Play-Based Instruction Versus Teacher-Directed Instruction in Kindergarten

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Abstract

The purpose of this study was to compare play-based instruction with teacher-directed instruction in a kindergarten classroom regarding student interest level, engagement, and motivation of learning. Seventeen students took part in this study for 6 weeks. Three weeks of this study consisted of teacher-directed instruction, and 3 weeks consisted of play-based instruction. The study was done during the researcher's theme time, which was 4 days a week for 30 minutes each. The teacher-directed portion of the study consisted of whole-group and independent work, worksheets, and teacher-led experiments. The play-based portion of the study consisted of hands-on experiments, small group work, and collaboration. The researcher hypothesized that student engagement, interest, and motivation would be higher during play-based instruction. The researcher took observational notes during theme time. At the end of each week, the students took a simple survey about how they felt about the work done during the week. Also, the researcher interviewed small groups of students each week. Overall, the majority of the students preferred play-based instruction over teacher-directed instruction.

Keywords: play-based instruction, kindergarten, engagement

Play-Based Instruction versus Teacher-Directed Instruction in Kindergarten

Play-based learning is a developmentally appropriate practice that involves children learning academic, social, and emotional skills through playful and child-centered activities (Pyle & Danniels, 2017). Increased academic skills, especially in language and literacy development, occur during play-based learning (Pyle et al., 2018). Increased social and emotional skills are another benefit of play-based learning because children are allowed to interact with other children to develop those skills needed for socializing and regulating emotions.

Teacher-directed instruction is not child-centered in nature and does not give children the opportunity for hands-on, exploratory learning. By allowing children to take control of their own learning, the teacher is making learning more meaningful. While teacher-directed instruction does have some positives, it does not provide as many benefits for kindergarten students as play-based learning can when planned and executed properly.

Instructional methods have been widely examined in all grade levels of schooling. The early childhood years of schooling have undergone a lot of change over the last few decades due to an increase in academic standards. There is a clash between teaching methods like teacher-directed and play-based learning. Research into which teaching approach is more beneficial is ongoing. Educators have been trying to figure out the best approach to teaching and learning in kindergarten so the needs of the whole child are met. Play-based teaching and learning help develop the whole child in areas such as cognitive development, social and emotional development, physical development, and language development (Pyle et al., 2018).

In kindergarten, learning needs to happen in a way that grabs the students' attention and motivates them to stay engaged. Teacher-directed instruction is not as hands-on and engaging for

younger children who may not have the skills necessary to learn that way. Play-based instruction is more hands-on and exploratory. Ensuring that children are engaged, interested, and motivated to learn in the classroom is necessary for student success.

The overall purpose of this study was to compare play-based instruction with teacher-directed instruction in a kindergarten classroom regarding student interest level, engagement, and motivation of learning. The debate on which method to use for kindergarten education has been going on for decades now. Research needs to continue to help find the best solution to helping children learn and grow. Findings from this study will help educators learn what works best for kindergarten students: teacher-directed instruction or play-based instruction. Two research questions guided this study:

1. How will student motivation during play-based instruction compare with student motivation during teacher-directed instruction?

2. How will student engagement and interest level during play-based instruction compare with student engagement and interest level during teacher-directed instruction?

The researcher hypothesized students' motivation for learning would be higher during play-based instruction than during teacher-directed instruction. The researcher also hypothesized that students' engagement and interest levels would be higher during play-based instruction than during teacher-directed instruction. In the following literature review, the researcher discussed what play-based learning is. The researcher also discussed the numerous benefits of play-based learning. Lastly, the researcher discussed the challenges that come with play-based learning.

Literature Review

Education is one of the most important things that our society has to offer. Within education, change is always happening. Change can occur in policies, standards, which pedagogical method to use, instructional strategies, and more. As people research and learn more about what is developmentally appropriate for children's learning, different approaches come to the forefront. One of those approaches to teaching and learning is play-based learning. This pedagogical method has been around for decades, but it has not always been utilized. Different educational reforms have caused play-based learning to come in and out of focus as a developmentally appropriate practice. Typically, it is used in the younger primary grades as a way to develop the whole child through exploratory, child-centered learning.

What is Play-Based Learning?

Many different definitions have been used to define what play-based learning is. This can confuse how to define it for certain educational purposes. There needs to be a consistent definition of what play-based learning is, so there is consistency in how it is used (Fesseha & Pyle, 2016). Different categories seem to pop up in several studies done about play-based learning. Pyle et al. (2018) found that their participants fell into two groups: those who believed play-based learning helped foster play and development, with an emphasis on oral language development, or those who believed play-based learning helped foster integrated play and learning, with an emphasis on the development of academic skills. Similar results were found in a study done by Pyle and DeLuca (2017), except there was also a third group who believed play-based learning's primary function was to foster academics only. Paterson (2020) stated that the "lack of consensus around the definition of PBP plagues current literature, and therefore, becomes a significant constraint around successful application in the classroom" (p. 104). The

inconsistency of what play-based learning is and what its function is should be addressed to help create a consistent and cohesive approach that benefits children.

Simply put, play-based learning is a child-centered pedagogical approach that promotes academic, social, emotional, and cognitive development through free play. Another way to describe play-based learning is a "purposeful, co-construction of knowledge with others (peers and teachers) within children's social and cultural worlds" (Nolan & Paatsch, 2018, pp. 42–43). Play-based learning is different from other approaches because it is not teacher-directed. This approach is child-centered with the teacher supporting and guiding the students when needed. This allows students to discover and learn on their own and at their own pace. The teacher can provide different materials and spaces to help encourage play that can increase certain academic skills. For instance, providing children with literacy materials during play can help develop and increase their literacy skills (Pyle & Danniels, 2017). The same can be said about providing math and language materials and tools.

Play-based learning is a developmentally appropriate practice because it takes into consideration the whole child, not just one area or skill. When used correctly, play-based learning should develop academic, social, and emotional skills. Making sure that best practices are being used is one of the goals of teaching. Educators want what is best for their students, so utilizing the best approach is something to think of for every group of students. In an inquiry done by Hunter (2019), 96% of the teachers who participated felt that play-based learning was an effective approach to teaching students. While this was a small sample of educators, the results are similar in other areas.

Play-based learning is not the same thing as free play. This can be a difficult concept for those who are not familiar with how play-based learning works in the classroom setting.

According to Bowden (2015), "Play lets children engage in extended interactions that build oral language, imagination, critical thinking, and social skills" (p. 33). Those skills are key to a child's development. When learning those skills in a classroom environment, they are carried over to other academic subjects and social situations.

Benefits of Play-Based Learning

As a developmentally appropriate approach, play-based learning has numerous benefits for children. When implemented the correct way, play-based learning can provide so much for the children who are using it. Benefits include academic, physical, cognitive, social, and emotional skills.

Academic Skills

One of the benefits of play-based learning can be an increase in academic skills. According to Keung and Cheung (2019), "play provides children with the opportunity of active exploration that helps them build and strengthen cognitive abilities" (p. 628). When children can actively explore different areas and materials on their own, they can discover and learn new things. This puts the learning in the child's hands, letting them make their conclusions about things. Being able to explore and play can also help build their problem-solving skills. The building of problem-solving skills can lead to innovative thinking later on in life. This can help in careers that involve engineering and other careers that involve those types of critical thinking skills (Fesseha & Pyle, 2016).

Another academic area that play-based learning has a positive effect on is the development of language and vocabulary (DeLuca et al., 2020). Fesseha and Pyle (2016) also discuss the increase in the development of language and vocabulary and how it can increase later reading and writing skills. Being able to play with peers can also help increase language skills

(Pyle & Danniels, 2017). Reading and writing are important skills that need to be developed and hopefully mastered to have a successful educational career. Developing those skills at a young age can help throughout students' academic careers, especially with an increase in academic standards and expectations that schools are facing throughout the world.

Physical Development

Play-based learning can also affect a child's physical development and well-being. One of the benefits to a child's physical health is being able to work on their gross and fine motor skills. This can be done in a variety of activities that promote both types of skills. One example is "through play children practice using their fine and gross motor muscles, which supports the development of physical coordination and growth" (Pyle et al., 2018, p. 118). Having activities that incorporate gross motor skills can help improve their coordination. "Physical activity through play alleviates stress and helps children learn to manage feelings and gain a sense of self-control" (Stegelin, 2005, p. 79). Physical activity also helps children expend the extra energy they build up throughout the day. This helps them have better focus during instruction. Components to include in your play-based learning plan to help promote a healthy, physical lifestyle include active indoor and outdoor play, the use of kinesthetic movement, creative expression through movement and music, and interactions between children and adults that involve highly physical activities (Stegelin, 2005). To achieve these goals and become a classroom that promotes a healthy physical lifestyle through play-based learning, teachers and play areas need to be equipped for those kinds of activities.

