned to zero after the intervention period was over (Ganz et al., 2008). The most noteworthy finding of this particular study was that all three students decreased and maintained lower perseverative speech both during and after the intervention period (Ganz et al., 2008).

Ganz & Flores (2009) examined how visual scripts impacted play for preschoolers. They observed two boys with ASD in an inclusive preschool classroom during free play time to see if visual scripts would help increase their interactions with peers. For this study both the observed

students and the peers were given instruction. The students with ASD were taught how to use a visual script while the peers were taught how to respond. The findings were encouraging! Both students with ASD had an increase in verbal communication and interactions with peers. One student ended up creating a close friendship with another peer while the other student started to use context-appropriate phrases he had picked up from peers (Ganz & Flores, 2009).

Another study that looked at visual scripts occurred in 2012 (Ganz et. al, 2012). In this study they observed the effects of visual scripts when paired with peer-mediated implementation. This study involved three middle school students, one with ASD and two peers, from a public school district in Texas. After teaching both the student with ASD and the peers, observations were observed during cooking activities. Much like Ganz's 2008 study, the student with ASD showed an increase in communication during intervention; however, some progress was lost after the intervention period was over, particularly with questioning and praise statements (Ganz et al., 2012). The student with ASD didn't initially request help; however, during and after intervention the student continued to request help (Ganz et al., 2012).

One final study that looked at the effects of teaching play strategies on social interactions was conducted by Francke and Geist (2003) at an integrated preschool setting in Ohio. For this nine-week study a three-year-old child with ASD was taught play strategies and found to have increased opportunities to play with and around other students than had previously been observed (Francke & Geist, 2003). The student in this study was also able to develop high levels of play and social behaviors as well as generalize these behaviors and skills to other settings (Francke & Geist, 2003). As is evident in two of these studies (Francke & Geist, 2003; Ganz & Flores, 2009), the best outcomes were found when the children were younger.

School Profile

School Performance

The Monticello Community School District (MCSD) is located in eastern Iowa within the Grant Wood Area Education Agency. It served 983 students in grades kindergarten through twelfth grade during the 2021-2022 school year (Iowa Department of Education, 2022). The MCSD also provides preschool through the Iowa Department of Education's Statewide Voluntary Preschool Program (SWVPP) along with two community-based partners, Mother Goose Preschool and Sacred Heart. Between these four preschool programs, 60 four-year-old preschool students are being served during the 2022-2023 school year.

These four sites' demographics match closely to the MCSD demographics. The MCSD is a predominately white district with 90.7%, or approximately 891 students, identifying as white. Students of Hispanic origin are next with approximately 36 students, or 3.7%. Approximately 22 students, or 2.2%, of the district's students identify as multi-racial while approximately 22 students, or 2.3%, identify as Black/African American. The rest of the district population (0.9%) is made up of students of Asian descent (Iowa Department of Education, 2022).

Students within the four preschool programs are assessed using Teaching Strategies GOLD (TSG) during three reporting windows throughout the school year. During the Fall 2022 screening period, students were assessed on the following areas: Social-Emotional, Physical, Language, Cognitive, Literacy, and Mathematics. For both social-emotional skills as well as literacy skills, 37 students, or 62%, were below expectations while 23 students met expectations. The other three areas that saw a majority of students below expectations were physical skills (55% of students), cognitive skills (63% of students), and mathematical skills (58% of students). For these same three areas 45%, 35% and 42% of students met expectations, respectively. The only area that saw a majority of students meeting expectations for Fall 2022 was in language

skills with 55% of students meeting expectations, while the other 45% of students were below expectations (TSG Fall Report, 2022).

Student and Community Characteristics

All four preschool sites are located within Monticello city limits. Mother Goose Preschool is considered private, Sacred Heart is a Catholic school, while the other two preschool sites are housed within the public school's early elementary building, Shannon Elementary. All four sites receive their funding through the SWVPP and have licensed preschool teachers leading the classes. The population of Monticello is 4,045 people with 90.2% white, 5.24% multi-racial, 3.76% Hispanic, and .8% black according to 2020 census data (U.S. Census Bureau, 2020). For the 2022-2023 school year the four preschool sites currently serve 60 students. While historically the preschool teachers at Shannon Elementary have the majority of the special education students, the fall semester of 2022 found each of the four preschool sites with at least one student on an Individual Education Plan (IEP). The students at both Mother Goose and Sacred Heart had speech-only IEPS, while one student at Shannon Elementary had speech as well as other goals.