Cognitive Development

Play-based learning impacts cognitive and language development. Stegelin (2005) stated, "Stimulating play environments facilitate progress to higher levels of thought throughout

childhood" (p. 81). For younger children, especially preschoolers and kindergarteners, a classroom that consists of seatwork from workbooks or textbooks is not a stimulating environment because they will not be using higher levels of thinking. Instead, they will be sitting quietly doing seatwork. Children need to explore with their hands and figure things out for themselves. According to Hansel (2015), "A worksheet, workbook, or even a flat screen with objects that can be rotated or flipped cannot provide the sensory and visual experiences of a solid object" (p. 25). This means that children need to be provided with manipulatives they can work with to better understand a concept that needs to be taught. Not all children have access to quality literacy materials at home. By providing literacy props, art supplies, environmental print, song, poems, chants, big books, and plenty of time for children to explore it all the teacher can promote a literacy-rich play-based environment in the classroom and give children equal access to these types of materials (Stegelin, 2005). Play-based learning also promotes STEM learning, inventive learning, creative and design learning, and collaborative learning. Play-based learning can help children reach higher levels of thinking including synthesizing, integrating, evaluating, and creating.

Social and Emotional Skills

Another area that play-based learning can benefit involves children's social and emotional skills. These skills are important to foster at a young age. The development of these skills can help children to self-regulate, share, negotiate, solve their social problems, and more.

Social skills are important skills that cannot just be taught by telling children how to do something. Social skills need to be taught through hands-on experiences. Play-based learning can be a great way for children to actively try out social skills and work through problems with their peers. If students are never put in social situations, then they are not going to have the skills to

work through those problems or situations on their own. Play-based learning provides multiple scenarios and situations where children can engage with peers and use social skills such as sharing, solving social issues that may arise, negotiating, and more. Another area that play-based learning can help is the development of communication skills, which can help with collaboration (Fesseha & Pyle, 2016). Communication and collaboration are important skills to learn, especially in our society today. Learning these skills at a young age can help throughout their educational careers, professional endeavors, and their personal lives. The social skills that can be learned through play-based learning can benefit children forever and give them the necessary skills needed to be productive members of society. Learning these social skills and how to best use them can translate over to the academic side as well (Pyle & DeLuca, 2017).

Some of the emotional skills that play-based learning can help foster include motivation, higher expectations, less worrying and anxiety related to school experiences, and more (DeLuca et al., 2020). When it comes to motivation, there can be some issues with children having it towards undesirable activities. Using a play-based learning method can help increase motivation because it is more hands-on and engaging. If students can have access to this type of learning, it can make learning more fun and increase their motivation. Being able to explore and learn on their own, coming to their conclusions and realizations can increase confidence and show them that they can expect more from themselves (Pyle & Danniels, 2017). Having these positive experiences with learning and having more control over what and how they learn can lessen the anxiety that can come from not understanding or succeeding in a teacher-directed, didactic approach. When students feel confident in themselves, they are more susceptible to trying new things and being more open with learning (Pyle & DeLuca, 2017). The building of emotional competency can help students with self-regulation skills that can help get them ready for learning

academic subjects by giving them the tools necessary for different controls of behavior (Pyle & DeLuca, 2017). Self-regulation is important for children because "children's ability to self-regulate is correlated with vocabulary acquisition, emergent literacy, and math performance and predicts kindergarten reading achievement" (Becker & Mastrangelo, 2017, p. 20). Play-based learning works to bridge academic, physical, cognitive, social, and emotional skills together to help whole-child development.

Challenges with Play-Based Learning

Even with all these benefits that play-based learning can have on children's academic, physical, cognitive, social, and emotional well-being, there are still challenges that occur. Several studies show that there are challenges that include time, resources, support, and more. Understanding and working on these challenges can help promote more consistent and comprehensive play-based learning implementation in the classroom.

Increase of Academic Standards

Throughout the last few decades, an increase in academic standards has occurred in all grade levels. This has resulted in many different outcomes. One of those outcomes has been the disappearance of play in schools. Bowden (2015) reports that teacher-directed instruction has increased, more workbooks and textbooks are being purchased instead of play items, and more pressure to meet standards has occurred. These types of things have been happening all over, especially in the early years of the adoption of more rigorous academic standards. The pressure to achieve those standards created a panic that the standards would not be met if there was too much time spent playing. Because of that pressure, play-based learning was pushed away more and more. Even though there is nothing that says play-based learning cannot reach both the development and academic areas, educators may not know how to use play-based learning to

effectively reach those higher academic standards, which leads to them using more of a teacher-directed approach (DeLuca et al., 2020). With the increase of academic standards, there is a worry that play-based learning is not enough, which results in teachers wanting to address these standards and skills outside of a play-based environment (Nolan & Paatsch, 2018). Meeting the academic standards set forth can lead to mixed signals and ideas of what the best way to reach them is.

Assessment

Another challenge with play-based learning is what and how to properly assess students' learning. One result from the study by Pyle and DeLuca (2017) is that assessment in play-based learning is one of the biggest challenges. Figuring out how to assess different academic skills is difficult for many teachers. One concern that occurs is how to keep track of all the different skills that students are showing and doing during play-based learning because not everyone is doing the same thing at the same time (Pyle & DeLuca, 2017). If students are working on their own and discovering different things at different times, there might not always be an opportunity for the teacher to assess a certain skill or standard. Teachers use tools like observations, anecdotal notes, checklists, and more to try to capture those skills being used by their students. The research from Pyle and DeLuca (2017) found that "dialogue and playing alongside students were viewed as methods for integrating assessment and play" (p. 461). Even with these ideas and intentions on capturing those skills, it is still seen that a lot of academic skills are assessed through teacher-directed activities (DeLuca et al., 2020). Trying to figure out how to effectively organize and capture all the skills and standards that are being assessed is a challenge that comes with play-based learning.

Time

Time was another challenge linked to play-based learning. One of the biggest challenges reported in the study done by Fesseha and Pyle (2016) involved not having enough time to properly prepare their classrooms for play-based learning and not enough time in the school day to implement play-based learning. Jay and Knaus (2018) also reported that the time it took to properly prepare and organize play-based learning was a big challenge for participants. Having the proper materials and resources to effectively implement play-based learning takes considerable time to create and set up. Play-based learning takes time to plan out, especially when looking at specific standards that need to be met. Having enough time to properly plan and execute that plan is not always easy to come by in a school setting.

Support

Another challenge with play-based learning is the support needed to properly implement it. Many studies reported a lack of support from administration, colleagues, and parents was a challenge with play-based learning. Barblett et al. (2016) reported in their study that participants were told to teach using different methods, while others reported that they were moved to different grade levels because of it. The lack of support and understanding of how play-based learning is a developmentally appropriate approach is a challenge faced by many. Lack of support from colleagues is another challenge. Many teachers feel that their colleagues, especially in higher grades, do not see the legitimacy of play-based learning, resulting in a lack of confidence in implementing play-based learning (Nolan & Paatsch, 2018). Parental support has also been an issue for some. Both Nolan and Paatsch (2018) and Bowden (2015) report that pressure from parents and lack of understanding can make implementing play-based learning a challenge. Keung and Cheung (2019) look into how to involve parents with play-based learning to better support it in and out of the classroom to try to bridge that gap.

Resources

Play-based learning takes a lot of resources to implement properly. Funding in schools is something that can be a challenge. This includes funding for resources, materials, and professional development. Hunter (2019) found that the biggest barrier to successfully implementing play-based learning was the lack of resources available. The lack of resources is also a challenge for many of the participants in the study by Jay and Knaus (2018), with many of them stating that it even affected the type of activities that they could do.

Conclusion

Play-based learning is a developmentally appropriate approach to teaching social, emotional, and academic skills when implemented properly. The benefits of play-based learning include, but are not limited to, increased social skills with peers, the ability to self-regulate emotions, creative thinking, problem-solving skills, and increased academic knowledge. There are several challenges including time, resources, support, and academic standards that can lead to problems with successfully implementing play-based learning. There is still more research to be done about effective implementation, professional development, assessment, and more when it comes to play-based learning.

Methods

The research conducted was a mixed-methods design. The researcher collected data for a total of 6 weeks from students in the researcher's kindergarten classroom. The participants were between the ages of 5 and 7. The study took place in the spring semester of 2021. The information below is a detailed outline of the participants, setting, data source and research materials, and the data collection procedures.