School Characteristics

Each preschool site offers various structures and programming in their school day. Each site is a four-day-a-week program. Mother Goose Preschool offers a half day morning program; Sacred Heart offers two half day programs, one in the morning and one in the afternoon. Shannon Elementary offers the only full day program within the district. Each site works on developing both academic and social skills, but each has the flexibility to use different approaches and resources to accomplish this goal. All four sites also adhere to and follow guidelines set forth by the Iowa Department of Education and complete yearly desk audits that ensure the implementation of the Iowa Quality Preschool Program Standards (IQPPS).

Parent Involvement

Parents are an integral part of each site's program. All sites conduct home visits with each family either before the start of the school year or very soon after starting. Each site offers parent-teacher conferences twice a year, once in the fall and once in the spring. The ways in which parents are kept informed throughout the year also vary, but each site uses at least one of the following modes of communication: weekly emails, monthly newsletters, SeeSaw, Facebook private groups, Google Photos, and/or school website. Throughout the year each site provides various family involvement opportunities through events such as pizza night, breakfast with grandparents, open house, muffins with moms, and/or donuts with dads. Parents are also encouraged to attend field trips and are given volunteer opportunities as they occur.

School District Mission and Vision

The mission of the four preschools sites that serve the students of the Monticello area focuses on the partnership that is formed between staff, parents, and the community to prepare students for life beyond the walls of the school. It reads:

> The mission of Monticello Community School District, a partnership of school staff, parents, and community, is to prepare students to be life-long learners who can become successful, productive future citizens. This will be accomplished by recognizing the value of each individual and promoting academic and personal growth in a challenging and caring environment. (Monticello Preschool Handbook, 2022)

Current Student Learning Goals

Currently student learning goals across all four preschool sites are as follows: “Children will show competency in social/emotional, physical, cognitive, and language development skills; children will be enthusiastic and curious learners; and children will be safe and healthy”

(Monticello Preschool Handbook, 2022). These goals are monitored and measured using Teaching Strategies GOLD, feedback from parents and students, as well as observational data. To support and ensure progress on these learning goals, the four preschool teachers gather monthly to discuss data and create action plans.

Time for Play in District Preschool Classrooms

While the four preschool teachers that serve the students of the Monticello community agree that play is important, the amount and types of play that occur in each program differs. At both Mother Goose Preschool and Panther Preschool, students are given time for gross motor play as well as student-directed play each day. At Mother Goose Preschool these two types of activities occur for approximately 90 minutes per three-hour class period, while at Panther Preschool these two types of activities occur for approximately 2 hours and 15 minutes per full day. At Sacred Heart Preschool students are given free choice play for approximately 100 minutes per three-hour class period. During these free choice times students may be engaged in individual play, group play, dramatic play, water play, and/or block play (to name a few examples). During gross motor play students are given the opportunity to go outside or into a large room or gym if it's raining or too cold. During this gross motor play students have access to a variety of equipment and play structures and may also utilize parachutes or cooperative games.

Teacher Instructional Strategies, Assessment Practices, and Professional Development

At each preschool site all four teachers use a variety of instructional strategies that include both large and small group activities as well as a combination of student-directed and teacher-directed activities. For students who need additional support, the four sites use the RTI process as well as seek additional support from specialists at Grant Wood Area Education

Agency (GWAEA) as needed. Student assessment is monitored through observations and parental input that is then used for Teaching Strategies GOLD. The four teachers also utilize informal and formal assessments to guide and instruct their day-to-day teaching needs.

For the current school year (2022-2023) the MCSD has an early release each Wednesday to allow time for professional development. This is also the day the preschool team uses for prep and team professional development opportunities. Each individual teacher takes professional development that pertains to their identified areas of growth through the district or through opportunities at GWAEA. The preschool team, which is made up of the four teachers, administration, and GWAEA support staff, meets monthly. During the 2021-2022 school year the preschool team completed a book study of *Unpacking the Pyramid Model: A Practical Guide for Preschool Teachers* (Hemmeter et al., 2020). This book study has been followed up with action plans for the 2022-2023 school year. Each teacher on the team uses the implementation checklist from the book to create and implement action plans on areas identified as needing improvement. During the monthly meetings the preschool team also looks at IQPPS standards, Teaching Strategies GOLD, and FAST data collected in the fall. Teachers also discuss and provide support with current issues and struggles individual sites are having.

Needs Assessment

As the research validates, play is a developmentally appropriate and important part of the early childhood classroom that has the ability to help strengthen necessary skills needed for later academic success (Vygotsky et al., 2016; Blanco & Ray, 2011). When looking at the Learning Strategies GOLD data from Fall 2022, it is easy to see why many of the discussions that are happening during the preschool team meetings are about students lacking necessary skills not only for academic purposes but for social and cognitive purposes as well. Like many other

teachers, the preschool team in Monticello has found the impacts of legislative changes, increased technology use, and the pandemic affecting the skills that preschool students possess when beginning their school career.

Play is currently a practice all four teachers use within their classrooms; however, the amount of time given, the type of play allowed, the resources provided, and the supports given vary or are missing all together. Creating a more cohesive, yet customizable, structure and supports around play will help ensure ideal opportunities for students' future success. Completing the creations of visuals as a team, will help ensure greater accountability and buy-in with all teachers involved, as well as lighten the already overwhelming loads carried by the members of the preschool team. Also, by creating supports and opportunities for play during the early school years (in the preschool classroom), students are more likely to see long-lasting impact from these efforts as is evident in many studies about the effectiveness of early intervention.

Data Analysis

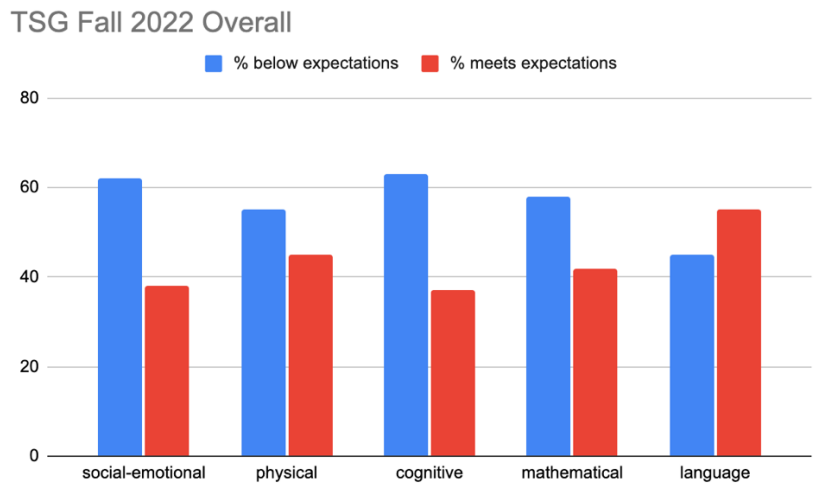
Data Collection from Teaching Strategy GOLD

When examining the data for TSG for Fall 2022, it is apparent that the currently enrolled students within the four sites of Monticello preschools are needing additional support in almost all areas. Assessment areas that saw a majority of students below expectations were social-emotional skills (62%), physical skills (55%), cognitive skills (63%), and mathematical skills (58%) (TSG Fall Report, 2022). The only assessed area that saw a majority of students meeting expectations for the fall reporting period was language skills with 55% of students meeting expectations. These findings can be seen below in figure 1. Since TSG compares students to an age range target, there are times that progress in the fall looks lower. However, since TSG is

based on individual student data, it is hard to get an accurate picture if the students from Fall 2023 have a higher percentage of students below expectations than previous years. If we compared year-to-year data, the characteristics of the class (number of students, number of IEP students, etc.) could potentially negatively affect this comparison and could possibly paint skewed results.

Figure 1

Teaching Strategies GOLD Fall 2022 results from four preschool sites combined



Areas of Weakness

As the data above shows, the students currently enrolled in the Monticello preschool programs are below expectations in social-emotional skills, physical skills, cognitive skills, and mathematical skills (TSG Fall Report, 2022). While it is hard to pinpoint the reasons for this result, it is important to note that a majority of these students would have been between 18 months to two-years-old when the COVID-19 pandemic first hit. This experience led to higher rates of isolation, increased technology use, and less time with others (Limone & Toto, 2021; Benner & Mistry, 2020); the pandemic may be part of the reason these students are below

expectations in the areas of social-emotional skills, physical skills, cognitive skills, and mathematical skills.

Another area of weakness for the four preschool sites in the Monticello school district is the amount of time offered for children to play and the materials to which students have access to while playing. In *The Creative Curriculum for Preschool: The Foundation,* Heroman et al. (2010) recommends that full-day programs have 40-60 minutes of outdoor exploration as well as at least 60 minutes of free choice time so students can get deeply involved in play. The recommendations for a half-day program are to still allow up to 60 minutes of free choice time as well as 30 minutes of outdoor exploration. Heroman et. al (2010) also recommends that students have access to 11 interest areas during these free choice times: blocks, dramatic play, toys and games, art, library, discovery, sand or water, music and movement, cooking, and technology.