Participants and Setting

Participants in this study were from the researcher's kindergarten classroom. The sample included a total of 17 students consisting of 10 girls and 7 boys ranging in age from 5 to 7. Sixteen of the participants in this study were Caucasian and one student was African American. All students in this study were part of the general education classroom. Two students had an Individualized Education Program (IEP) for speech, one student had an IEP for academics and speech, and one student had an IEP for speech, occupational therapy, behavior, and social skills.

The location of this study was in a self-contained kindergarten classroom in an elementary school in a small Central Illinois city. The size of this community is around 16,500 residents and has four different school districts. The researcher's school consists of pre-k to 4th grade and has a population of around 470 students. According to the Illinois Report Card (2020), the racial/ethnic diversity of the school is 91% White, 3.6% two or more races, 3.6% Hispanic, 1.1% Black, and 0.6% Asian. Students with IEPs make up 15% of the population. Just under 26% of the students are low-income. The homeless student population is at 0.9%. English Language Learners make up 1.3% of the population. There is not any recent data on academic test scores because of the pandemic.

Data Source and Research Materials

The researcher used three different instruments to conduct this study. Those instruments were as follows:

- Interest level of the students was collected by using a simple survey (Appendix A and B). The survey used three different faces to gauge student reactions. Each question had a smiling face, a straight face, and a frowning face to choose from. The researcher asked each question and allowed students to color in their responses. The students took the surveys at the end of each week after a brief discussion of the different activities that took place that week.

- The researcher took observational notes during data collection. The researcher looked at student engagement during the lesson activities, which included active listening, participation in group discussions, and participation in each lesson activity. The researcher also looked at the quality of work done by students and the length of time spent completing the activity.

- Interviews took place at the end of each week. The researcher divided up the students into three groups containing five to six students each. Group 1 was interviewed after Weeks 1 and 4. Group 2 was interviewed after Weeks 2 and 5. Group 3 was interviewed after Weeks 3 and 6. The interview consisted of questions about the students' likes and dislikes of each instructional method, the interest level of each type of method used, and the motivation levels during each instructional method.

Procedures and Data Collection

The time frame for this study was 6 weeks. The first 3 weeks the researcher taught using teacher-directed instruction, which included the reading of the week's story and worksheets that included sentence writing, math, and story elements. In the last 3 weeks, the researcher taught

using play-based instruction, which included rotating centers of hands-on, exploratory activities. Each week had a theme centered around a story with correlating activities. At the end of each week, students completed a survey about how they felt about that week's activities. The researcher took observational notes during lesson implementation and work time. At the end of each week, a group of students was interviewed by the researcher. Each group of students was interviewed twice, with one interview taking place after the teacher-directed method and one interview taking place after the play-based method.

The theme of Week 1 was kindness/Valentine's Day. The story focused on how students can be kind to each other. The week's activities consisted of writing about kindness and love, teacher-directed experiments, and literacy worksheets. At the end of the week, students were surveyed about their feelings about the activities. Group 1 was interviewed about what they liked, disliked, their interest levels, and motivation.

The theme of Week 2 was centered around the story of the Three Little Pigs. A version of the story was read to students. The week's activities consisted of worksheets that included drawing of the different settings in the story, putting the sequence of events in order, and drawing the meaning of vocabulary words. At the end of the week, students were surveyed about their feelings about the activities. Group 2 was interviewed about what they liked, disliked, their interest levels, and motivation.

The theme of Week 3 was centered around Dr. Seuss's books. Each day focused on a different Dr. Seuss story with worksheets to match that story. Each story theme had a writing worksheet that matched the story. The math activities for the week also matched the story for the day. Each math activity was a different type of worksheet that focused on adding and number

stories. At the end of the week, students were surveyed about their feelings about the activities. Group 3 was interviewed about what they liked, disliked, interest levels, and motivation.

The theme of Week 4 centered around the story of Goldilocks and the Three Bears. A version of the story was read. Instead of doing the typical worksheets at their table spot, the structure of the week's activities changed. During the reading/theme time, four different activities were set up for the children to explore. Students had to stay in one area with their table of students because of the new guidelines and rules for the pandemic. Each day the students participated in a different activity until they did all four. The four activities included an interactive story element map, building a chair out of different materials, character and setting bracelet making, and an interactive puppet house with the characters from the story. At the end of the week, students were surveyed about their feelings about the activities. Group 1 was interviewed again about what they liked, disliked, interest levels, and motivation.

The theme of Week 5 centered around the weather. A nonfiction book about weather was read to the class. The rotating centers were used again. This time the four different centers included experiments like cloud making, rain cloud in a jar, wind blowing, and building a shade structure. At the end of the week, students were surveyed about their feelings about the activities. Group 2 was interviewed again about what they liked, disliked, interest levels, and motivation.

The theme of Week 6 centered around St. Patrick's Day. A fiction book was read before the activities began. The rotating centers were used again. This time the four different centers included building a leprechaun trap, building a bridge structure, making a wind-powered maze, and a sink or float experiment. At the end of the week, students were surveyed about their feelings about the activities. Group 3 was interviewed again about what they liked, disliked, interest levels, and motivation.

Data Analysis and Results

The data was collected both qualitatively and quantitatively. Data collection included student survey results, weekly interviews with small groups of students, and teacher observations. The teacher used teacher-directed instruction for the first three weeks and play-based instruction for the last three weeks. A total of 6 weeks of data collection on 17 kindergarten students was allotted for this study.

Data Analysis

This study was analyzed using a mixed-methods approach. The data was collected during the researcher's theme time, which was about 30 minutes, 4 days a week. Theme time was not able to fit in the researcher's schedule for all 5 days of the school week because of the shortened schedule due to the pandemic. The qualitative data consisted of observational notes and student interviews. The researcher took observational notes both during and after the time of implementation. Those notes showed how engaged students were during the duration of the lesson each day, how they interacted with the materials and other students, and their feelings about each lesson or activity. At the end of each week, the researcher interviewed a group of 5 to 6 students. Three different groups were interviewed. Group 1 was interviewed at the end of Week 1 and Week 4, Group 2 was interviewed at the end of Week 2 and Week 5, and Group 3 was interviewed at the end of Week 3 and Week 6. The quantitative data consisted of weekly student surveys. At the end of each week, a survey (see Appendix A and B) about the students' interest in the activity and how they felt about the method was given to each student.

Week One

The theme of this week was kindness. This was the first week for teacher-directed instruction. Work was done whole-group and independently. Students were all actively engaged

through group discussion and listening to the teacher reading the weekly story on the first day. After the reading of the weekly story, a group discussion about kindness took place. All students (17/17) were actively engaged in the group discussion, raising their hands at least once to answer questions or share thoughts. The second day of this theme consisted of a second reading of the story and a group discussion about the sequence of events. Approximately half of the class (9/17) was eager to answer questions, while the other half (8/17) sat at their tables, put their heads down, or played with items on their table. The third day consisted of independently writing about what love means. All students were involved and participating in the writing activity. The last day consisted of a vocabulary review and a teacher-led science experiment. For the vocabulary review, 13/17 students were able to answer questions about the vocabulary used throughout the week. The other students did not attempt to answer the questions. All students were participating in the science experiment led by the teacher. The teacher dropped candy hearts into three different types of liquid and students had to predict what would happen and write about the results. When interviewed about this, all five students said they would want to do this activity on their own instead of having the teacher do the whole thing. The survey results (Figure 1) showed that the majority of students liked the activities and worksheets, but there were mixed feelings about wanting to do them again.