Areas of Strength

For the preschool class of 2022-2023 an area of strength is their language skills. A majority of students (55%) met expectations in the fall (TSG Fall Report, 2022). Having developed the necessary language skills will help to develop the other skills areas currently below expectations. Another area of strength for the four preschool programs is their willingness and time allotted for play daily. Each site currently allows play but with additional supports, like visuals. This play time could help develop the necessary skills needed for later academic success, as is evident by the literature review. Having this time already built into the day will make it much easier to accomplish the necessary changes instead of needing to try and find additional time in an already full schedule.

Other Necessary Assessments

As explored in the literature review section, having play time isn't enough to increase skills. For students who are struggling, additional supports are needed. Another way to gauge growth in students could be through observations that document the complexity of play and length of play in which students currently engage. While this data isn't currently available or collected across the four preschool sites, it could help to paint a more in-depth picture of students' overall play skills. After implementation of visuals to support play, looking at students' future academic achievements on formal assessments, such as FAST, Measures of Academic Progress (MAP), or Iowa Statewide Assessment of Student Progress (ISASP), will be necessary to help determine success of the intervention.

Action Plan

Strategies

The intention of this school improvement plan is to provide the four preschool teachers within the MCSD with the research and support needed to strengthen play within their classrooms, a move that could lead to increased academic success for their students. While all four teachers include play for various amounts of time throughout their program's day, most of the time additional support isn't provided unless it's identified as needed through an IEP or behavioral challenges. One strategy that has been proven effective to support play, which ultimately supports later academic learning, is the use of visual scripts. Visual scripts are series of pictures that help guide students in completing a play sequence. By incorporating this strategy into already existing periods of play, the preschool teachers could help ensure improved future academic success for their students.

Steps to Solve the Problem

To successfully implement changes in regard to supporting play with visuals, a few things need to occur at all four preschool sites. A proposed time frame can be seen below in figure 2.

Figure 2
Timeline for Implementation of Proposed Improvement Plan

Date	Members Involved	What needs to happen?
April/May 2023	Author meets with elementary principal	The proposed school improvement plan is shared with elementary administrator to get support and approval to share with the preschool team.
May or August 2023	Author meets with all members of preschool team	Author shares research, data, and ideas on how to better support play and learning through adding visuals to play time.
August - November 2023	Preschool teachers	Baseline data is collected on current preschool students during the Fall reporting window of Teaching Strategies GOLD (TSG).
September-November 2023	All members of the preschool team	Members of the preschool team work together to create visuals to use during play time.
December 2023	All members of the preschool team	Data from Fall reporting window for TSG is shared and analyzed.
December 2023	Preschool Teachers	Preschool teachers will teach students and any support staff about using visual scripts and then place the premade visual scripts up around the classroom.
December 2023-February 2024	Preschool Teachers	Preschool teachers will collect winter reporting window data and enter into TSG.
March 2024	All members of preschool team	Data from the Winter reporting window for TSG is shared and analyzed. Adjustments are made as needed. New visual supports are created as needed.
March - May 2024	Preschool Teachers	Preschool teachers collect spring reporting window data and enter into TSG. Review data together in early Fall 2024.
Fall 2024	Administration	After the fall reporting period of FASTBridge testing, results from the students that attended

		preschool during the 2023-2024 school year will be shared.

Implementation of School Improvement Plan

Assessment of School Improvement Plan

To gauge the degree of success of this improvement plan, short-term and long-term data will need to be observed. During the preschool year, the preschool teachers will be able to determine if the plan is working based on a few factors. The first factor the teachers can use to gauge effectiveness will be TSG observations and final reports from each of the three reporting windows (fall, winter, spring). By recording the number of exchanges students have in conversations, teachers will also be able to collect engagement data to see if students are playing for longer periods and engaging in more complex play patterns. Also, the preschool teachers can see if there is growth not only in social-emotional skills but also academic gains. Academic gains may be observed in TSG as well as informal observations and through activities conducted in the classroom.