Figure 1

Week One Survey Results

Week One Survey Results
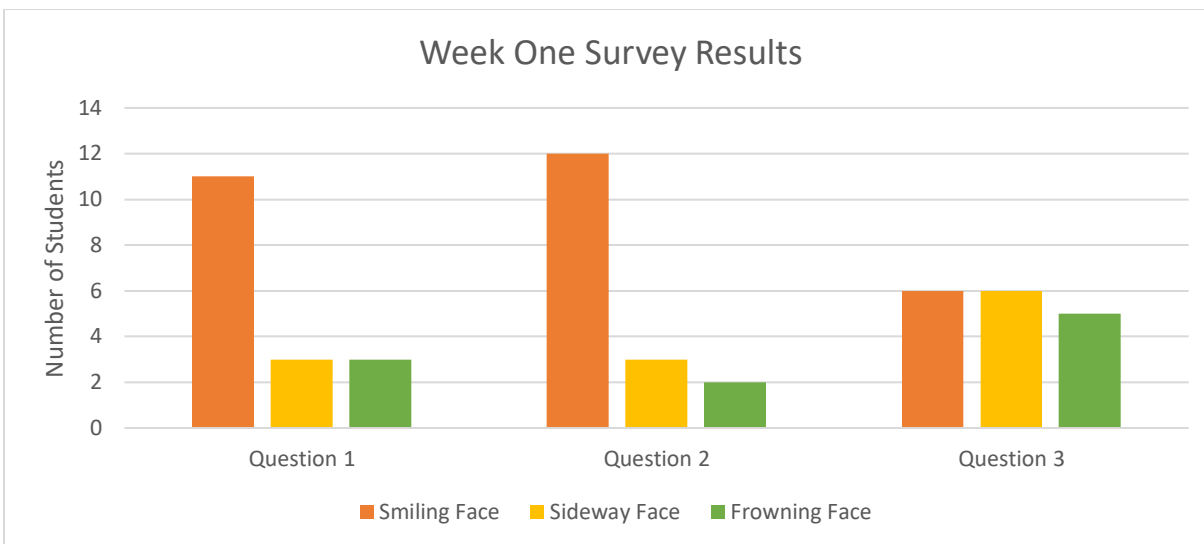
Week Two

     The theme for this week was centered around the story of the Three Little Pigs. There were only 3 days for theme time this week due to a holiday and a snow day. The first day consisted of the teacher reading the story whole-group. All students (17/17) were actively participating in the reading of the story by answering questions and reading along with the teacher. After the story, the students did a worksheet involving drawing four characters from the story. All students completed the worksheet, with 13/17 students finishing within 10 minutes. The other four students took almost 20 minutes to draw, adding details to their pictures. The second day consisted of the students independently drawing the three types of houses built in the story. Most of the students (14/17) drew quickly and without much detail, but the other three students took longer and added more details to their drawings. The last day consisted of a worksheet where they had to cut pictures out and glue them in the correct sequence. All students participated in this activity. Five students did not want to color their pictures and when told to, just scribbled with one color. When interviewed, four out of the six students stated they were not interested in the work they had to do and that they would not want to do it again because of it

being hard and not liking coloring. The other two students stated that they liked coloring and drawing different things from the story. The survey results (see Figure 2) showed that more students picked the sideways and frowning faces than the previous week, showing a growing dislike for using worksheets.

Figure 2

Week Two Survey Results
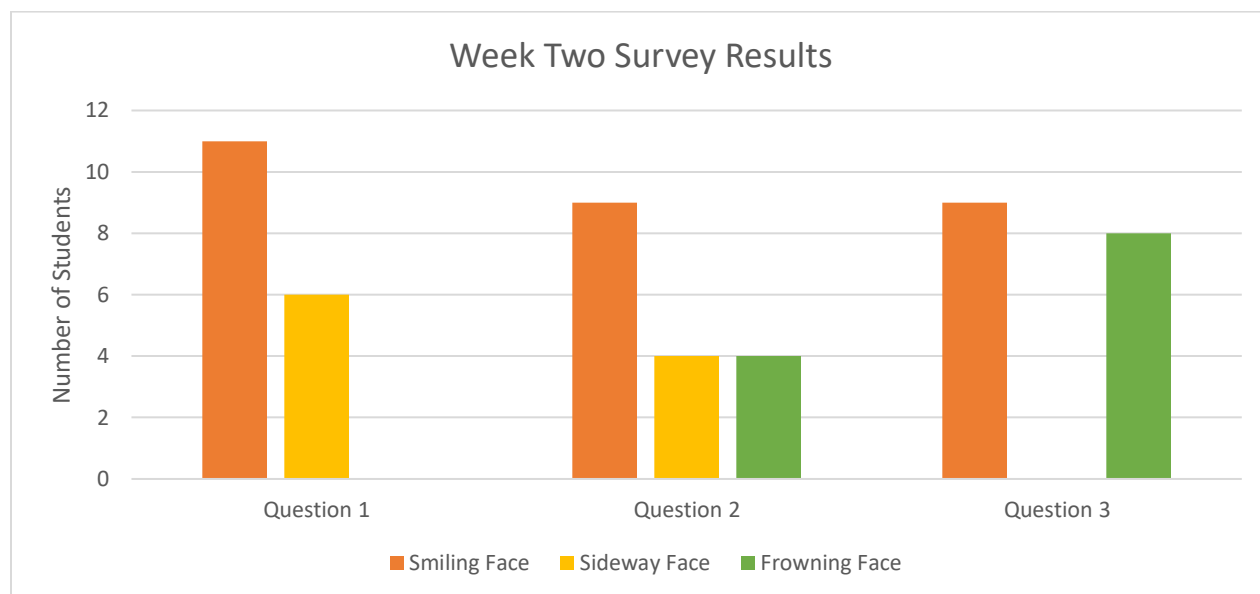
Week Three

The theme for this week was centered around books by Dr. Seuss, with each day focusing on one book. Each book also had worksheets to go along with the characters or theme. Two of the books were very long and over half the students lost interest in the story halfway through, fidgeting in their seats or playing with things on their tables. Most students were completing the worksheets and put effort into them. When the teacher asked some students, who were not engaged in worksheets the previous week, why they were this week, one replied that "These have fun characters on them." Another student stated that they liked Dr. Seuss's stories. When the teacher interviewed the students in Group 3, all responses were positive. The survey results

(see Figure 3) showed that the trend of increasing sideways faces and frowning faces continued for teacher-directed learning.

Figure 3

Week Three Survey Results


Week Three Survey Results
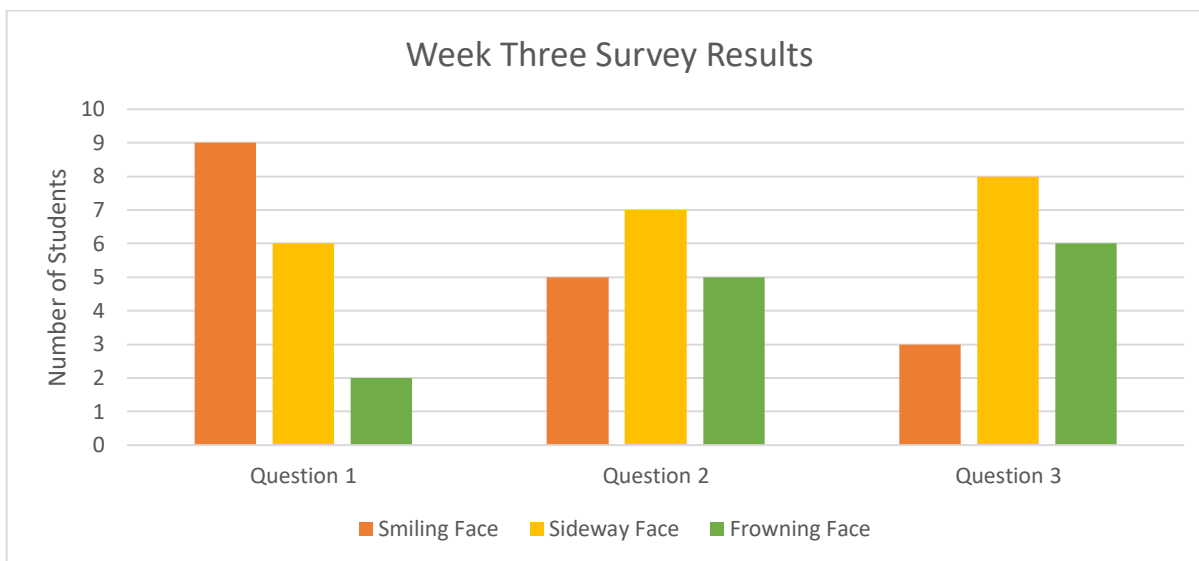
Week Four

This was the start of the implementation of play-based instruction. The theme for this week was centered around the story of Goldilocks and the Three Bears. Instead of whole-group teaching, students were divided into groups of 4 to 5 and worked without direct teacher instruction. There were four stations for the week with each group doing one station a day until all four were done. The four stations included furniture building with popsicle sticks, creating their own books where they were the illustrator, character bracelets to reenact the story, and a story map. On the first day of implementation, all students were active participants for the entire 30-minute block. Since students were free to work out their own ideas and explore options, more students were engaged for longer amounts of time than the previous 3 weeks. Students would cheer when they found out what station they were going to. Students would divide group work

up between each other. When Group 1 was interviewed, all five students said they preferred the play-based learning stations over the worksheet work they did previously. One student stated that the stations were better because they were able to talk more. Another student stated the reason for liking stations more was because they got to move around instead of just sitting at their spot for the whole time. Figure 4 shows the first results for play-based learning instruction. There was a high number of students who chose smiling faces compared to sideways or frowning faces for all three questions. This type of response was similar to the beginning of the teacher-directed learning surveys.

Figure 4

Week Four Survey Results

Week Four Survey Results
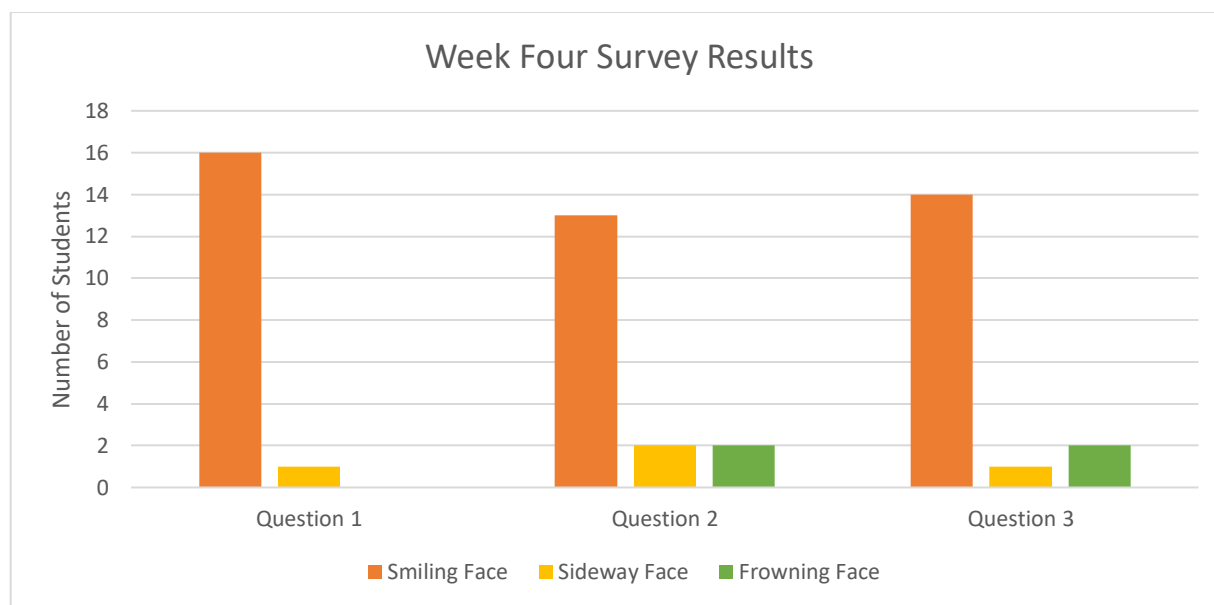
Week Five

The theme for this week centered around the weather. The four stations included blowing different objects with wind, building a shade structure, creating different types of clouds, and a rain cloud in a jar experiment. The station with the least amount of engagement was the one where they created different types of clouds. This activity was closer to a worksheet-style

activity. The other three stations were very hands-on, which resulted in longer engagement periods. The students were working collaboratively more often, giving each other ideas of what they could try next. During the rain cloud in a jar station, one student said, "I feel like a real scientist." When asked why she felt that way, she stated "because I get to use tools like one." On a different day, another student said, "I feel like a scientist because I'm doing an experiment like one." When Group 2 was interviewed, all stated that their favorite station was the rain cloud in a jar for reasons like being able to use the science tools and being able to do it all on their own. Figure 5 shows that there was still a high number of students who chose smiling faces compared to the sideways or frowning faces. Compared to the second week of teacher-directed instruction, the second week of play-based instruction had a more positive response from the students.

Figure 5

*Week Five Survey Results*
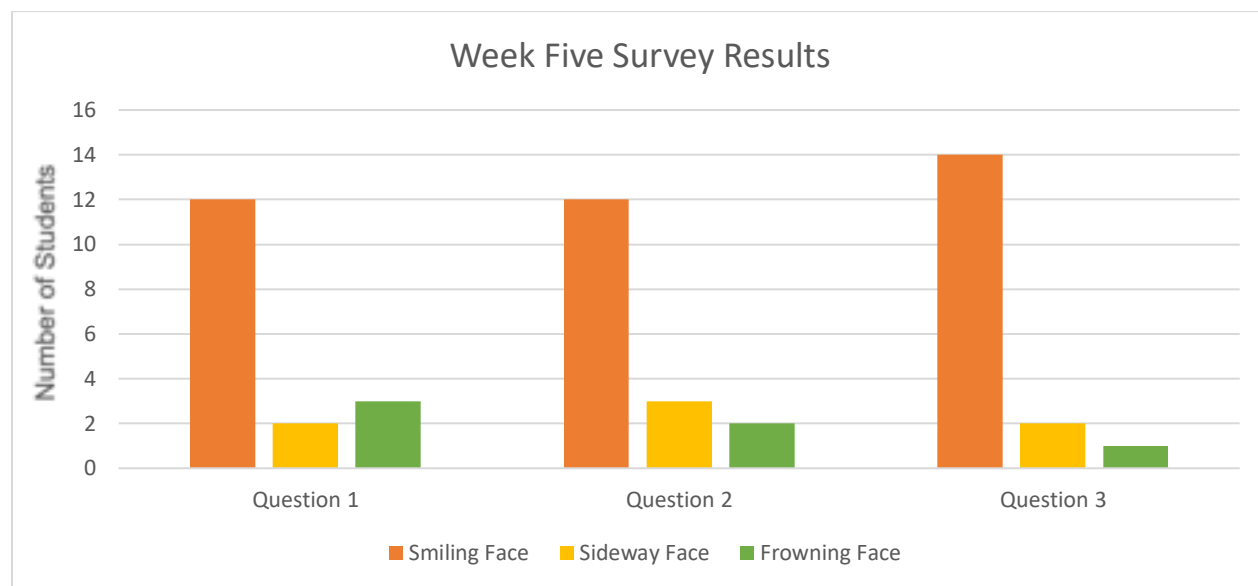
Week Six

The theme for this week centered around St. Patrick's Day. The four stations included building a rainbow bridge, creating a wind maze, building a leprechaun trap, and a sink or float

experiment. A lot of the groups worked collaboratively on the wind maze station and the leprechaun trap building station. Students were fully participating in stations almost all of the time for all 4 days. The students who lost interest in the stations before the 30 minutes were over, consistently lost interest at each different station throughout the week. When Group 3 was interviewed, five out of the six students liked all the stations for the week. The other student said he only liked the two of the stations because the other two were boring to him. When asked if they preferred this type of learning over the worksheet activities, all six students said yes. Figure 6 shows the results from the last week of play-based instructions. Almost all students chose smiling faces for all three questions, showing a very positive response to the play-based instruction. Compared to the last week of teacher-directed instruction, play-based instruction yielded a more positive response from the students even after three weeks.