Long-term data that will help determine the success of the plan will come from FAST testing in the fall directly following the preschool year. A questionnaire could also be given to the kindergarten teachers to see if they notice a difference in regard to play, social skills, and academics between the students who attended one of the four preschool sites as opposed to those who had no prior preschool experience. Their observations and insights could also provide informal data that can gauge the effectiveness of day-to-day classroom procedures. While other measures of future academic progress could be examined in future years, such as Iowa Statewide Assessment of Student Progress (ISASP) or Measures of Academic Progress (MAP), it would be

too hard to determine if any improvement were due to this school improvement plan or other factors.

Resources

One advantage of this school improvement plan is it doesn't require a specific outside resource. Whereas BoardMaker or other such software could be used to create visual play scripts, teachers can easily make these with photos and a word processing program. All four teachers have access to these resources at each of their sites. Also, by working on the task of creating visuals as a team, it will be easier to divide up the centers and complete the visuals in a timelier manner. Examples of possible visuals, both simple and more complex, can be seen in figures 3 and 4.

Other resources that are needed are the items within the various centers that teachers will need to photograph to create the visuals. Also, printers and laminators would help to make the final products more professional and durable. Both collaborative and individual time will be necessary to complete the implementation and execution of this school improvement plan.

Figure 3 and 4
Possible play scripts (simple and more complex)

Responsibilities

The responsibility of the creation and implementation of this plan will fall on the four preschool teachers and their support staff. Administration will need to be responsible for approving the plan and then providing time for the visuals to be prepared so implementation can occur. The teachers and their support staff will be responsible for implementing the plan with fidelity and collecting data within their own classrooms. While this plan execution may appear to be more work for the teachers involved, besides the creation of the visual, the other aspects of this plan already occur within each classroom. It will be the responsibility of the preschool team to analyze the data to determine the degree of plan success and possible plan revisions.

Monitoring Success and Failures

Monitoring the success and failures of this improvement plan will occur during preschool team meetings. Data from TSG will be analyzed after the closure of the three reporting periods. Teacher observations and recordings in regard to engagement and play can be analyzed monthly, or as needed, during preschool team meetings. Academic progress will be measured using FAST data both during the preschool school year as well as during the following fall.

Barriers and Challenges

As with any new implementation there are bound to be some barriers and challenges. The first challenge that could be expected would be some initial pushback from the other preschool teachers. While the preschool teachers appreciate additional support, such as visual scripts, resistance can come when the work upfront seems overwhelming. The shared responsibility between all teachers and time provided to work on creating visuals will help to relieve some of that burden. Another challenge that could occur would be in regard to training support staff and students on using the new visuals. While the visuals are meant to be a guide or jumping off point for some students, and adults, they could be seen as the only way to play.

Whereas data collection and observations are already occurring within the preschool classroom, it could feel like some of the suggested data collection is too time consuming, especially regarding engagement during play. By supporting the teachers and showing multiple ways to simplify this process, such as recording play, choosing a few students to watch daily, or including support staff, this barrier could also be seen as not such a problem. The last barrier or challenge that could arise from this plan would be continued administrative support. While administration currently allows time for collaboration between the four teachers, this team time could be reduced or removed in the future. While this change is unlikely, it is still a possibility that does present another potential barrier to the implementation and sustainment of this improvement plan.

Conclusion

The landscape of the preschool classroom has changed over the last decade or so. Many preschool teachers find themselves torn between what they must do, due to polices and regulations, and what they feel is best for their students. One aspect of the preschool classroom that has been negatively impacted is the element play. While there are many reasons the amount

of time for play has been decreased or even eliminated in preschool classrooms, four of the main reasons are legislative changes, the COVID-19 pandemic, teachers' perceptions around the importance of play, and increase in technology usage. These factors have resulted in preschool-aged children coming to school with fewer play skills than they had in the previous twenty years and receiving less time to develop those skills in preschool. While teachers can feel torn about implementing play, research has shown the value and importance that play has not only on social emotional learning but also on necessary foundational skills for future academic success.

However, just adding time to play to the classroom won't get the desired results; supports and structures need to be in place. The results from this school improvement plan will help to support *all* students within the four preschool classrooms in the Monticello school district by bridging the gap between missing skills and the needed skills for growth. By implementing this school improvement plan at a young age, the skills needed have a higher chance of being gained and maintained for future academic success. Also, by working together as a team to implement this school improvement plan, the preschool teachers in Monticello will help to reduce each other's workload as well gain valuable resources to use in their classrooms. This school improvement plan works to show just how correct Fred Rogers from *Mr. Roger's Neighborhood* was when says, "Play is often talked about as if it were a relief from serious learning. But for children, play IS serious learning. Play is really the work of childhood" (Rogers, 2019).

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