Figure 6

Week Six Survey Results
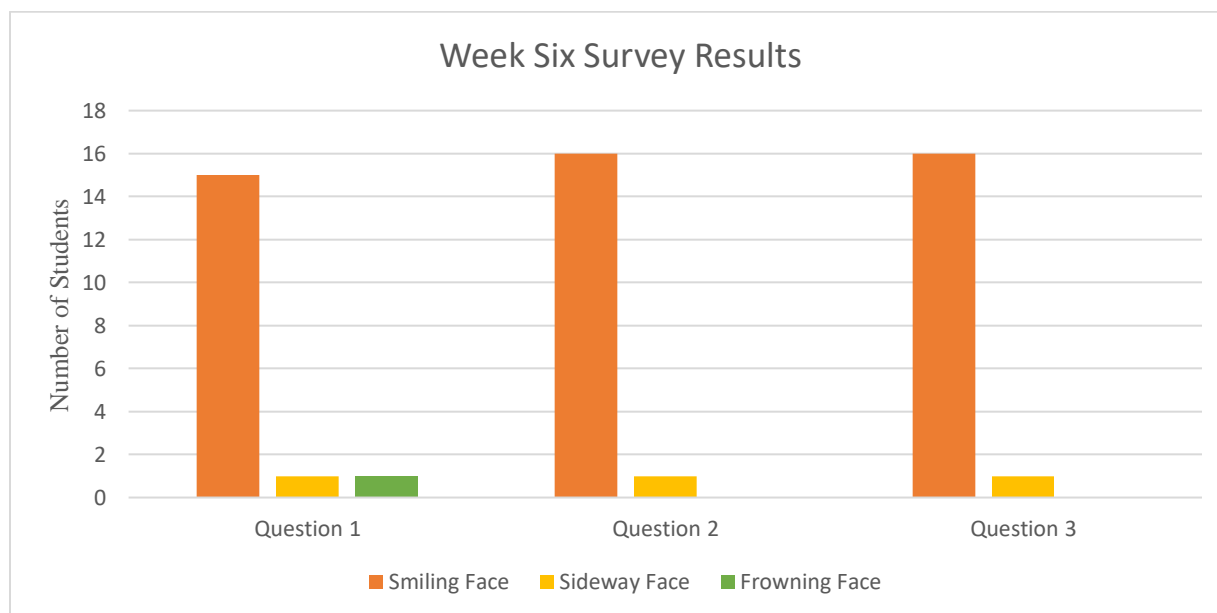
Results

The overall results from the weekly surveys showed a higher rate of students choosing smiling faces over sideways or frowning faces after play-based instruction. Figure 7 shows the results of the surveys for the 3 weeks of teacher-directed instruction versus the 3 weeks of play-based instruction. These results show that there were more positive feelings about play-based instruction than teacher-directed instruction.
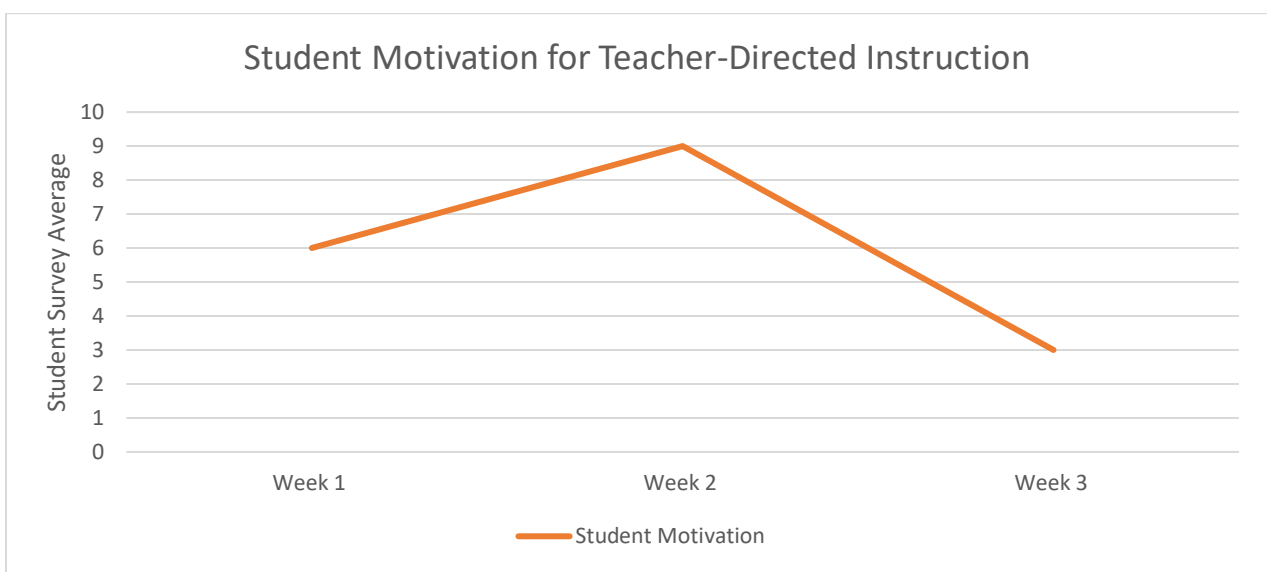
Figure 7

Overall Survey Results
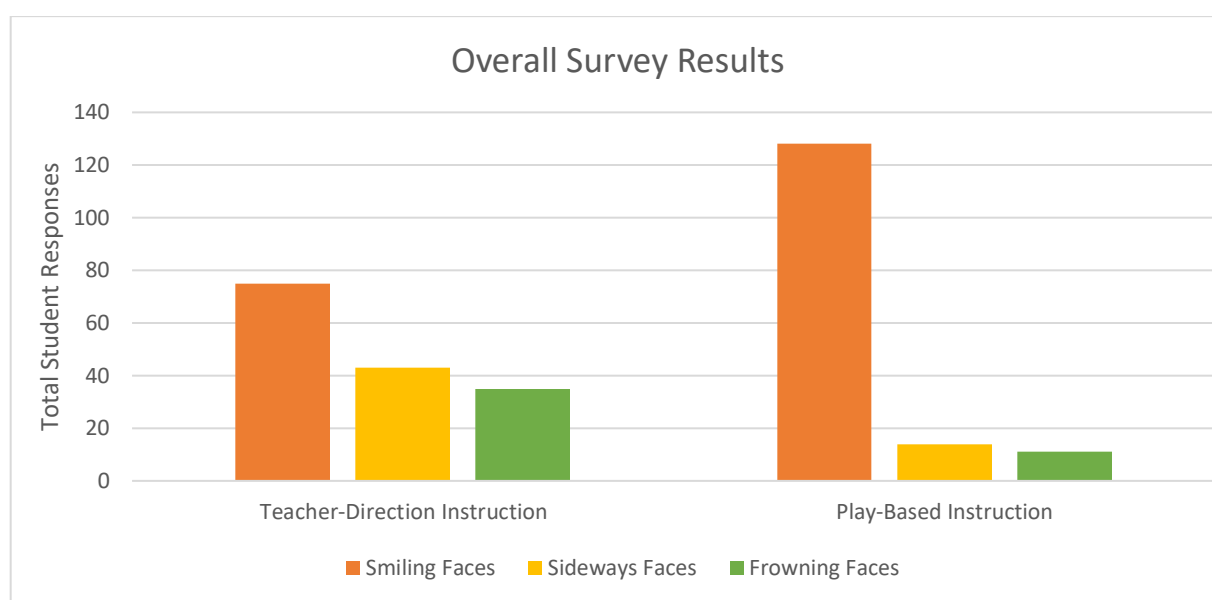
The next section will discuss the results of the study based on the research questions.

Research Question One: 1. How will student motivation during play-based instruction compare with student motivation during teacher-directed instruction?

During teacher-directed instruction, student motivation seemed to go down as the weeks went on. The desire to do more teacher-directed activities was higher at the beginning and middle of the 3-week implementation than at the end of the 3-week implementation. Figure 8 shows the decline in student motivation.
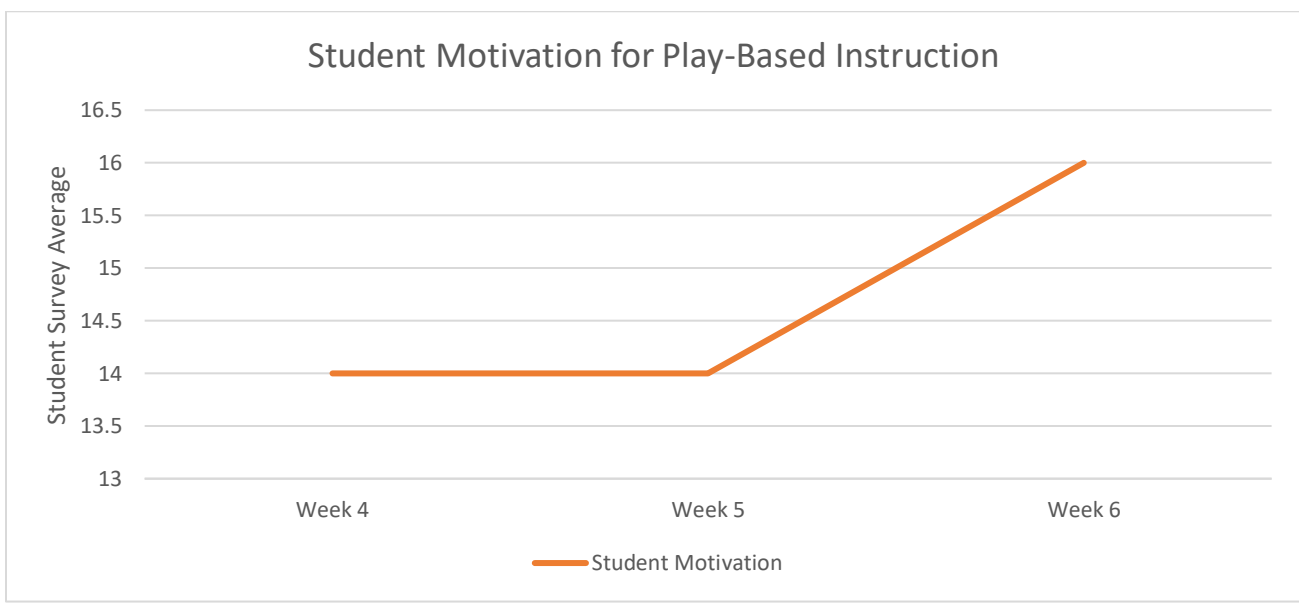
Figure 8

Student Motivation for Teacher-Directed Instruction

During play-based instruction, student motivation was higher and increased throughout the three-week period of implementation of play-based instruction. Figure 9 shows the growth of student motivation during the last 3 weeks of the study.

Figure 9

Student Motivation for Play-Based Instruction

Similar results were found during the interview process of the study. Students were more likely to say they would not want to do the activity again or on their own during the interviews for teacher-directed instruction than play-based instruction. The majority of the answers to those two questions were yes during the 3 weeks of play-based instruction.

During the observation portion of the study, students seemed more excited about the play-based instruction than the teacher-directed instruction. The researcher noted several cheers and positive reactions when learning what they were going to do each day during play-based instruction.

Research Question Two: How will student engagement and interest level during play-based instruction compare with student engagement and interest level during teacher-directed instruction?

Engagement. While most students were engaged during both teacher-directed instruction and play-based instruction, the amount of engagement was more in-depth during play-based instruction. The work during teacher-directed instruction was whole-group work and independent work. The work during play-based instruction was done in collaborative small groups. Students reacted more positively during the times they were able to work together and engage in group discussions. During the observations, the researcher noted that there were more students actively engaged for longer periods during play-based instruction than teacher-directed instruction.

Interest Level. Mostly, students were interested in both methods of instruction, but there was a higher interest in the activities during play-based instruction. The researcher noted more positive talk during play-based instruction. Students would cheer when told about the different stations they would be able to take part in for the week. Students would talk more about what

they were working on during the play-based stations instead of quietly writing or listening to the teacher talk during teacher-directed instruction. The researcher noted that several students would ask to keep working at the stations even though the allotted time was done. During teacher-directed instruction, several students would quickly finish worksheets without adding much detail until told to by the teacher.

During the interviews, students had a lot of positive things to say about both teacher-directed instruction and play-based instruction. Students typically were able to name more things that they liked during play-based instruction. Almost all students responded that they were more interested in doing the play-based stations than the teacher-directed worksheets and experiments. Some of the reasons the students gave for liking the stations more were that they got to talk more with their friends, they got to build more things, they got to move around the room more often, and it felt like they were playing more than working on school stuff.

The first two questions on the survey involved student interest level. Play-based instruction had more positive responses (smiling faces) than negative responses (sideways or frowning faces). Overall, more smiling face responses were given to those questions during play-based instruction. Figures 10 and 11 show the comparison of responses to those two questions.
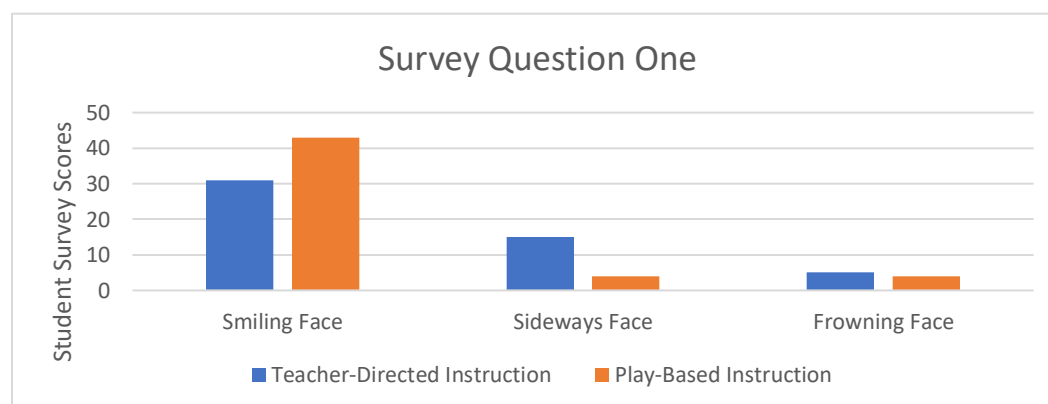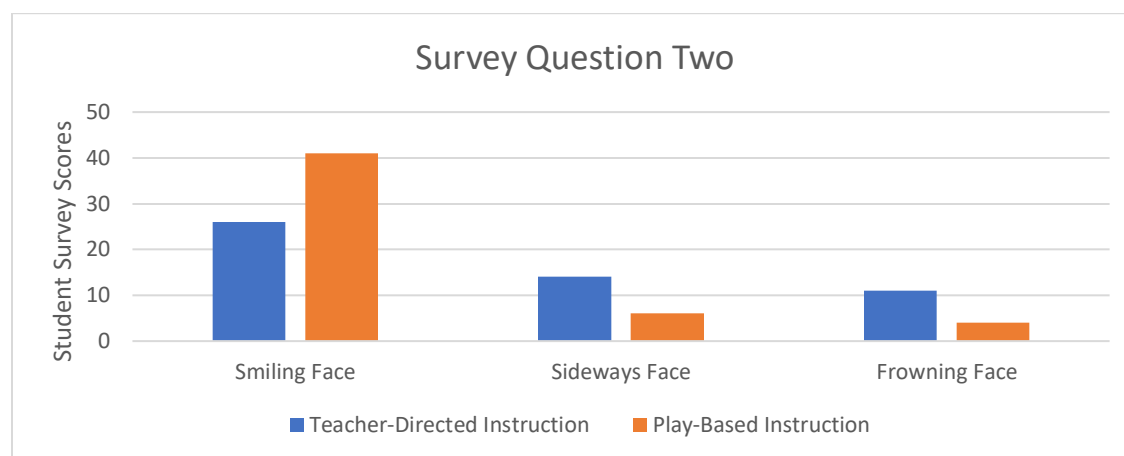
Figure 10

Survey Question One

Figure 11

Survey Question Two

Findings, Implications, Limitations

Findings

The findings of this study show that student motivation, engagement, and interest levels were generally higher during play-based instruction than teacher-directed instruction. The data collected showed more positive, work-related talk amongst peers during play-based instruction involving the small group stations. During teacher-directed instruction, students were fairly quiet and focused on the whole-group or independent work. The response to wanting to do more teacher-directed learning decreased as the weeks went on, while the response to wanting to do more play-based learning increased as the weeks went on.

The purpose of this study was to compare play-based instruction with teacher-directed instruction in a kindergarten classroom regarding student interest level, engagement, and motivation of learning. The goal of this study was to find out whether students learn better with hands-on exploratory learning or seat work involving worksheets. The first research question focused on student motivation during instruction. The study hypothesized that students'

motivation for learning would be higher during play-based instruction than during teacher-directed instruction. The second research question focused on student interest level and engagement during instructional time. The study hypothesized that students' engagement and interest levels would be higher during play-based instruction than during teacher-directed instruction. The results of this study show that student motivation was slightly higher during play-based instruction. Furthermore, student engagement and interest levels were generally higher during play-based instruction.

Implications

Instruction in kindergarten classrooms has changed a lot over the last few decades. Educators have been trying to figure out the best way to help children learn and grow academically, socially, and emotionally. It seems that finding the right balance between work and play has been a struggle for many. Test scores and standards have become incredibly important to our society, which has caused a change in early childhood education. Incorporating play-based learning and instruction into kindergarten curriculum will benefit children in many ways. Children will be more in charge of their own learning by taking part in hands-on, exploratory learning. Students will get to discover things on their own more often than they would be able to when doing seatwork and worksheets. Play-based learning also helps children with their social and emotional skills. This will help them with skills like problem-solving, collaboration, self-regulation, and more skills that will benefit them for life.

The information from this study shows that students were more engaged and interested in their work when they were able to do hands-on, collaborative work. This helps students create an interest in their own education and motivate them to do more. Teachers want to give their students the best education that they possibly can. Finding out how they learn best is important

for everyone involved. Being able to show actual results of how students can learn from play-based instruction can help guide teachers in the right direction of how to best teach.

Limitations

This study had a few limitations. One limitation was the size of the sample participant group. The sample only consisted of 17 students. If there were more student participants, the data could be clearer. Another limitation is that the participants were from one classroom only. If more kindergarten classes were part of the study, there would be more data to collect from a larger variety of students. The length of the study can also be a limitation. This study only covered six weeks. A long study could provide more information about how the two methods of teaching compare. Lastly, the study took place in the middle of a pandemic, which caused several changes to how school was. Students had to stay in their specific pods or tables of students to help reduce the number of people they are close with. This limits some aspects of the study because they are grouped by academic levels, so collaboration is not as mixed. The safety precautions also limit what type of activities and materials that can be used. This can hinder the play-based learning environment making it less play-based than usual.

<div align="center">

Reflection and Action Plan

</div>

Reflection

Implementing play-based instruction into the classroom proved to have a positive impact on student motivation, engagement, and interest. The results of this study showed that students were more actively engaged during the play-based portion of the study. While play-based instruction is more liked and engaging for the students, teacher-directed instruction is also necessary sometimes. Educators should find the right balance that works in each classroom to best benefit the students. The results of this study also showed that students were more interested

in the play-based instructional activities. All students did all the work for both portions of the study, but the researcher noted more excitement from the students during play-based instruction. Again, finding the right balance between play-based instruction and teacher-directed instruction is needed to best incorporate students' interest in learning activities.

Action Plan

The researcher plans to continue integrating more play-based instruction in the daily classroom environment. Even though students regularly preferred play-based instruction over teacher-directed instruction, there is still a need for both in the classroom. The researcher plans to figure out the best way to incorporate both types of instruction to best benefit the students. The researcher will share these findings with grade-level colleagues, so the whole grade level can be on the same page when it comes to planning instruction in the future.

References

Barblett, L., Knaus, M., & Barratt-Pugh, C. (2016). The pushes and pulls of pedagogy in the early years: Competing knowledges and the erosion of play-based learning. *Australasian Journal of Early Childhood*, *41*(4), 36–43. https://doi.org/10.1177/183693911604100405

Becker, K., & Mastrangelo, S. (2017). Ontario's early learning–kindergarten program: A transformative early childhood education initiative. *YC Young Children, 72*(4), 17-23. https://www.naeyc.org/resources/pubs/yc/sep2017/ontario%E2%80%99s-early-learning%E2%80%93kindergarten

Bowdon, J. (2015). The common core's first casualty: Playful learning. *Phi Delta Kappan*, *96*(8), 33–37. http://dx.doi.org/10.1177/0031721715583960

DeLuca, C., Pyle, A., Valiquette, A., & LaPointe-McEwan, D. (2020). New directions for kindergarten education: Embedding assessment in play-based learning. *Elementary School Journal*, *120*(3), 455–479. http://dx.doi.org/10.1086/707008

Fesseha, E., & Pyle, A. (2016). Conceptualising play-based learning from kindergarten teachers' perspectives. *International Journal of Early Years Education*, *24*(3), 361–377. https://doi.org/10.1080/09669760.2016.1174105

Hunter, J. (2019). Supporting teachers to successfully implement a play-based learning approach. *Kairaranga*, *20*(2), 16–29. https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ1240103

Jay, J. A., & Knaus, M. (2018). Embedding play-based learning into junior primary (year 1 and 2) curriculum in WA. *Australian Journal of Teacher Education*, *43*(1), 112–126. http://dx.doi.org/10.14221/ajte.2018v43n1.7

Keung, C. P. C., & Cheung, A. C. K. (2019). Towards holistic supporting of play-based learning implementation in kindergartens: A mixed method study. *Early Childhood Education Journal*, *47*(5), 627–640. https://doi.org/10.1007/s10643-019-00956-2

Nolan, A., & Paatsch, L. (2018). (Re)affirming identities: Implementing a play-based approach to learning in the early years of schooling. *International Journal of Early Years Education, 26*(1), 42–55. https://doi.org/10.1080/09669760.2017.1369397

Paterson, A. (2020). The play paradox: A systematic literature review of play-based pedagogy applied in the classroom. *Educational & Child Psychology*, *37*(4), 96–114. https://shop.bps.org.uk/educational-child-psychology-vol-37-no-4-december-2020-right-to-play-challenges-and-opportunities

Pyle, A., & Danniels, E. (2017). A Continuum of Play-Based Learning: The Role of the Teacher in Play-Based Pedagogy and the Fear of Hijacking Play. *Early Education and Development*, *28*(3), 274–289. http://dx.doi.org/10.1080/10409289.2016.1220771

Pyle, A., & DeLuca, C. (2017). Assessment in play-based kindergarten classrooms: An empirical study of teacher perspectives and practices. *Journal of Educational Research*, *110*(5), 457–466. https://doi.org/10.1080/00220671.2015.1118005

Pyle, A., Prioletta, J., & Poliszczuk, D. (2018). The play-literacy interface in full-day kindergarten classrooms. *Early Childhood Education Journal, 46*(1), 117–127. https://doi.org/10.1007/s10643-017-0852-z

Stegelin, D. (2005). Making the case for play policy: Research-based reasons to support play-based environments. *YC Young Children, 60*(2), 76-85. https://www.jstor.org/stable/42729217

Appendix A

Survey

taken after teacher-directed method

1. Did you like the activity that we just did?

2. How do you feel about using the worksheets?

3. Would you want to do this type of learning again?

Appendix B

Survey

taken after play-based method

1. Did you like the activity that we just did?

2. How do you feel about being able to use the manipulatives and tools?

3. Would you want to do this type of learning again?

Appendix C

Interview Questions

to take place after each method

1. What did you like or not like about the activities we just did?

2. Were you interested in what we just did? Why or why not?

3. Would you want to do this activity on your own if I didn't make us do it?

4. Would you want to do this activity again?

5. What do you think could make this activity better?

6*. Which kind of activity did you prefer more- the ones where I did all the teaching or the ones where you were in charge of your learning?

*This question will take place at the end of the study
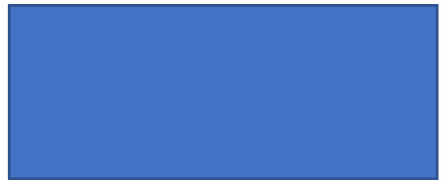
Appendix D

Observation Notes

Date: Activity:

Appendix E

Principal Letter

January 22, 2021

Dear Institutional Review Board Members,

As principal of ▮▮▮▮▮▮▮▮▮▮ I approve the appropriateness of Haley Schwartz's project study titled Play-Based versus Teacher-Directed Learning in Kindergarten. Miss Schwartz discussed the components of the study as well as the expected outcomes. The project will compare teacher-directed teaching with play-based teaching in terms of student interest level and motivation of learning. Conducting the project at Lincoln Grade School is very feasible and should be completed before the end of the semester. If you have any questions, please contact me.

Sincerely,

Principal

Appendix F

Informed Consent Letter

Dear Parents/Guardians:

I am currently working towards my master's degree in Curriculum and Instruction at Eastern Illinois University. As a requirement for my coursework, I will be conducting an Action Research project titled "Play-Based Instruction versus Teacher Directed Instruction in Kindergarten". My Action Research project will include data collection and analysis on instructional teaching methods used in my classroom.

My research study will assess student engagement, motivation, and interest levels during two different types of instructional methods. I use both teacher-directed and play-based instructional methods in my classroom already. For this study, I am going to look into which method the students respond to more. This study will span 6 weeks starting the second week in February. The results gathered from this study will be used for the purpose of this project only. All data collected will be confidential. The results that will be presented will not contain any specific identifying information or names of the participants. As parents or guardians, you have the option to exclude your child from this study. Please contact me if you do not want your child to be included in this study as soon as possible.

I have been given approval from ▮▮▮▮▮▮ to conduct this research in my classroom this semester. Below is the contact information for my professor and co-investigator on this research, and the review board of this research, and myself. Please reach out to me, or the other names provided if you have any questions or concerns.

Thank you,

Haley Schwartz

Haley Schwartz	Dr. Alexis L. Jones	Institutional Review Board
Investigator	Co-Investigator	Eastern Illinois University
	aljones16@eiu.edu	eiuirb@eiu.edu

Appendix G

IRB Approval

September 6, 2022

Haley Schwartz
Alexis Jones
Teaching Learning and Foundations

Thank you for submitting the action research protocol titled, "Play-Based Instruction versus Teacher Directed Instruction in Kindergarten**"** for review by the Eastern Illinois University Institutional Review Board (IRB). The protocol was reviewed on 2/4/2021 and has been certified that it meets the federal regulations exemption criteria for human subjects research. The protocol has been given the IRB number 21-036. You are approved to proceed with your project.

The classification of this protocol as exempt is valid only for the research activities and subjects described in the above named protocol. IRB policy requires that any proposed changes to this protocol must be reported to, and approved by, the IRB before being implemented. You are also required to inform the IRB immediately of any problems encountered that could adversely affect the health or welfare of the subjects in this study. Please contact me in the event of an emergency. All correspondence should be sent to:

Institutional Review Board
c/o Office of Research and Sponsored Programs
Telephone: 217-581-8576
Fax: 217-581-7181
Email: eiuirb@eiu.edu

Thank you for your cooperation, and the best of success with your research.

Compliance Coordinator
Office of Research and Sponsored Programs
Telephone: 581-8576
Email: eiuirb@eiu.edu